Ansible Core Concepts and Advanced Features

Ansible is the leading solution for configuration management. Learn what Ansible is and how to modify and organize your Ansible set-up, it is organized, and explore playbooks, modules, content collections and how to use these with variables and conditionals. You will also explore how to manage files with Jinja2 templates, and Ansible roles to include standardized components in Ansible. Further, it will look at more advanced topics, including filters and plugins, which let you extend Ansible functionality easily.

Module 1: Fundamentals

Lesson 1: What is Ansible
1.1 What is Configuration Management
1.2 Solutions for Configuration Management
1.3 Configuration as Code and DevOps
1.4 Ansible Components
1.5 Working with Ansible in Small Environments
1.6 Working with Ansible in Large Environments

Lesson 2: Getting Started
2.1 Ansible Infrastructure Components
2.2 Setting up a RHEL Ansible Control Node
2.3 Setting up an Ubuntu Ansible Control Node
2.4 Setting up an Ansible Control Node with Python pip
2.5 Requirements for Managing Assets
2.6 Modules and Collections
2.7 Using Ansible to Configure Managed Nodes - Part 1
2.8 Using Ansible to Configure Managed Nodes - Part 2
2.9 Using Ansible to Configure Managed Nodes - Part 3
2.10 Defining Default Settings in ansible.cfg
2.11 Managing Windows
2.12 Using MacOS as a Control Node

Lesson 3: Using Ansible in Large Environments
3.1 Centralizing Configuration as Code Using Git
3.2 Using AWX and Ansible Automation Platform

Lesson 8: Managing Files

      8.1 Manipulating Files

      8.2 Changing File Contents

      8.3 Using the find Module

      8.4 Using Templates

      8.5 Using Conditional Statements in Templates

Lesson 9: Using Roles

      9.1 Understanding and Using Roles

      9.2 Working with ansible-galaxy

      9.3 How Roles are Organized

      9.4 Writing Custom Roles

      9.5 Using System Roles

Module 3: Advanced Ansible Management

Lesson 10: Ansible Best Practices and Optimization

      10.1 Using include and import

      10.2 Configuring Security

      10.3 Using Tags

      10.4 Using Delegation

      10.5 Managing Parallelism

      10.6 Efficiently Copying Files

      10.7 Optimizing SSH

      10.8 Case Study: Optimizing Ansible

Lesson 11: Using Filters

      11.1 Understanding Filters and Plugins

      11.2 Filters, Plugins, and Collections

      11.3 Understanding Filters and Variable Types

      11.4 Using Filters to Change Variables

      11.5 Using Filters to Work with Network Addresses

      11.6 Examples of Using Filters

      11.7 More examples of using filters

Lesson 12: Using Plugins

      12.1 Understanding Plugins

      12.2 Exploring Lookup Plugins

      12.3 Common Lookup Plugins

      12.4 Using the fileglob Plugin

      12.5 Plugin-based Inventory

      12.6 Fact Caching