

F5-TRG-BIG-AUTO

Automating BIG-IP with Ansible

Overview

This course introduces network administrators, operators, and DevOps engineers to the foundational and F5 Networks-specific technologies required to automate BIG-IP. Participants will gain exposure to multiple technologies for a variety of use cases and will have hands-on experience that leave them better prepared to automate the onboarding and configuration of BIG-IP.

Course Length

2 days

Topics covered in this course Include

- Review the Linux Command Line
- Review BIG-IP Application Creation
- Discuss Automation and DevOps Concepts
- Configuring BIG-IP with iControl REST
- Configuring BIG-IP programmatically with Ansible

Audience

This course is intended for network administrators and operators and DevOps engineers interested in automating tasks on BIG-IP systems in their public and private Clouds as well as in their datacenter infrastructure.



AUTHORIZED
TRAINING CENTER

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SHOULD ADAPT TO CHANGE

Prerequisites

Students should be familiar with and able to configure basic BIG-IP elements such as:

- Virtual Servers
- Pools, Pool Members and Nodes
- Pool Monitors
- Basic Virtual Server Profiles

In addition, the following general technical knowledge should be well understood:

- Layer 2 Ethernet and ARP networking concepts
- Layer 3 and 4 TCP/IP networking concepts, including IP addressing and subnetting
- Layer 7 HTTP networking concepts
- Linux command line and basic Linux commands
- HTML

Finally, *nice-to-have* knowledge includes familiarity with programming and/or scripting languages, such as:

- JavaScript or NodeJS
- Python
- Bash

Course Outline

- Chapter 1: Linux Command Line Review
 - Navigating the Linux File System
 - Creating and Deleting Files and Directories
 - Copying and Moving Files
 - Command Line Auto-Completion and Editing
 - Tools for Analyzing Test Results and Inspecting Log Files



- Chapter 2: BIG-IP Application Creation Review
 - Understanding Load Balancing Basics
 - Configuring Virtual Servers, Pools, Pool Members and Nodes
 - Configuring Health Monitors and SSL Profiles
 - Understanding the Full Proxy Architecture and Source Address Translation

- Chapter 3: Automation and DevOps Concepts
 - Understanding Infrastructure as Code, NetOps and DevOps
 - Differentiating Automation and Orchestration Concepts
 - Diving into DevOps Concepts such as Idempotency, Atomicity and Imperative vs Declarative

- Chapter 4: Programming BIG-IP with iControl REST
 - Introducing Basic JavaScript Types
 - Introducing JavaScript Object Notation
 - Discovering an existing BIG-IP Configuration using iControl REST
 - Deploying Apps on BIG-IP using iControl REST
 - Onboarding BIG-IP using iControl REST
 - Working with JSON Programmatically

- Chapter 5: Automating BIG-IP with Ansible
 - Introducing YAML
 - Establishing an Ansible Trust Relationship
 - Creating an Ansible Playbook
 - Exploring the Playbook
 - Working with the Inventory File
 - Using the Command Module
 - Gathering Facts for the Playbook
 - Deploying Apps on BIG-IP using Ansible
 - Deleting a BIG-IP Application
 - Onboarding a BIG-IP system using Ansible
 - Deploying BIG-IP HA
 - Investigating Ansible Roles

