
GCP ANSIBLE COURSE CONTENT

1 Introduction to Google Cloud Platform and Ansible

- 1.1. Overview of GCP Services
- 1.2. Introduction to Ansible
- 1.3. Why Integrate GCP with Ansible

2 Setting Up the Development Environment

- 2.1 Installing Ansible
- 2.2 GCP Account Setup
- 2.3 Installing GCP SDK
- 2.4 Authenticating with GCP

3 Ansible Basics

- 3.1 Ansible Playbooks and Inventory
- 3.2 Ansible Modules
- 3.3 Ansible Variables and Facts

4 Managing GCP Resources with Ansible

- 4.1 Provisioning VM Instances
- 4.2 Configuring Network and Firewall Rules
- 4.3 Managing Cloud Storage
- 4.4 Deploying Kubernetes on GCP

5 Dynamic Inventories

- 5.1 Introduction to Dynamic Inventories
- 5.2 Writing Custom Dynamic Inventory Scripts for GCP



6 Role-Based Configuration Management

- 6.1 Organizing Playbooks with Roles
- 6.2 Creating Custom Ansible Roles for GCP

7 Securing Ansible and GCP

- 7.1 Best Practices for Ansible Security
- 7.2 Google Cloud Identity and Access Management (IAM)

8 Advanced Topics

- 8.1 Ansible Vault for Secret Management
- 8.2 Ansible Tower/AWX for Automation Orchestration
- 8.3. Continuous Integration and Continuous Deployment (CI/CD) with Ansible and GCP

9 Case Studies and Real-World Applications

- 9.1 Building a Highly Available Web Application
- 9.2 Infrastructure as Code (IaC) for GCP

10 Troubleshooting and Debugging

- 10.1 Common Issues and Solutions
- 10.2 Debugging Ansible Playbooks

11 Best Practices and Optimization

- 11.1 Performance Optimization
- 11.2 Scalability Considerations

12 Final Project

- 12.1 Implementing a Complete GCP Infrastructure Using



Ansible

12.2 Presentation and Evaluation of Projects

13 Course Review and Next Steps

13.1 Recap of Key Concepts

13.2 Resources for Further Learning

13.3 Certification and Career Path Guidance

14 Q&A and Open Discussion

14.1 Addressing Participants' Questions and Concerns

15 Course Evaluation and Feedback

15.1 Collecting Feedback from Participants

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