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## *Advanced Automation with Red Hat Ansible Eğitimi*

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Red Hat Ansible is an all-purpose software platform that renders enterprise applications with better automation control. It is built upon a clear syntax and intuitive programming language making it a simplistic approach for centralizing IT infrastructures. With the aid of Red Hat Ansible Automation Platform tools, users can carry out automation implementations while reducing the complexity of DevOps tasks.

This instructor-led, live training (online or onsite) is aimed at DevOps engineers, developers, and SysOps administrators who wish to employ the Red Hat Ansible Automation Platform for executing software development functions and orchestrating advanced IT processes.

All labs in this training can be carried out in DaDesktop, a collaborative training platform that enables the instructor and participants to interact with each other's machines in real time. Course content can also be customized to suit a wide array of use cases and requirements.

### **Hedefler:**

- Install and configure Red Hat Ansible Automation Platform within the preferred environment.
- Familiarize with advanced Ansible features for centralizing and managing projects.
- Utilize automation tools and higher-level resources of Red Hat Ansible to achieve CI/CD approach.
- Perform administrative methods for better collaboration of larger teams.
- Enhance DevOps tasks execution within the organization and optimize existing ones.
- Integrate Ansible Automation Platform with other Red Hat distributions to maximize productivity.

### **Topics:**

- Introduction
- Overview of Red Hat Ansible Automation Platform Features and Architecture

- Reviewing fundamental Ansible concepts and principles Understanding core Ansible contents and resources
- Installing and Setting Up Red Hat Ansible Automation Platform
- Prerequisites for Ansible installation Upgrading the current Ansible version
- Configuring Red Hat Ansible Automation Platform
- Performing advanced environment configuration methods Working with higher-level Ansible CLI commands
- Running Ansible Playbooks and Practicing Components Delegation
- Executing and managing specific use cases for tasks and plays
- Leveraging Re-usable Ansible Artifacts and Automating Complex Tasks with Inventory
- Handling Data Interaction Between Ansible Tools and Systems
- In-Depth Usage of Traditional Ansible Components and Ad-Hoc Commands
- Utilizing Advanced Ansible Automation Syntax with YAML
- Managing unsafe or raw data strings Using YAML anchors and aliases for increased flexibility
- Manipulating Complex Data and Transforming String Functionalities in Ansible
- Working with Expandable Ansible Plugin Architecture
- Types of Ansible plugins and how to maximize their uses
- Employing Advanced Playbook Keywords and Command-Line Tools of Ansible
- Overview of Complex Module Operations with Red Hat Ansible
- Managing and Coordinating Ansible Rolling Updates
- Accessing Red Hat Ansible Tower Using Ansible Automation Platform
- Integrating Ansible with Red Hat Advanced Cluster Management
- Interacting with RESTful APIs using Playbooks and Tower

- Automating Build Pipelines and Streamlining Workflows in Ansible Automation Platform
- Developing CI/CD Approaches with Ansible Automation Platform and Tower
- Creating and Writing Custom Modules and Plugins for Ansible Development Projects
- Adding and optimizing local modules and plugins Conventions and best practices for Ansible modules development
- Operating Red Hat Ansible Automation Platform with Python 3.x
- Debugging Modules and Tips for Documentation Formatting
- Overview of Ansible Modules Development in External Platforms
- Guidelines for Ansible Automation in Microsoft, AWS, and more
- Testing Ansible with Efficient Methods and Monitoring Module Lifecycles
- Advanced development practices for other Ansible resources and utilities
- Maximizing the Python API of Red Hat Ansible Automation Platform
- Working with Ansible Galaxy and Employing Metadata Structures
- Leveraging Public Cloud Services in Alignment with Ansible
- Deploying Cloud-Native Applications Using Ansible Automation
- Migrating to a cloud-native platform with Ansible Executing advanced Red Hat OpenShift implementations
- Automating Networks with Ansible and Responding to Dynamic Operations Workload
- Working with Ansible network modules and parsing Ansible data Managing timeout, proxy, and other issues Practicing virtualization and containerization methods
- Maintaining and Administering Ansible Automation Platform and Components
- Demonstrating the Most Common Automation Cases to the Organization
- Troubleshooting Red Hat Ansible Automation Platform

- Summary and Conclusion