

# Hands-on Ansible Essentials | Introduction to Automation with Ansible - TTDV7580

Explore Ansible Basics, Automatic Provisioning, Configuration Management, Service Deployment, Operational Processes & More

**Duration:** 3 Days

Skill Level: Introductory

Available Format: Instructor-Led Online; Instructor-Led, Onsite In Person; Blended;

On Public Schedule

Hands-on Ansible / Introduction to Automation with Ansible is a three-day, labintensive course geared for toward those responsible for automation of configuration management; consistent and repeatable application deployment; provisioning and deployment of development, testing, and production servers; and (optionally) integration with DevOps CI/CD workflows.

## What You'll Learn

#### **Overview**

Introduction to Ansible | Automation with Ansible is a three-day, lab-intensive course geared for toward those responsible for automation of configuration management; consistent and repeatable application deployment; provisioning and deployment of development, testing, and production servers; and (optionally) integration with DevOps CI/CD workflows.

**Throughout the course** participants will explore core Ansible features such as automatic provisioning, configuration management, service deployment and operational processes. This course also covers enterprise topics such as managing sensitive data (Ansible Vault), Ansible Tower, and integrating with Docker (optional). Attendees might include Linux system administrators, DevOps engineers, infrastructure automation engineers, and systems design engineers.

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## **Objectives**

Working in a hands-on learning environment led by our expert practitioner **attendees** will explore how to:

- Describe Ansible concepts and install Red Hat Ansible Engine (optional we can preinstall is as well if desired, depending on the audience)
- Deploy Ansible and Configure Ansible to manage hosts and run ad hoc Ansible commands.
- Implement playbooks
- Write a simple Ansible playbook and run it to automate tasks on multiple managed hosts.
- Manage variables and facts
- Write playbooks that use variables to simplify management of the playbook and facts to reference information about managed hosts.
- Implement task control; Manage task control, handlers, and task errors in Ansible playbooks.
- Deploy files to managed hosts
- Deploy, manage, and adjust files on hosts managed by Ansible.
- Manage large projects
- Write playbooks that are optimized for larger, more complex projects.
- Simplify playbooks with roles
- Use Ansible roles to develop playbooks more quickly and to reuse Ansible code.
- Troubleshoot Ansible
- Troubleshoot playbooks and managed hosts.
- Automate Linux administration tasks
- Automate common Linux system administration tasks with Ansible.

#### **Audience**

The audience would include system administrators, DevOps engineers, and IT professionals looking to automate server configuration, deployment, and management tasks.

## **Pre-Requisites**

**Take Before** Attendees should have incoming experience similar to the topics listed in the course(s) below or should have attended these as a pre-requisite:

- TTPS4800 Introduction to Python Programming Basics 3 days
- TTLX2103 Introduction to Linux 3 days

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TTLX2103 Introduction to Linux / Linux Essentials
TTPS4800 Introduction to Python Programming Basics

## **Agenda**

Please note that this list of topics is based on our standard course offering, evolved from typical industry uses and trends. We will work with you to tune this course and level of coverage to target the skills you need most.

#### **Ansible Overview**

- Overview of Architecture
- Overview of Deployments
- Inventory

## **Deploying Ansible**

- Installing
- Configuration Files
- Running Ad Hoc Commands
- Dynamic Inventory

## **Playbooks**

- Writing YAML Files
- Modules

#### Variables and Inclusions

- Variables
- Facts
- Inclusions

#### **Task Control**

- Constructing Flow Control
- Handlers
- Tags
- Handling Errors
- Jinja2 Templates

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#### **Roles**

- Role Structure
- Creating Roles
- Deploying Roles with Ansible Galaxy
- Optimizing Ansible

### **Configuring Connection Types**

- Configuring Delegation
- Configuring Parallelism
- Ansible Vault
- Configuring Ansible Vault
- Executing with Ansible Vault
- Troubleshooting Ansible

#### **Troubleshooting Playbooks**

- Troubleshooting Managed Hosts
- Ansible Tower

#### **Ansible Tower overview**

- Installing
- Account management
- Hosts
- Jobs

## **Follow On Courses**

TTDV7585 Advanced Ansible in Action: Building Smarter, Stronger Automation

## **Related Courses**

TTDV7585 Advanced Ansible in Action: Building Smarter, Stronger

Automation



## For More Information

Please <u>contact us</u> or call 844-475-4559 toll free for more information about our training services (instructor-led, self-paced or blended), coaching and mentoring services, public course enrollment or questions, partner programs, courseware licensing options and more.