Ansible & Ansible-Playbooks For Automation

VRTechnologies

Introduction to Ansible

➢ Ansible is an open source, command-line IT automation Tool written in Python.
➢ Ansible is used :
  ➢ To Configure Systems
    ➢ Examples:
      ➢ Create dbadmin user on all servers
      ➢ open some port on all database servers
  ➢ To Deploy Software's/Applications
    ➢ Examples:
      ➢ Install nc command on all servers
      ➢ Install webserver
  ➢ To Updates Systems/To Apply Patches
  ➢ Provisioning
    ➢ Examples:
      ➢ Provisioning servers – But terraform is the best tool for it
➢ Ansible is a configuration management Tool
➢ Ansible follows push model and agentless Architecture

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Introduction to Ansible…

- We can use ansible in two ways
- They are:
  - **Ansible CLI commands – called ansible ad-hoc commands**
  - **Ansible Playbooks – Written in simple YAML Files**
- Note: Ansible CLI Command/Ad-Hoc Commands or Ansible Playbooks are done with modules only
- **What we need to know to work with ansible ?**
  - How to install and configure Ansible ?
  - How Ansible Works ?
  - How to run Ansible Ad-Hoc Commands ?
    - What is a module ?
  - How to Develop Playbooks?
    - What is a playbook(s), task(s) ?
    - How to define variables ?
    - How to use variables in playbooks ?
    - How to use conditional statements ?
    - How to use loops ?
    - How to handle errors ?
    - How to use tags ?
    - How to reuse Ansible Playbooks using Roles ?

Pre-requisites

➢ **Provisioning Servers – VMWare or From Any Cloud**
➢ **Knowledge on Unix/Linux Environment**
  ➢ **Basic Commands**
  ➢ **Usage of vi/vim commands to create a file**
  ➢ **What is ssh connection with remote servers ?**
  ➢ **Difference between password-less and password authentication**
➢ **Basic knowledge on any programming or scripting language**
➢ **Note: Its good if you have knowledge on python as Ansible is developed with python**

➢ **Shell Scripting or Python Scripting is mandatory to develop own modules/collections**

Who can Enroll This Course ?

➢ **Any IT Employee who wants to work with Unix/Linux Environment**

➢ **Note:**
   ➢ **Ansible is also used to work with Windows, but I am not covering this part as I am not good at Windows Concepts**
   ➢ **We are also having UI for Ansible which is Ansible Tower , this is also not covered here**

Thank you