**Ansible Interview Question and Answers**

1. what is ansible?

It is an open-source configuration management tool use for provisioning, deployment, task automation and maintained by RedHat.

1. What Are the Advantages of Ansible?

-Ansible uses a push mechanism. That is, it pushes configuration into all its servers using adhoc command or playbooks.

- It is agentless meaning you don’t need to install its software on any of the host. It is already installed on the control node meaning everything is being run in the control nodes and pushed out to the hosts.

-You can use Ansible to configure multiple servers at the same time.

-It is open source meaning you don’t need a license to use it. It is free.

-It has a lot of custom modules that you can use.

-It is highly flexible.

-It can be used to configure both cloud and on-prem infrastructure.

1. How are playbooks written?

They are written in the Yaml format and have a .yml file extension.

4. What are the modules you used in Ansible?

Yum, copy, file, user, command, fetch, ping.

5. Do you know what language Ansible is written in?

Python programming language.

6. What is module?

They are pre-written script that are re-usable. It can also be considered as standalone script that ansible runs on your behalf either locally or remotely.

7. What is ansible.cfg file ?

It is our Ansible configuration file.

8. Difference between Docker and ansible?

Docker is a containerization tool while ansible is a configuration management tool.

9. What is the use of group, hostvars?

With hostvars, you can access variables defined for any host in the play, at any point in a playbook. You can access ansible facts using the hostvars variable too, but only after you have gathered or cached facts. It uses hosts file and group-vars directory to set variables for hosts groups and deploying ansible plays/tasks against each host/group.

10. Ansible Playbooks vs Roles?

Playbooks organize and launch task. Roles organize bunches of tasks, handlers that perform a particular function. Roles are a way to make codes in playbooks reusable by putting the functionality into generalized libraries that can be then used in any playbook as needed.

11. We need to download one file from internet and we need to unzip that file that we need to execute one shell script Using Ansible? what are the steps we need to write?

12. What kind of playbooks you have written?

13. What is the default inventory file name of ansible?

/etc/ansible/hosts.

14. Do you know what is handlers in Ansible?

They are special tasks that only get executed when triggered via the notify directive. Handlers are executed at the end of the play, once all tasks are finished. In ansible, handlers are used to start, reload, restart and stop services.

15. Suppose inventory file having 100 servers and in that 10 servers each time need to update. not all servers at a time. How u will achieve?

16. Have you used ansible adhoc commands or written any playbook?

We declare whatever we want in the playbook. Adhoc command is imperative.

17. What Is Ansible Role?

It is a set of tasks, handlers, variables, files and other components organized in a predefined structure to configure specific requirements. It is easy to understand, maintained and shared. Roles are used in Ansible playbooks. You use roles for complex requirements.

18. Please define what is Ansible Galaxy?

It is a repository for ansible roles that are available to drop directly into your playbooks to streamline your automation projects.

19. What is Ansible Tower?

It is a web- based solution that makes ansible even more easy to use for IT teams of all kinds.

20. Can you build your own modules with Ansible?

21. Difference B/W Pull & Push based configuration management tools?

22. How to execute or skip only specific tasks in playbook?

We can do that using tags.

23. What is ansible dry run how to perform dry run of playbook?

24. What is ansible vault & use of vault?

It is use to create or store secrets in Ansible.

25. What is the use of conditional statements in playbook?

26. What is dynamic inventory in ansible?

It is a script which can either be a shell or python use to fetch hosts details from a cloud provider which can be AWS or GCP.

27. How does Ansible works?

Ansible has a control node/engine, remote nodes(hosts). Ansible connect to the remote host by pushing a module. That is, it uses a push mechanism to push modules to the control node unlike puppet and chef which uses pull mechanism. It is agentless meaning you don’t need to install its software on any of the host. It is only installed on your control node. So, everything is being run from the control node and pushed out to the hosts. You need python to be installed on your hosts so that when that module is pushed, the python on your hosts will be running that script. Python is the prerequisite for Ansible to run. Looking at installation, it is designed to run on Linux/Unix systems. Meaning you can’t have the control nodes to be windows but you can have hosts as windows servers. Because Ansible is python based, it means control nodes and hosts needs to have python. Once your control node is running, Ansible uses ssh client to make the connection between your control node and hosts or remote. When we are using ssh to connect, what we need for this server connection is;

-Key

-Host details(ip address/dns name)

-username and password(Meaning once you create a user and give them a password, by default, password authentication is disabled so you need to go into /etc/ssh/sshd\_config file to enable password authentication). Once this is done, you restart the sshd. With this, you will be able to connect to hosts using password.

-To establish a password less connection with our host, use a key.

Since Ansible is about automation, you need to establish a password less connection so that you won’t be prompted to enter a password or username. You also need to know the Ansible directory structure. The default ansible home is /etc/ansible. In the /etc directory, all system configuration are stored. If you go into the /etc/ansible and so ls, you will find (ansible.cfg which the the main configuration file, you will also meet the hosts file)

28 How does Ansible connect to your host? It connects using ssh plugins. By default, Ansible communicate using ssh keys and Ansible user. To create our host inventory details, we go into /etc/ansible/hosts. This is also the default host file.

29. What is Ansible cli?

30. What is the difference between host, dynamic and static inventory?

A host inventory contains hosted servers’ details. A static inventory is a static file where hosted servers are grouped meanwhile a dynamic inventory is a script either shell or python use to fetch hosts details from a cloud provider which can be AWS or GCP.

31. Can we install Ansible in window OS?

No.

32. Can we configure window system using Ansible?

Yes.

33. What is verbose mode and dry run in Ansible?

34. What is metadata?

These are comments, information about the role, what it does and on which operating system it works.

35. How do you do configuration management? Do you use localhost, commands, bash shell script or Ansible?

Theanswer is that they use command and the next question that followed is how can you guys use commands? Ansible brings automation to the system. If you are using bash shell script, you will have to do more work to achieve less automation. With bash shell script, there are no modules. Ansible already have modules that does almost everything.