

Ansible with Linux and Windows Administration

Duration: 5 Days

Hands-On Format: This hands-on class is approximately 80/20 lab to lecture ratio, combining engaging lecture, demos, group activities and discussions with comprehensive machine-based practical programming labs and project work.

Module 1 – Introduce Ansible

Introduction to Ansible
Current IT Automation State
Configuration Management
Ansible History
How Ansible Works?

Module 2 – Understanding of Ansible Framework

Case Study
Ansible way of Configuration Management
Infrastructure as a Code (IaC)
Idempotency
Ansible Terminologies

Module 3 – Ansible Deployment

Pre-requisites for Controller Node
Installation and Configuration
Ansible Configuration File
Pre-requisites for Managed Node
Ansible Inventory
Ansible Communication
Ansible Architecture

Module 4 – Ad-hoc Commands

Introduction to Ansible Module
Ad-hoc Remote Executions
Ansible Commands
Privilege Escalation

Module 5 – Managing Playbooks

YAML Structure
Ansible Playbooks
Structure of Playbook
Syntax Check of Playbook
Run Playbook

Module 6 – Variables in Ansible

- Introduction to Ansible Variables
- Defining Ansible Variable in Ansible Code
- Use Variable File
- Host Vars and Group Vars
- Ansible Facts
- Facts in Playbooks
- Use Cases of Facts
- Disabling Facts

Module 7 – Conditionals, Loops, Handlers and Error Handling

- Conditionals in Ansible
- Loops in Ansible
- Loops with Variables
- Notify and Handlers in Ansible
- Register and Debug
- Ignore Errors
- Block and Rescue

Module 8 – Ansible Roles and Galaxy

- Introduction to Role
- Understanding Role Structure
- Managing Roles
- Introduction to Ansible Galaxy
- Download and Use Roles from Ansible Galaxy

Module 9 – Ansible Vault

- Introduction to Ansible Vault
- Encrypt and Decrypt Playbooks
- Use File as Password for Ansible Playbooks
- Ansible Vault Commands

Module 10 – Jinja 2 Templates

- Introduction to Jinja2 Template
- Create Jinja2 Template
- Template with Looping
- Template with Conditions

Module 11 – Linux Administration

- Managing Packages
- Managing Users and Groups
- Managing Partition
- Starting and Stopping Services
- Managing SSH Keys

Module 12 – Windows Administration

Install and Uninstall MSI/EXE

Download Software

Managing Users

Managing Windows Partition

Managing Services