

# Running Containers with Red Hat Technical

**Course Duration: 8 Hours**

**Course Code: RHCTR-TO**

## 1. Course Overview

The **Running Containers with Red Hat Technical Overview** course provides an introduction to **Linux containers** and how they are used to build, run, and manage applications in modern IT environments. This technical overview highlights the **fundamentals of container technology**, its benefits, and how Red Hat supports container adoption with its platforms and tools.

Participants will learn about container concepts, basic commands, image management, and how containers fit into DevOps and cloud-native strategies.

## 2. What You'll Learn?

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

- Understand **container technology and its advantages**.
- Differentiate containers from **traditional virtualization**.
- Run, manage, and interact with containers.
- Work with **container images** and registries.
- Explore the role of containers in **DevOps pipelines and cloud-native applications**.
- Learn how containers are supported in **Red Hat Enterprise Linux and OpenShift**.

### 3. Target Audience

This course is designed for:

- **System administrators** exploring container adoption.
- **Developers** building and testing applications in containers.
- **DevOps engineers** working on CI/CD pipelines.
- **IT decision-makers** evaluating container strategies for enterprise workloads.

### 4. Pre-Requisites

- Basic knowledge of **Linux system administration**.
- Familiarity with command-line operations.
- No prior container experience required.

### 5. Course Content

#### **Module 1: Introduction to Containers**

- What are containers?
- Containers vs. virtual machines.
- Benefits of containers in modern IT.

#### **Module 2: Container Architecture and Concepts**

- Linux kernel features supporting containers.
- Images, layers, and registries.
- Container runtime basics.

#### **Module 3: Running and Managing Containers**

- Starting, stopping, and managing containers.
- Executing commands inside containers.

- Networking and storage basics for containers.

#### **Module 4: Working with Container Images**

- Creating and pulling container images.
- Using Red Hat container catalogs and registries.
- Image security and best practices.

#### **Module 5: Containers in DevOps and Cloud-Native Environments**

- Containers in CI/CD workflows.
- Scaling applications with containers.
- Containers as the foundation of Kubernetes and OpenShift.

#### **Module 6: Red Hat Support for Containers**

- Running containers in **Red Hat Enterprise Linux (RHEL)**.
- Container management with **Podman and Buildah**.
- Role of Red Hat OpenShift in enterprise container adoption.