



Red Hat Certified Specialist in OpenShift Administration

About DevOpsSchool

DevOpsSchool is a unit of "Cotocus PVT Ltd" and a leading platform which helps IT organizations and professionals to learn all the emerging technologies and trend which helps them to learn and embrace all the skills, intelligence, innovation and transformation which requires to achieve the end result, quickly and efficiently. We provide over 40 specialized programs on DevOps, Cloud, Containers, Security, AI, ML and on Big data that are focused on industry requirement and each curriculum is developed and delivered by leading experts in each domain and aligned with the industry standards.

About Course

"Red Hat Certified Specialist in OpenShift Administration" training course from DevOpsSchool will provide you in-depth knowledge on all the key features and concepts of OpenShift. The course introduces containers and Red Hat OpenShift Container Platform, and builds core knowledge to manage containers with hands-on live and interactive demo. With the help of this training, you will be skilledful enough to work on real-time projects and this openshift training is completely inline with the official OpenShift Certification Exam.

What is OpenShift?

"Containerization make possible for IT organizations to become more agile and scalable, which help them to become more efficient in application development. If we believe on Gartner's report currently 50% of the organizations are utilizing the power of Containerization and by 2022 its expected to reach by 75% of the organization who will leverage the benefits of containerization.

"To help with Containerization there many toolsets available and Openshift is one of them. It is created by open-source software service provider Red Hat. This platform brings together Docker and Kubernetes to help applications run more efficiently by providing an API to manage these services.



Co-coordinator - Akanksha Kumari

Call/WhatsApp: - +1 (469) 756-6329

Mail Address: -

contact@DevOpsSchool.com

Secondary contact - Patrick

Call/WhatsApp: - +91 7004 215 841

Mail Address: - contact@DevOpsSchool.com

Duration	10 Hours
Mode	Online (Instructor-led, live & Interactive)
Projects (Real time scenario based)	1

FEATURES	DEVOPSSCHOOL	OTHERS
Faculty Profile Check	✓	✗
Lifetime Technical Support	✓	✗
Lifetime LMS access	✓	✗
Top 25 Tools	✓	✗
Interviews Kit	✓	✗
Training Notes	✓	✗
Step by Step Web Based Tutorials	✓	✗
Training Slides	✓	✗
Training + Additional Videos	✓	✗



AGENDA OF THE MASTER IN MACHINE LEARNING COURSE

Setting up the environment for an OpenShift installation

Installing RHEL on the provisioner node

Preparing the provisioner node for OpenShift Container Platform installation

Extracting the OpenShift Container Platform installer

Creating an RHCOS images cache

Configuration files

BMC addressing

Root device hints

Creating the OpenShift Container Platform manifests

Creating a disconnected registry

Preparing the registry node to host the mirrored registry

Generating the self-signed certificate

Creating the registry podman container

Copy and update the pull-secret

Mirroring the repository

Deploying routers on worker nodes

Validation checklist for installation

Deploying the cluster via the OpenShift Container Platform installer

Managing the OpenShift Platform

- Courses Overview

Understanding Containers and OpenShift

- Module Overview
- Understanding Container Architecture
- Understanding OpenShift Architecture
- Setting up the Lab Environment.

Deploying and Managing Containers

- Module Overview
- Creating Containerized Services
- Managing Containers
- Managing Container Images
- Troubleshooting Containerized Applications
- Demo: Deploying an Apache Web Server
- Demo: Managing an Apache Web Server Image

Building Custom Container Images

- Module Overview
- Building Custom Container Images
- Demo: Building a Custom Apache Image

Deploying Applications on OpenShift

- Module Overview
- Use Product Documentation
- Deploy Containerized Applications
- Managing OpenShift Applications
- Deploy Multi-container Applications
- Demo: Deploy an HTTPD Service on OpenShift
- OpenShift Projects
- Demo: Deploy a WordPress Application on OpenShift with a Template

Building Custom Container Images

- Module Overview
- Building Custom Container Images
- Demo: Building a Custom Apache Image

Deploying Applications on OpenShift

- Module Overview
- Use Product Documentation
- Deploy Containerized Applications
- Managing OpenShift Applications
- Deploy Multi-container Applications
- Demo: Deploy an HTTPD Service on OpenShift
- OpenShift Projects
- Demo: Deploy a WordPress Application on OpenShift with a Template

Working with OpenShift Resources and Information Gathering

- Module Overview
- OpenShift Resources
- Managing Resources and Investigating Logs
- Demo: Working with OpenShift Resources
- Demo: Working with OpenShift Logs

Using the OpenShift Web Console

- The OpenShift Web Console
- Demo: Deploying a CakePHP App Using the Web Console

OpenShift Container Platform security and compliance

- Security overview
- Container security
- Auditing
- Certificates
- Encrypting data
- Vulnerability scanning

Compliance overview

- Compliance checking
- File integrity checking

About authentication in OpenShift Container Platform

- Understanding networking
- OpenShift Container Platform DNS
- OpenShift Container Platform Ingress Operator
- Comparing routes and Ingress

OpenShift Container Platform storage overview

- Storage Types
- Ephemeral storage
- Persistent storage

Container Storage Interface (CSI)

- Dynamic Provisioning

Pod Scheduling

- Module Overview
- Pod Scheduling Using Node Selector
- Demo: Pod Scheduling Using Node Selector
- Demo: Pod Scheduling Using Affinity Rules
- Pod Scheduling Using Taints and Tolerations
- Demo: Pod Scheduling Using Taints and Tolerations
- Module Summary

Pod Scaling

- Module Overview
- Manual Scaling of Pods
- Demo: Manual Scaling
- Auto Scaling of Pods
- Demo: Auto Scaling of Pods
- Module Summary

Limiting Resource Usages

- Module Overview
- Limits and Requests
- Demo: Limits and Requests
- Quotas
- Demo: Resource Quota
- Demo: Cluster Resource Quota
- Limit Ranges
- Applying Templates
- Demo: Templates
- Summary

Cluster Scaling

- Module Overview
- Monitoring Node Health
- Machine API Operato
- Manual Cluster Scaling
- Demo: Manual Cluster Scaling
- Cluster Autoscaling
- Demo: Cluster Autoscaling
- Module Summary

Thank you!

Connect with us for more info

Call/WhatsApp: - **+91 7004 215 841**

Mail: - contact@DevOpsSchool.com

www.DevOpsSchool.com