DevOpsSchool

Course curriculum · November 2026

LEVEL 03 OF 04 · INTERMEDIATE

Openshift Intermediate Training

Administer cluster resources, control pod placement, deliver apps with GitOps and monitor, log and debug workloads in production.

LIVE ONLINE **Max 8-10 hours**	CORPORATE (DAY-WISE) **3 days · Days 1-3**	SELF-PACED VIDEO **1-year LMS access**
BATCH SIZE **Max 10 learners**	NEXT BATCHES **1st of every month · weekends: first Saturday**	CERTIFICATE **Verifiable certificate of completion**

Foundation	Essential	Intermediate	Advanced
1 day · Included	2 days · Included	3 days · This curriculum	5 days · Next step

INSIDE THIS CURRICULUM

What you will achieve	Outcomes and level focus
Who should attend	Audience and prerequisites
Agenda	39 topics · Foundation to Intermediate
Hands-on labs	3 labs
Formats and fees	Live, 1:1, self-paced, corporate
Trainer and reviews	Rajesh Kumar
Enrolment	Batches, payment, contacts

WHY DEVOPSSCHOOL

- Rated 4.6 on Google
- 1,500+ verifiable certificates issued in the public registry
- Trainer Rajesh Kumar: 20 years in industry
- Small batches: max 10 learners, every session recorded

Course page: www.devopsschool.com/courses/openshift/openshift-intermediate-training.html
Talk to us: WhatsApp +91 99057 40781 · +1 (469) 756-6329 · contact@DevOpsSchool.com · reply within 1 hour

OUTCOMES

What you will achieve

By the end of the Openshift course path, you will be able to:

1

Install and access OpenShift

Plan, install or provision OpenShift clusters and work confidently with oc and the web console.

2

Deliver applications reliably

Build, deploy, scale and store applications with S2I, Tekton, GitOps and persistent storage.

3

Operate secure production clusters

Manage nodes, monitoring, logging, security and upgrades for multi-tenant OpenShift platforms.

WHAT THE INTERMEDIATE LEVEL ADDS

Operators, scheduling, GitOps, monitoring and debugging

Hands-on: GitOps delivery with monitoring and backup. Deliver an app through OpenShift GitOps with quotas and anti-affinity, add user workload alerts and LokiStack logs, and back up and restore it with OADP.

WHO SHOULD ATTEND

- Regular Openshift users who want to automate, integrate and manage it at a deeper level.
- Specialists who support Openshift for colleagues or customers.
- Leads preparing Openshift for wider use across projects.

BEFORE YOU START

- The Essential level, or equivalent hands-on experience.
- You can already: Build and ship applications with S2I and Tekton, expose them with routes, configure them safely and give them persistent storage.
- Basic computer skills and a laptop with a stable internet connection for the live sessions and labs.
- This curriculum includes every earlier level, so it is complete on its own.

AGENDA · FOUNDATION TO INTERMEDIATE

Openshift Intermediate Training agenda

39 topics. Each level builds on the one before it, so this curriculum lists every earlier level in full. Days are for corporate (day-wise) delivery; live online batches cover the same agenda in max 8-10 hours.

DAY 1 — Foundation: Containers, architecture, installation and cluster access

Included from Foundation

1. Getting started: course overview, OpenShift Container Platform releases and version check, demo environment walkthrough
2. Containers: images, registries, the CRI-O runtime and running a first container with podman
3. Kubernetes basics: pods, deployments, services, control plane and worker roles, hands-on demo
4. Why OpenShift: differences from upstream Kubernetes, routes, builds, integrated registry, Operators and secure defaults
5. OpenShift architecture: control plane, workers and infra nodes, Red Hat CoreOS, Operators, CRDs and the Cluster Version Operator
6. Deployment planning: deployment considerations and steps, system, load balancer, DNS and firewall requirements
7. Installing on bare metal or VMs: the Assisted Installer, single node OpenShift and OpenShift Local for labs
8. Installer-provisioned versus user-provisioned infrastructure: IPI and UPI flows, install-config.yaml, demo IPI install
9. Managed OpenShift: Azure Red Hat OpenShift, Red Hat OpenShift Service on AWS and OpenShift Dedicated, deploying ARO
10. Accessing clusters: retrieving kubeadmin credentials and kubeconfig, oc login, tokens and the web console
11. Web console: Developer versus Administrator perspectives, topology view, project and workload pages
12. oc CLI basics: new-project, create, get, describe, delete, api-resources and explain for the OpenShift API
13. Projects, namespaces, users and roles: RBAC basics with roles, role bindings and oc adm policy
14. First application: deploy an image with oc new-app and from the console, add storage, expose and test it

DAY 2 — Essential: Builds, networking, configuration, scaling and storage

Included from Essential

15. Source-to-Image: builder images, BuildConfig, oc new-app from a Git repository, oc start-build and build logs
16. Deployment versus DeploymentConfig: rollout strategies, why DeploymentConfig is deprecated, migrating to Deployments
17. Networking: Services, Routes with edge, passthrough and re-encrypt TLS, Ingress and the Gateway API
18. Configuration: ConfigMaps, Secrets and environment variables with oc set env and volume mounts
19. Pod scaling basics: manual scaling with oc scale, Horizontal Pod Autoscaler on CPU and memory, demo
20. Vertical Pod Autoscaler: VPA Operator, recommendations, update modes and combining with HPA safely
21. OpenShift Pipelines intro: Tekton Tasks, Pipelines, PipelineRuns, workspaces and the tkn CLI
22. Storage concepts: ephemeral storage and emptyDir, persistent volumes, claims, StorageClasses, RWO and RWX access modes
23. Container Storage Interface: CSI drivers, dynamic provisioning, managing persistent CSI storage, snapshots and expansion
24. Local and hostPath volumes: persistent local volumes with the Local Storage Operator, hostPath volumes and their risks
25. Network storage volumes: deploying persistent NFS, iSCSI and Azure Files volumes, demos for each
26. Developer workflow: odo or the Developer perspective, health probes, resource requests and limits for every workload

