

## Introduction to Ansible: Automation with Ansible (TTDV7580)

### Overview

This lab-intensive course is geared toward those responsible for automation of configuration management; consistent and repeatable application deployment; provisioning and deployment of development, testing, and production servers; and integration with DevOps CI/CD workflows. Throughout the course you will explore core Ansible features such as automatic provisioning, configuration management, service deployment and operational processes.

### Prerequisite Comments

TTPS4824 Introduction to Python for Networking / SysAdmin – 4 days  
TTLX2103 Introduction to Linux | Linux Essentials – 3 days

### Target Audience

This is an Introductory level course for experienced Linux system administrators, DevOps engineers, infrastructure automation engineers, and systems design engineers. Ideally students should have familiarity with basic Python scripting. Attendees without programming skills can follow along with the scripting portion of the labs.

### Course Objectives

This course is approximately 50% hands-on, combining expert lecture, real-world demonstrations and group discussions with machine-based practical labs and exercises. 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 pre-install 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

[Register Online](#)**Schedule**

Class Length: 3 Days

G2R = "Guaranteed to Run" | OLL = "Online LIVE"  
ILT = "Instructor-Led-Training"

*This course is not currently available on the public schedule. Please contact us using the information in the footer below to inquire about future dates or to schedule a private class.*

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

## Course Outline

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### 1 - Ansible Overview

Overview of Architecture  
Overview of Deployments  
Inventory

### 2 - Deploying Ansible

Installing  
Configuration Files  
Running Ad Hoc Commands  
Dynamic Inventory

### 3 - Playbooks

Writing YAML Files  
Modules

### 4 - Variables and Inclusions

Variables  
Facts  
Inclusions

### 5 - Task Control

Constructing Flow Control  
Handlers  
Tags  
Handling Errors

## 6 - Jinja2 Templates

Jinja2 Templates  
Jinja2 Templates

## 7 - Roles

Role Structure  
Creating Roles  
Deploying Roles with Ansible Galaxy

## 8 - Optimizing Ansible

Configuring Connection Types  
Configuring Delegation  
Configuring Parallelism

## 9 - Ansible Vault

Configuring Ansible Vault  
Executing with Ansible Vault

## 10 - Troubleshooting Ansible

Troubleshooting Playbooks  
Troubleshooting Managed Hosts

## 11 - Ansible Tower

Ansible Tower overview  
Installing  
Account management  
Hosts  
Jobs

## 12 - Optional: Ansible in a DevOps Environment

Provisioning Vagrant Machines  
Deploying Vagrant in a DevOps Environment  
Deploying Docker in a DevOps Environment

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