

Delivering Customized OKD Training for Container Orchestration & DevOps Expertise

Challenge:

An individual professional aimed to build deep expertise in OpenShift with a specific focus on OKD (OpenShift Origin)—the open-source counterpart to Red Hat OpenShift. This aligned with their strategy to adopt open-source solutions and significantly reduce licensing costs. The primary challenge was:

- A lack of structured learning paths and official documentation specific to OKD, necessitating a fully customized, practical, and hands-on training program covering detailed OKD workflows, administration, monitoring, and troubleshooting.

Solution:

To address the client's needs, we developed an entirely tailored training solution through detailed pre-training consultations to understand the participant's existing container knowledge and specific automation goals. Our customized solution involved:

1. Tailored Training Curriculum:

- a. Stage 1: Podman and OKD Administration 1: Covered containerization fundamentals and OKD cluster setup.
- b. Stage 2: OKD Administration 2: Advanced topics including cluster administration, scaling, monitoring, and troubleshooting, delivered after a practical application gap.

2. Real-World Custom Labs:

- a. Labs and exercises were created specifically around OKD, ensuring direct relevance and applicability to the client's future environment.
- b. Hands-on scenarios addressed practical administration challenges, building operational confidence.

3. Personalized Instruction:

- a. Delivered as live instructor-led online (ILO) sessions, tailored directly to the participant's unique requirements and availability.

Collaboration & Execution:

- **Courses Delivered:**
 - Podman and OKD Administration 1 (Containerization Basics & OKD Cluster Setup)
 - OKD Administration 2 (Advanced Cluster Administration, Monitoring, and Troubleshooting)
- **Training Format & Schedule:**
 - Instructor-Led Online (ILO) training, conducted in two stages with a practical gap for participant application and practice.
 - Sessions scheduled from 19:00 to 01:30 IST, matching participant availability.
- **Tools & Platforms Used:**
 - Podman (Container management)
 - OKD (OpenShift Origin - Open-Source Kubernetes distribution)
 - Linux (RHEL/CentOS Stream)
 - Git and GitHub (Version Control)
 - Prometheus and Grafana (Cluster Monitoring)
 - Helm and Operators (OKD Application Management)

Results:

- **Participants Trained:**
 - One individual participant trained comprehensively.
- **Key Learning Outcomes:**
 - Achieved robust theoretical and practical knowledge in Podman and OKD, from basic container management to advanced cluster administration.
 - Enabled the participant to independently deploy, manage, scale, monitor, and troubleshoot OKD clusters effectively.
- **Impact & Business Benefits:**
 - Empowered the participant with operational expertise in OKD, directly supporting production-level deployments confidently.

- Enabled the successful adoption of OKD, aligning with the client's open-source adoption strategy and significantly reducing licensing expenses compared to proprietary solutions.