**ANSIBLE:**

* Ansible is an Open source automation platform and it is very simple to setup, efficient and more powerful.
* Ansible can help you with configuration management also application deployment, Task automations and also ID orchestrations.
* Ansible is available for free and runs on Linux, Mac or BSD
* Ansible also has an enterprise product called Ansible tower

**Why do we use Ansible or Advantages of Ansible:**

* Ansible is free and open source
* Ansible main advantage is agentless because no need to install ansible on client nodes
* Ansible uses SSH for the operations
* System requirement is very low
* Ansible is developed in Python
* Lightweight and Quick deployment, it is lightweight and very fast to deployment
* Ansible uses YAML syntax in configuration files

**ANSIBLE Terminologies:**

**Playbooks:**

* Playbooks are expressed in the yaml format and have a minimum of syntax
* Playbooks are the language by which ansible Configure, Administrate, Deploy systems automate tasks and Orchestrations

**Host:**

* Host is a simply remote machine that ansible managers they can have individual managers assign to them and also can be organized in groups.
* Under the hostname you can mention the node servers and in the playbook you can mention the host: Group name

-hosts: webservers 🡪 here webservers is a group name

**Task:**

* Playbooks exist to run task
* Task a list of tasks

**Tasks:**

* It compile and action with the name and

**Actions:**

* Action is a part of a task that specifies which of the modules to run and which arguments to pass to that module, Each task can have only one action but it may also have other parameters

**Handlers:**

* Handlers are also task but they are special kind of task that do not run unless they are notified by name when a task reports and under line change on a report system

**AD-HOC:**

* AD-HOC is command your executing on the command line not using the playbooks

**Inventory:**

* A file that describes Hosts and Groups in Ansible
* Inventory can also be provided via inventory scripts so you can define all your hosts in a single file as inventory either in the hostname format IP address or fully qualified Domain name
* You have to create a file where you have to define all your list of the servers which comes under hostname groups (webservers)

**Modules:**

**Library:**

* A collection of modules made available to ansible commands or ansible playbooks

Notify:

**Roles:**

* Roles are units of organizations in Ansible assigning role to a group of hosts implies that they should implement specific behavior

Example Playbook:

