# Introduction to Ansible



### What is Ansible?

- Ansible is an **Open Source** community project sponsored by Red Hat, it's the simplest way to automate IT.
- Ansible is an Automation engine that runs Ansible Playbooks.
- Simple Automation Language that can perfectly describe an IT application infrastructure in Ansible Playbooks.



# Why Ansible?

- The simplicity of playbook design makes them usable by every team, which allows people new to Ansible to get **productive quickly**.
- No Special Coding Skills are required.
- Playbooks execute Tasks in order.
- It helps you automate:
  - Application Deployment
  - Configuration Management
  - Cloud Provisioning
  - Updating Workstations and Servers, and many other tasks.



### **Ansible Is Powerful**

- You can use Ansible to deploy applications for:
  - I. Configuration Management
  - 2. Workflow Automation
  - 3. Network Automation
- Ansible can be used to **Orchestrate** the entire **Application life cycle**.



### Ansible Is Agentless

- Ansible is built around an **Agentless Architecture**.
- Ansible connects to the hosts it manages using OpenSSH or WinRM and runs tasks, often (but not always) by pushing out small programs called Ansible modules to those hosts.
- You can start using Ansible almost immediately because no special agents need to be approved for use and then deployed to the managed hosts.
- Ansible is more efficient and more secure than other alternatives.



#### Ansible is Versatile

- Ansible provides Agentless support for Linux, Windows, UNIX, and Network devices,
- Ansible provides Agentless support for Physical, Virtual, Cloud, and Container environments.
- Ansible Playbooks, written as **YAML text files**, are easy to read and help ensure that everyone understands what they will do.
- Ansible Playbooks and projects are plain text. They can be treated like source code and placed in your existing **version control system**.



# Ansible: The Language of DevOps

- Ansible is the first automation language that can be read and written across IT.
- It is also the only automation engine that can automate the application life cycle and continuous delivery pipeline from start to finish.





# **Security and Compliance**

- When your security policy is defined in **Ansible Playbooks**, **scanning**, and **remediation** of sitewide security policies can be **integrated** into other automated processes.
- Instead of being an afterthought, it is an integral part of everything that is deployed.

