

# Red Hat Openshift 4 on Bare Metal

**Duration: 1 days (8hrs/day)**

**Prerequisite: --**

- Basic System Administration
- Basics of Kubernetes

**Course Objective:**

Learn the fundamentals and basic concepts of OpenShift that you will need to build a production ready OpenShift cluster and get started with deploying and managing Application.

**Lab Requirement: -- Koenig DC**

## Module 1: Introduction

- Introduction
- Architecture Diagram
- Setup KVM Infrastructure (On Hypervisor Node)
- Create utility Virtual Machine
- Configure OCP Zone on Bind DNS Server
- Install and Configure DHCP server
- Configure Apache and HAProxy
- Setup NFS server
- Setup TFTP Service and Install OpenShift installer and CLI binary
- Generate ignition files
- Create Bootstrap, Masters and Worker VMs (On Hypervisor Node)

## Module 2: Administration

- OpenShift Authentication & Authorization
- Local image registry
- Role-based Access Control – RBAC
- Controlling Application Permissions with Security Context Constraints SCC
- NFS Storage Class with OpenShift
- Cluster health check