

Day - 1

- **Welcome and Introductions**
 - Overview of the course and objectives
 - Participant introductions and expectations
- **Understanding HashiCorp Consul**
 - Introduction to service networking
 - Overview of Consul architecture and components (agents, servers, and data centers)
- **Setting Up Consul**
 - Installation and configuration of Consul
 - Configuring a Consul cluster
- **Hands-On Lab: Deploying Consul**
 - Guided lab to install and set up a Consul cluster
- **Service Discovery Fundamentals**
 - Registering services with Consul
 - Discovering services using the Consul UI and API
- **Hands-On Lab: Service Discovery**
 - Hands-on exercises to register and discover services using Consul

Day - 2

- **Implementing Health Checks**
 - Importance of health checks
 - Configuring and using health checks in Consul
- **Working with the Key-Value Store**
 - Overview of the Consul key-value store
 - Use cases and best practices for managing configuration data
- **Hands-On Lab: Health Checks and Key-Value Store**
 - Exercises to implement health checks and manage key-value pairs
- **Security in Consul**
 - Introduction to Access Control Lists (ACLs)
 - Encrypting communication between Consul agents
- **Hands-On Lab: Implementing Security**
 - Configuring ACLs and encryption in a Consul cluster
- **Hands-On Lab: Service Discovery**
 - Hands-on exercises to register and discover services using Consul
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- **Introduction to Consul Connect**
 - Overview of service mesh concepts
 - Configuring secure service-to-service communication
- **Troubleshooting Consul**
 - Common issues and troubleshooting techniques
 - Monitoring and logging in Consul
- **Hands-On Lab: Consul Connect and Troubleshooting**
 - Practical exercises on implementing Consul Connect and troubleshooting issues
- **Exam Preparation**
 - Overview of the HashiCorp Certified: Consul Associate exam format
 - Review of key concepts and study tips
- **Final Q&A and Wrap-Up**
 - Open forum for questions and clarifications
 - Review of resources for further study and certification preparation