

ANSIBLE CONFIGURATION MANAGEMENT TRAINING

Duration: 2 Days

Overview:

This Ansible training course demonstrates the flexibility and power of the Ansible configuration management system, and how it can be used to build and scale highly reliable infrastructure for your own environments and projects. Using real-world examples, we demonstrate how Ansible can be used to manage environments as small as a couple of servers, or for massively distributed infrastructure that spans the globe — all with the same simple syntax.

By the end of this course, you will have a solid understanding and hands-on experience building reliable and easily reproducible infrastructure using Ansible, and the knowledge to integrate Ansible into your operations workflow. Our hands-on lab format and real-world practice scenarios cement your new skills with Ansible's tools and leave you prepared to begin taking advantage of radically simple configuration management

You Will Learn How To:

- Develop a playbook to install and configure OpenSSH-server on all nodes
- Refactor your inventory so that your staging environment is local using Vagrant
- Build infrastructure on local Vagrant environment
- Adapt your infrastructure to deploy using Docker

Course Outline

Part 1: Introduction

- Why configuration management is a critical part of any DevOps team
- Strengths and weaknesses of Ansible
- Web-scale

Part 2: Getting set up

- Some prerequisites
- Getting set up on a Mac
- Getting set up on Linux
- Getting set up on Windows
- Testing with Vagrant
- Using SSH keys to connect to your target nodes

Part 3: Inventory

- Basic inventory example
- Hosts and groups

Part 4: Ansible Playbooks

- A useful directory structure to keep your Ansible code organized
- Using git to manage your Ansible code
- A first look at a playbook to install and configure NTP time synchronization

Part 5: Provisioners

- Connecting Ansible to your preferred cloud provider (we'll use DigitalOcean)
- Creating a new server instance
- Dynamic inventory
- Dynamic inventory on Amazon AWS
- Mixing static and dynamic inventory

Part 6: Highly available infrastructure with Ansible

- Spec up our inventory and host groups
- Using roles
- Configure our database backend
- Configure our web server front-end
- Configure a replicated filesystem
- Configure centralized logging

Part 7: Application deployments with Ansible

- Deploying our app from SCM to our local Vagrant environment
- How we would deploy that code to production once tested by QA
- Updating our application
- How Ansible compares to alternatives such as Capistrano

Part 8: Docker containers with Ansible

- A brief intro to Docker

- The synergy of containerization and automation
- Using Ansible to build Docker containers
- MySQL containers
- Web application containers
- Data storage containers

Part 9: Testing and continuous integration

- Unit, integration, and functional testing
- Automating your testing using GitHub and Travis CI

Part 10: Preparing for Ansible back at work

- Real-world use case: Using Ansible to automate CM and application pipelines through continuous integration, release, deployment, and operations
- We'll review your own environments and processes and evaluate how to best integrate Ansible's configuration management for your own needs

Audience/Prerequisites

- IT Managers and Leaders
- Developers and Application Teams
- System Administrators
- IT Operations Staff
- Release Engineers
- Configuration Managers
- Anyone involved with IT infrastructure
- ScrumMasters
- Software Managers and Team Leads

Ways to Register:

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