



## Network Automation with Ansible Fast Track

- 3 Days
- Lecture and Hands-on Labs

### Course Overview

This course provides a comprehensive introduction to using Ansible for network automation and management. Ansible's agentless nature and human-readable YAML syntax lower the barrier to entry, enabling teams to achieve immediate ROI in configuration management and multi-vendor consistency. It teaches the principles of Infrastructure as Code by focusing on the desired outcome rather than a step-by-step process.

Review this course online at <https://www.alta3.com/courses/ans201ft>

### Who Should Attend









- Network Engineer/Administrator
- IT/Network Manager or Team Lead
- Systems Administrator or DevOps Engineer
- Security and Compliance Analyst
- Aspiring Network Architect/Consultant

### What You'll Learn

- Automate at Scale:\*\* Develop and run Ansible playbooks to automate common network administration tasks.
- Manage Multi-Vendor Environments: Use Ansible's core modules and advanced features to manage configurations on a variety of network devices.
- Build Reusable Solutions: Apply Jinja2 templates and Ansible Roles to create scalable, maintainable automation code.
- Secure Your Workflows: Implement secure automation practices using Ansible Vault and robust error-handling techniques.








### Outline

#### Ansible Foundations






-  Lecture: Introduction to Ansible
-  Lecture: Introduction to YAML
-  Lecture + Lab: Making an Inventory
-  Lecture + Lab: Running a Playbook
-  Lecture + Lab: ansible.cfg setup
-  Lecture + Lab: Looping Tasks
-  Lecture + Lab: Setting Variables
-  Lecture + Lab: When Condition

#### Core Modules and Network Collections



-  Lecture + Lab: Ansible Module - copy

-  Lecture + Lab: Ansible Module - file
-  Lecture + Lab: Ansible Module - get\_url and uri
-  Lecture + Lab: Ansible Module - template
-  Lecture: Collections, Roles, and Ansible Galaxy
-  Lecture + Lab: Using Collections
-  Lecture + Lab: Exploring Switches with Ansible
-  Lecture + Lab: Backup Cisco, Juniper, Arista, and More




#### Agnostic and Vendor-Specific Modules

-  Lecture + Lab: Agnostic Network Modules
-  Lecture + Lab: Simplifying Network Playbooks with Agnostic Modules
-  Lecture + Lab: Network Playbooks and Vendor Specific Modules
-  Lecture + Lab: Ansible Get Switch Config and Archive
-  Lecture + Lab: network\_cli Playbook





#### Dynamic Facts and APIs

-  Lecture + Lab: Using Ansible Facts
-  Lecture + Lab: Network API Calls
-  Lecture + Lab: Jinja2 Templating for Network Configurations

#### Reusability and Security

-  Lecture + Lab: Using Roles
-  Lecture + Lab: Making Roles
-  Lecture + Lab: Ansible Vault

#### Robustness and Error Handling

-  Lecture + Lab: Ansible Error Handling
-  Lecture + Lab: Network Playbook Error Handling
-  Lecture + Lab: Network Playbook Precheck
-  Lecture + Lab: Network Playbooks with Roles and Rollbacks

#### Prerequisites

- Basic Keyboard Proficiency: Ability to efficiently navigate and use a keyboard, including typing, copy-pasting, and basic text editing in terminal and/or text editors.

#### Next Courses

- Ansible 202: Linux Admin Automation with Ansible (<https://alta3.com/courses/ans202>)
- Ansible 203: Windows Automation with Ansible (<https://alta3.com/courses/ans203>)
- Ansible 204: Enterprise Server Automation with Ansible (<https://alta3.com/courses/ans204>)
- Git and GitHub (2 days) (<https://alta3.com/courses/github>)
- Git and GitLab CI/CD (2 days) (<https://alta3.com/courses/gitlab>)
- Terraform 101: Infrastructure as Code (3 days) (<https://alta3.com/courses/terraform>)