DAY 3 **Intermediate: Operators, scheduling, GitOps, monitoring and debugging** New at this level

27. Operators and OperatorHub: Operator Lifecycle Manager, subscriptions, channels, install plans and approval modes
28. Machine management: MachineSets, infrastructure MachineSets, MachineHealthChecks, manually adding nodes, NodePools
29. Resource governance: ResourceQuota, LimitRange and ClusterResourceQuota across projects
30. Storage management: PVC lifecycle, RWX versus RWO choices, OpenShift Data Foundation introduction
31. Backup and disaster recovery basics: OADP Operator with Velero, namespace and volume backups, restores, etcd backup
32. Scheduling: scheduling profiles, overcommitted nodes, node selectors and node affinity with demos
33. Advanced placement: pod affinity and anti-affinity, taints and tolerations, the Descheduler Operator
34. OpenShift GitOps: Argo CD instances, Applications, sync policies and declarative app management
35. Monitoring stack: Prometheus, Alertmanager, Grafana and console dashboards, user workload monitoring
36. OpenShift Logging: LokiStack storage, collectors from Fluentd to Vector, ClusterLogForwarder outputs
37. Serverless on OpenShift: Knative Serving revisions, scale to zero and Knative Eventing introduction
38. Debugging applications: oc debug, oc logs, oc rsh, events, oc adm must-gather and inspect
39. Application lifecycle management: ImageStreams, image change triggers, rollouts and rollbacks

PRACTICE

Hands-on labs

You build these yourself during the course, guided by the trainer.

FOUNDATION **Deploy your first OpenShift application**

Log in to a lab cluster with oc and the console, create a project with role bindings, and deploy a container image with persistent storage exposed through a route.

ESSENTIAL **Build, expose and persist an app**

Build an application from Git with S2I, expose it through a TLS edge route, inject settings via ConfigMap and Secret, and attach a CSI-provisioned volume.

INTERMEDIATE **GitOps delivery with monitoring and backup**

Deliver an app through OpenShift GitOps with quotas and anti-affinity, add user workload alerts and LokiStack logs, and back up and restore it with OADP.

HOW YOU CAN LEARN

Formats and fees

The same agenda in four formats. Fees are in Indian rupees as of November 2026; the course page shows them in your currency.

FORMAT	DURATION	WHAT YOU GET	FEE
Live & interactive (online)	Max 8-10 hours	Instructor-led public batch of max 10 learners with demos, labs, Q&A and assignment review. Weekday batches start on the 1st of every month, weekend batches on the first Saturday of every month.	**INR 34,999**
1:1 live training (online)	Max 8-10 hours, one-to-one	The same agenda, taught one-to-one by the trainer. Starts immediately, without waiting for the next batch; sessions planned around your working hours, at your pace.	**INR 99,999**
Self-paced video	1-year LMS access	All four Openshift levels, plus 20+ more courses and 50+ tools, at your own pace.	**INR 833/month** billed yearly at INR 9,996
Corporate (day-wise)	3 days for this level	A private batch for your team, on demand. Foundation 1 day, Essential 2, Intermediate 3, Advanced 5 (cumulative).	**Quote on request**

ASSESSMENT AND CERTIFICATE

Your progress is checked through hands-on labs and assignments at every level. On completion you receive a DevOpsSchool certificate of completion with a unique credential ID that anyone can verify at devopsschool.com/certificates.

INCLUDED WITH EVERY LIVE BATCH

- Every live session is recorded and stays in your LMS for a year.
- Can't attend your batch? Move to next month's batch.
- Free demo class before you pay.
- Free 10-15 minute call with an advisor or the trainer to check the course fits you.

YOUR TRAINER

Learn from Rajesh Kumar

Principal Architect, trainer and mentor in DevOps, SRE, DevSecOps and platform engineering, with 20 years across 8+ software MNCs, including Staff DevOps/SRE Engineer for a leading Japanese mobile-payment platform and Principal DevOps Architect and Manager in Europe.

Profile: www.rajeshkumar.xyz · Videos: youtube.com/@TheDevOpsSchool

20 years in industry	**200+** corporate trainings
10,000+ engineers mentored	**70+** organisations coached

REVIEWS

What learners say

Rated 4.6 on Google · more reviews at devopsschool.com/testimonials and in our video testimonials.

> “Rajesh is very good trainer. Rajesh was able to resolve our queries and question effectively. We really liked the hands-on examples covered during this training program.”
>
> Indrayani, India

> “The training was very useful and interactive. Rajesh helped develop the confidence of all.”
>
> Abhinav Gupta, Pune

START YOUR OPENSHIFT TRAINING

Join the next batch

Weekday batches start on the 1st of every month and weekend batches on the first Saturday of every month, with max 10 learners each. 1:1 training can start immediately; corporate batches run on demand. We reply within 1 hour.

Pay by UPI, credit and debit cards, net banking or PayPal. Before you pay, read our refund policy. All levels of this course: www.devopsschool.com/courses/openshift/

ENROL OR RESERVE A SEAT
Openshift Intermediate Training

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Next step after this level: Openshift Advanced Training - Secure, tune and upgrade multi-tenant OpenShift clusters with SCCs, identity integration, image signing and autoscaling.