Introduction to Microsoft Azure Red Hat OpenShift

Course Duration: 16 Hours **Course code ARO101**

1. Course Overview

Introduction to Microsoft Azure Red Hat OpenShift provides participants with a foundational understanding of deploying and managing containerized applications using Azure Red Hat OpenShift (ARO) — a fully managed, jointly engineered service by Microsoft and Red Hat. The course covers ARO architecture, integration with Azure services, cluster deployment, and application lifecycle management. Attendees will gain the skills to leverage ARO for hybrid cloud workloads, ensuring scalability, security, and operational efficiency.

2. What you'll learn?

This course is designed to provide participants with a foundational understanding of deploying, managing, and scaling containerized applications using Red Hat OpenShift on Microsoft Azure. Learners will gain insight into how to leverage the flexibility and scalability of the Azure cloud with the robust container orchestration and developer-friendly features of OpenShift. By the end of the course, participants will be able to understand core concepts, navigate the OpenShift environment, and identify best practices for implementing enterprise-grade container platforms on Azure.

Phone: +91-999-911-1686 **Mail Us:** info@ssdntech.com

3. Target Audience

- IT administrators and infrastructure engineers
- Cloud architects and solution designers
- DevOps engineers
- System administrators looking to modernize application deployment
- Application developers working with containerized workloads
- Anyone interested in hybrid cloud solutions with Azure and OpenShift

4. Pre-Requisites

Participants should have:

To get the most out of this course, participants should have a basic understanding of cloud computing principles and containerization technologies. Familiarity with Linux system administration and fundamental networking concepts will also be beneficial for following along with hands-on exercises and demonstrations.

- General understanding of cloud computing concepts
- Basic knowledge of containers (e.g., Docker)
- Familiarity with Linux command-line administration
- Understanding of basic networking principles

5. Course content

Module 1: Introduction to Azure Red Hat OpenShift (ARO)

- Overview of OpenShift and Kubernetes
- What is ARO and how it works
- Benefits of using ARO in enterprise environments

Module 2: ARO Architecture & Components

- ARO control plane and worker nodes
- Integration with Azure Active Directory and RBAC
- Networking, storage, and security considerations

Module 3: Deploying Azure Red Hat OpenShift Clusters

- Prerequisites for cluster deployment
- Provisioning clusters through Azure Portal and CLI
- Configuring cluster networking and storage options

Module 4: Deploying and Managing Applications on ARO

- Deploying from source, image, and Helm charts
- Scaling applications manually and automatically
- Managing application configurations and secrets

Module 5: Integrating ARO with Azure Services

- Using Azure Monitor and Log Analytics for OpenShift
- Connecting to Azure Container Registry (ACR)
- Integration with Azure DevOps pipelines

Module 6: Security and Compliance in ARO

- Identity and access management
- Securing workloads with Azure policies and OpenShift security contexts
- Compliance best practices

Phone: +91-999-911-1686 **Mail Us:** info@ssdntech.com