# RedHat OpenShift – Basic (2 days / 8 hours)

#### Prerequisites in terms of knowledge for RedHat OpenShift – Basic training:

- Understanding of Containers and Docker
- Basic Knowledge of Kubernetes
- Familiarity with Linux Systems Administration:

#### **Learning outcomes of RedHat OpenShift – Basic training:**

- Ability to Deploy Applications on OpenShift
- Understanding of OpenShift Projects and User Management
- Knowledge of OpenShift Networking
- Basic Understanding of Monitoring, Logging, Security, and Access Control

# Day 1

#### **Session 1: Introduction to Containers (1 hour)**

- What are containers?
- Benefits of containerization
- Docker overview
- Container images vs. containers
- Key container concepts: Dockerfile, Docker Registry

#### Session 2: Introduction to Container Orchestration (1 hour)

- What is container orchestration?
- Need for container orchestration
- Overview of Kubernetes
- Features of Kubernetes
- Kubernetes architecture: Master and nodes

#### Session 3: Overview of Red Hat OpenShift (1 hour)

- Introduction to Red Hat OpenShift
- Key features and benefits
- OpenShift architecture
- Differences between OpenShift and Kubernetes

#### Session 4: Installing and Configuring OpenShift Cluster (1 hour)

- Preparing the environment for OpenShift installation
- Installing OpenShift Cluster
- Configuring OpenShift Cluster

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• Accessing OpenShift Console

# Day 2:

## Session 5: Basics of Deploying Applications on OpenShift (1 hour)

- Deploying applications on OpenShift
- Understanding pods, services, deployments
- Deploying applications using OpenShift CLI (oc) and Web Console

## Session 6: OpenShift Projects and User Management (1 hour)

- Understanding OpenShift projects
- Managing projects
- User management in OpenShift
- Role-Based Access Control (RBAC) in OpenShift

## Session 7: Introduction to OpenShift Networking (1 hour)

- Networking basics in OpenShift
- Types of networking in OpenShift
- Service networking
- Ingress networking

## Session 8: Basic Monitoring, Logging, Security, and Access Control (1 hour)

- Monitoring applications in OpenShift
- Logging in OpenShift
- Security best practices in OpenShift
- Access control policies and practices