OpenShift Essentials Bootcamp Training Course: Build, Deploy & Operate

26 – 30 July 2027
Istanbul

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Ref: 78_79028 **Date:** 26 – 30 July 2027 **Location:** Istanbul **Fees:** 4500 Euro

Course Overview:

"OpenShift Essentials Bootcamp: Build, Deploy & Operate" is a hands-on corporate training course designed to equip developers, DevOps engineers, and IT professionals with the foundational skills required to succeed with Red Hat OpenShift. This intensive workshop covers the essentials of OpenShift containers, developer workflows, and CI/CD practices. Participants will learn how to build and deploy applications using both the OpenShift Web Console and CLI tools, understand the architectural differences between OpenShift and Kubernetes, automate workflows with OpenShift Pipelines, and monitor application health. This course emphasizes practical knowledge through guided exercises and real-world scenarios, making it ideal for teams seeking to master OpenShift fundamentals for modern cloud-native development.

Target Audience:

- Software Developers
- DevOps Engineers
- Cloud Engineers
- Platform Engineers
- System Administrators
- Technical Team Leads

Targeted Organizational Departments:

- IT Operations
- Application Development
- Cloud Infrastructure
- DevOps & Automation
- Digital Transformation Teams
- Platform Engineering

Targeted Industries:

- Information Technology
- Financial Services
- Telecommunications
- Healthcare & Life Sciences
- Energy & Utilities
- Government & Public Sector

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Course Offerings:

By the end of this course, participants will be able to:

- Build and deploy applications using Source-to-Image S2I
- Configure basic CI/CD pipelines with OpenShift Pipelines Tekton
- Operate and monitor applications using integrated platform tools
- Utilize the OpenShift Web Console and oc CLI commands
- Understand the distinctions between OpenShift and Kubernetes
- Manage Projects and configure Routes within OpenShift
- Scale applications and configure basic health checks

Training Methodology:

This course blends theoretical instruction with hands-on practice. Training methodologies include interactive lectures, group troubleshooting sessions, guided labs, and simulated real-world use cases. Participants will complete structured labs on deployment automation, application scaling, pipeline creation, and container debugging. Collaborative discussions, visual configuration walkthroughs, and feedback sessions will reinforce core concepts and promote practical learning outcomes.

Course Toolbox:

- Lab environment access
- Command-line guides and usage scenarios
- Step-by-step configuration examples
- Platform UI navigation exercises
- YAML configuration samples for pipelines and templates

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Course Agenda:

Day 1: OpenShift Foundations & Essentials

- **Topic 1:** Introduction to OpenShift and its Role in Modern IT
- **Topic 2:** OpenShift vs Kubernetes: Concepts and Architecture
- **Topic 3:** Understanding Projects, Services, and Routes
- **Topic 4:** Working with oc CLI and the Web Console
- **Topic 5:** Deploying Applications with BuildConfig and DeploymentConfig
- **Topic 6:** Overview of Platform Architecture and Developer Access
- **Reflection & Review:** Recap of Core Concepts and Platform Navigation

Day 2: Application Deployment Essentials

- **Topic 1:** Introduction to Source-to-Image S2I Workflows
- **Topic 2:** Deploying Applications with Git Integration
- **Topic 3:** Application Scaling: Manual and Automatic Approaches
- **Topic 4:** Configuring Routes and Service Exposure
- **Topic 5:** Health Checks: Readiness and Liveness Probes
- **Topic 6:** Debugging Containers with CLI and UI Tools
- **Reflection & Review:** Practice Session: Deploy and Troubleshoot

Day 3: CI/CD Fundamentals with Pipelines

- **Topic 1:** Understanding OpenShift Pipelines and Tekton Basics
- **Topic 2:** Automating Builds with BuildConfig and Triggers
- **Topic 3:** Creating and Executing Pipelines
- **Topic 4:** Managing PipelineRun and TaskRun Workflows
- **Topic 5:** Git-Based Automation and Webhook Integration
- **Topic 6:** Simplified Configuration with Service Binding Concepts
- **Reflection & Review:** CI/CD Exercise and Review Discussion

Day 4: Monitoring and Operational Management

- **Topic 1:** Resource Monitoring and Metrics Overview
- **Topic 2:** Using the Web Console for Performance Insights
- **Topic 3:** Accessing Logs and Events; CLI Debug Tools
- **Topic 4:** Introduction to Templates and Deployment Automation
- **Topic 5:** User Roles and Project Access Control
- **Topic 6:** Developer Tooling and Local Integration Options
- **Reflection & Review:** Operational Best Practices Discussion

Day 5: Readiness for Production Environments

- **Topic 1:** Persistent Storage and Application State Management
- **Topic 2:** Configuring Advanced Routes and Network Policies
- **Topic 3:** Best Practices for Local Cluster Setup
- **Topic 4:** Reviewing Real-World Use Cases and Scenarios
- **Topic 5:** Preparation for Continued Learning and Advanced Skills
- **Topic 6:** Application Design Considerations for Developers
- **Reflection & Review:** Capstone Project Presentations

FAQ:

What specific qualifications or prerequisites are needed for participants before enrolling in the course?

Familiarity with basic software development concepts and version control tools e.g., Git is recommended. Prior experience with containers or Kubernetes is helpful but not required.

How long is each day's session, and is there a total number of hours required for the entire course?

Each day's session is generally structured to last around 4-5 hours, with breaks and interactive activities included. The total course duration spans five days, approximately 20-25 hours of instruction.

What is the difference between OpenShift Pipelines and Jenkins for CI/CD?

While Jenkins is a general-purpose CI/CD tool, OpenShift Pipelines is a Kubernetes-native solution based on Tekton. It integrates tightly with OpenShift's security model, allows containerized steps, and scales automatically within the OpenShift platform.

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How This Course is Different from Other OpenShift Courses:

Unlike traditional OpenShift courses that focus purely on system administration, "OpenShift Essentials Bootcamp: Build, Deploy & Operate" centers on essential skills needed by developers and DevOps teams. This course emphasizes foundational concepts and real-world workflows, including Source-to-Image automation, pipeline configuration, health checks, and scaling strategies. It provides practical training through hands-on sessions and scenario-based exercises that prepare teams for immediate use of OpenShift in enterprise environments. With a focus on the essentials, participants gain the confidence to deploy, manage, and scale containerized applications effectively.