Ansible and puppet

Ansible

Ansible is an open-source automation tool, or platform, used for IT tasks such as configuration management, application deployment, intraservice orchestration, and provisioning. Automation is crucial these days, with IT environments that are too complex and often need to scale too quickly for system administrators and developers to keep up if they had to do everything manually. Automation simplifies complex tasks, not just making developers' jobs more manageable but allowing them to focus attention on other tasks that add value to an organization. In other words, it frees up time and increases efficiency.

Advantages of Ansible

Free: Ansible is an open-source tool.

Very simple to set up and use: No special coding skills are necessary to use Ansible's playbooks (more on playbooks later).

Powerful: Ansible lets you model even highly complex IT workflows.

Flexible: You can orchestrate the entire application environment no matter where it's deployed. You can also customize it based on your needs.

Agentless: You don't need to install any other software or firewall ports on the client systems you want to automate. You also don't have to set up a separate management structure.

Efficient: Because you don't need to install any extra software, there's more room for application resources on your server.

Ansible's Features and Capabilities

Configuration Management

Ansible is designed to be very simple, reliable, and consistent for configuration management.

Application Deployment

Ansible lets you quickly and easily deploy multitier apps. You won't need to write custom code to automate your systems; you list the tasks required to be done by writing a playbook, and Ansible will figure out how to get your systems to the state you want them to be in.

Orchestration

As the name suggests, orchestration involves bringing different elements into a beautifully run whole operation—similar to the way a musical conductor brings the notes produced by all the different instruments into a cohesive artistic work.

Architecture
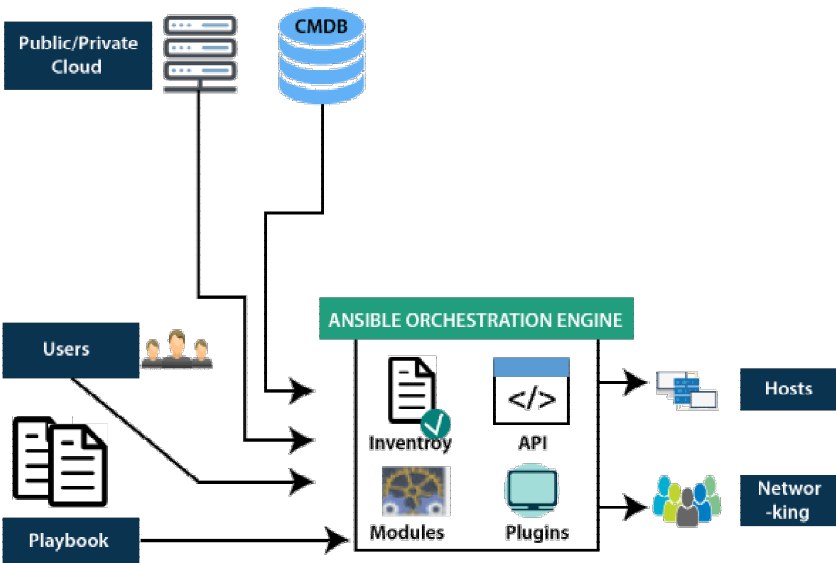
Puppet

Puppet is a configuration management technology to manage the infrastructure on physical or virtual machines. It is an open-source software configuration management tool developed using Ruby which helps in managing complex infrastructure on the fly.

Configuration management is the process of maintaining software and computer systems (example servers, storage, networks) in a known, desired and consistent state. It also allows access to an accurate historical record of system state for project management and audit purposes.

System Administrators mostly perform repetitive tasks like installing servers, configuring those servers, etc. These professionals can automate this task, by writing scripts.