
AWS ANSIBLE COURSE CONTENT

Module 1: Introduction to AWS and Ansible

1.1. Introduction to AWS

1.1.1. AWS Services Overview

1.1.2. AWS Regions and Availability Zones

1.2. Introduction to Ansible

1.2.1. Ansible Overview

1.2.2. Ansible Architecture

1.3. Setting Up Your Development Environment

1.3.1. Installing Ansible

1.3.2. AWS CLI Setup

Module 2: Ansible Basics

2.1. Ansible Playbooks

2.1.1. YAML Syntax

2.1.2. Creating Simple Playbooks

2.2. Ansible Modules

2.2.1. Common Ansible Modules

2.2.2. Writing Custom Modules



2.3. Ansible Variables and Facts

2.3.1. Using Variables

2.3.2. Gathering Facts

Module 3: AWS Integration with Ansible

3.1. Ansible AWS Modules

3.1.1. ec2 Module

3.1.2. s3 Module

3.1.3. rds Module

3.2. AWS Authentication

3.2.1. IAM Roles

3.2.2. Access and Secret Keys

3.3. Managing AWS Resources with Ansible

Module 4: Infrastructure as Code (IaC) with Ansible

4.1. Introduction to IaC

4.2. Creating AWS Resources Using Ansible

4.2.1. Launching EC2 Instances

4.2.2. Creating VPCs and Subnets



4.3. Managing Infrastructure Changes

4.3.1. Updating Playbooks

4.3.2. Drift Detection

Module 5: Ansible Best Practices

5.1. Role-Based Organization

5.2. Templating and Jinja2

5.3. Error Handling and Logging

5.4. Testing Ansible Playbooks

5.5. Ansible Galaxy

Module 6: Advanced Topics

6.1. Ansible Tower/AWX

6.1.1. GUI for Ansible Automation

6.1.2. Role-Based Access Control

6.2. Dynamic Inventories

6.2.1. AWS Dynamic Inventory

6.2.2. Custom Dynamic Inventory

6.3. Ansible Vault

6.3.1. Managing Secrets

6.3.2. Encrypting Sensitive Data

Module 7: Real-world Scenarios and Projects

7.1. Deploying Web Applications on AWS

7.2. Managing Multi-Tiered Environments



7.3. Continuous Integration and Deployment (CI/CD) with Ansible

Module 8: Troubleshooting and Optimization

- 8.1. Debugging Ansible Playbooks
- 8.2. Performance Optimization
- 8.3. Handling Failures and Rollbacks

Module 9: Security and Compliance

- 9.1. Security Best Practices
- 9.2. Compliance Automation
- 9.3. Security Auditing and Reporting

Module 10: Monitoring and Scaling

- 10.1. Monitoring Infrastructure
- 10.2. Scaling Resources
- 10.3. Auto Scaling Groups

Module 11: Course Conclusion and Next Steps

- 11.1. Recap and Review
- 11.2. Certification Preparation (if applicable)
- 11.3. Career and Learning Paths

