Linux Fundamentals and Ansible

Duration: 4 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 – Linux Fundamentals

What is Linux
Basic Linux Commands
Understanding Linux File System Structure
Creating Files and Directories
VIM Editor
Create and Delete Users
Adding Users in Groups
Managing Permissions
Managing Services
SSH
Managing Packages with Yum

Module 2 – Introduce Ansible

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

Module 3 – Understanding of Ansible Framework

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

Module 4 – 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 5 – Ad-hoc Commands

Introduction to Ansible Module
Ad-hoc Remote Executions
Ansible Commands

Module 6 – Managing Playbooks

YAML Structure
Ansible Playbooks
Structure of Playbook

Syntax Check of Playbook
Run Playbook

Module 7 – Variables in Ansible

Introduction to Ansible Variables
Defining Ansible Variable in Ansible Code
Use Variable File
Ansible Facts
Facts in Playbooks

Module 8 – Conditionals, Loops, Handlers and Error Handling

Conditionals in Ansible
Loops in Ansible
Notify and Handlers in Ansible
Register and Debug
Ignore Errors

Module 9 – Ansible Roles and Galaxy

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

Module 10 – Ansible Vault

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

Module 11 – Jinja 2 Templates

Introduction to Jinja2 Template
Create Jinja2 Template
Template with Looping