Course Outline

Ansible

Course Summary

Description

This course covers all the core Ansible features including: installing and configuring, running ad-hoc commands, understanding modules, creating and using playbooks, variables and inclusion, task control, templates, and roles. The course also covers: dealing with sensitive data via Ansible Vault, integration with Docker and Vagrant, and troubleshooting. Version: B01.

Topics

- Ansible Overview
- Deploying Ansible
- Playbooks Basics
- Variables And Inclusions
- Task Control
- Jinja2 Templates
- Roles
- Ansible Vault

Audience

The audience for this course is system's administrators desiring to automate provisioning, configuration management, service deployment, operational processes.

Prerequisites

Experience with Linux shell, text editing, and basic systems administration needed.

Duration

Three Days
Ansible

Course Outline

I. Ansible Overview
   A. Why Ansible?
   B. Overview of Architecture
   C. Quiz: Architecture
   D. Inventory
   E. Inventory Patterns
   F. Quiz: Inventory and Patterns
   G. Demo: Introducing Ansible

II. Deploying Ansible
   A. Installing
   B. Demo: Installing Ansible
   C. Configuration Files
   D. Demo: Configuration Files
   E. Module Syntax Help
   F. Running Ad Hoc Commands
   G. Demo: Running Ad Hoc Commands
   H. Dynamic Inventory
   I. Demo: Dynamic Inventory
      Lab Tasks
      • Deploying Ansible
      • Ad Hoc Commands
      • Dynamic Inventories

III. Playbooks Basics
   A. Writing Yaml Files
   B. Modules
   C. Command Modules
   D. Significant Module Categories
   E. File Manipulation
   F. Network Modules
   G. Packaging Modules
   H. System Storage
   I. Account Management
   J. Security
   K. Services
   L. Network Automation
   M. Simple Network Module Examples
   N. Gotchas
   O. Simple Ios Modules Examples
   P. General Purpose Ios Modules
   Q. Demo: Playbooks
      Lab Tasks
      • Playbook Basics
      • Playbooks: Command Modules
      • Playbooks: Common Modules

IV. Variables and Inclusions
   A. Variables
   B. Variables - Playbooks
   C. Variables - Inventory
   D. Variables - Registered
   E. Facts
   F. Demo: Facts
   G. Inclusions
      Lab Tasks
      • Variables and Facts
      • Inclusions

V. Task Control
   A. Loops
   B. Loops and Variables
   C. Demo: Constructing Flow Control
   D. Conditionals
   E. Demo: Conditionals
   F. Handlers
   G. Tags
   H. Handling Errors
      Lab Tasks
      • Task Control

VI. Jinja2 Templates
   A. Jinja2
   B. Expressions
   C. Quiz: Jinja2 Templates
   D. Filters
   E. Tests
   F. Lookups
   G. Demo: Jinja2 Templates
      Lab Tasks
      • Jinja2 Templates

VII. Roles
   A. Roles
   B. Role Usage Details
   C. Quiz: Role Structure
   D. Creating Roles
   E. Deploying Roles with Ansible Galaxy

VIII. Ansible Vault
   A. Configuring Ansible Vault
   B. Vault IDs
   C. Executing with Ansible Vault
   D. Lab Tasks
      • Ansible Vault