

# Ansible Basics: Automation Technical Overview

**Course Duration: 16 Hours**

**Course code: DO007**

## 1. Course Overview

The Ansible Basics: Automation Technical Overview course introduces you to the fundamentals of Red Hat Ansible Automation Platform. This course provides a hands-on understanding of how Ansible automates IT tasks such as configuration management, provisioning, and application deployment. You will learn how to write simple Ansible playbooks, manage inventory, and run automation tasks efficiently. It is an ideal starting point for beginners looking to adopt automation in their IT environment.

## 2. What you'll learn?

This course is designed to introduce learners to the fundamentals of Ansible automation, with a focus on applying these skills to real-world production environments. Participants will gain hands-on knowledge of automating routine tasks, configuring systems at scale, and managing deployments with increased consistency and efficiency. By the end of the course, learners will be equipped to use Ansible to simplify complex IT processes and enhance overall productivity in their infrastructure operations.

## 3. Target Audience

- System administrators
- DevOps engineers

- IT operations professionals
- Automation engineers
- Cloud infrastructure administrators
- Anyone interested in automating IT tasks using Ansible

## 4. Pre-Requisites

### Participants should have:

Before attending this course, participants should have a foundational understanding of Kubernetes concepts and AWS services, as well as some experience with OpenShift administration. This baseline knowledge will ensure learners can effectively grasp advanced ROSA deployment and integration topics.

- Familiarity with AWS fundamentals
- Working knowledge of Kubernetes (pods, services, deployments)
- Prior exposure to Red Hat OpenShift administration (recommended)
- Experience with containerized application deployment (helpful but not mandatory)

## 5. Course content

### Module 1: Introduction to Ansible Automation

- Overview of Ansible Automation Platform
- Benefits of IT automation
- Key features and use cases

## **Module 2: Installing and Configuring Ansible**

- Installation methods for Ansible
- Setting up and managing inventories
- Understanding Ansible configuration files

## **Module 3: Running Ad-Hoc Commands**

- Using Ansible command-line tools
- Managing systems without writing playbooks
- Basic module usage examples

## **Module 4: Writing and Running Playbooks**

- YAML basics for Ansible playbooks
- Creating tasks and handlers
- Executing playbooks to automate workflows

## **Module 5: Managing Variables and Facts**

- Defining and using variables in playbooks
- Gathering facts about managed hosts
- Variable precedence and organization

## **Module 6: Roles and Reusability**

- Structuring playbooks with roles
- Sharing and reusing automation content
- Best practices for role development

## Module 7: Ansible Tower Overview (Optional)

- Introduction to Ansible Tower
- Benefits of web-based automation management
- Job templates and role-based access

