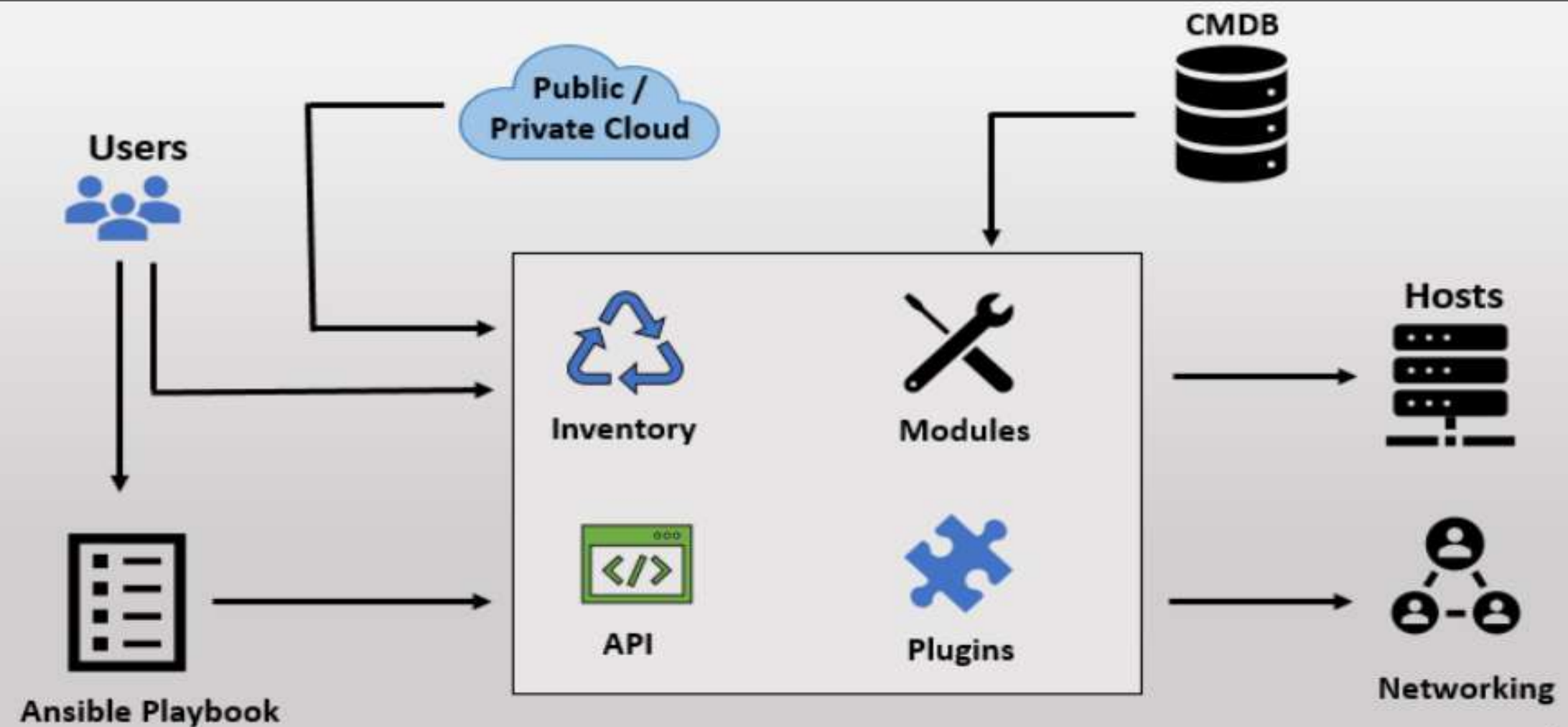


Ansible Architecture



Ansible Architecture

2



Ansible Concepts and Architecture

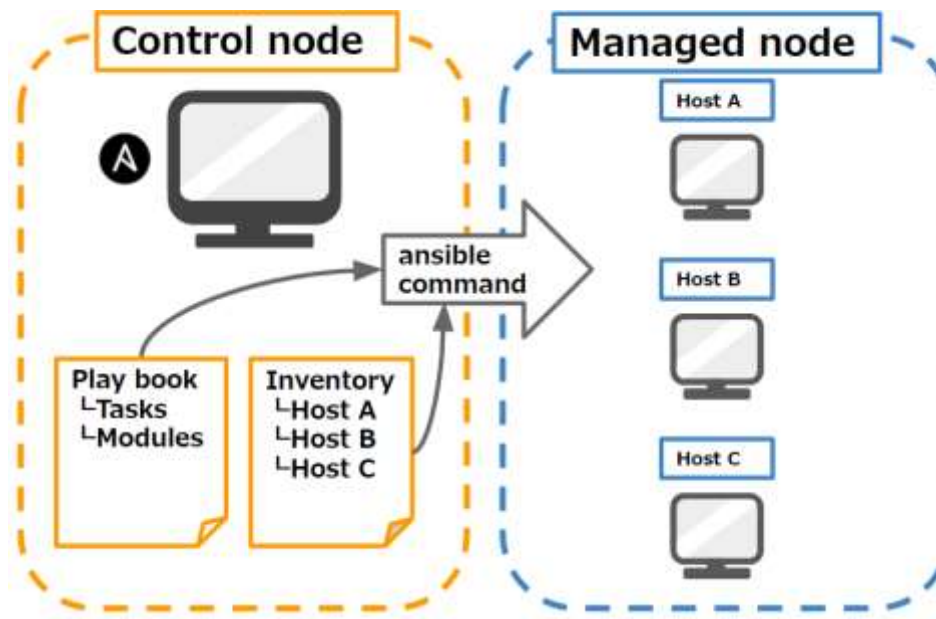
3

- There are two types of machines in the Ansible Architecture:
 1. **Control nodes**
 2. **Managed nodes**

Control Nodes

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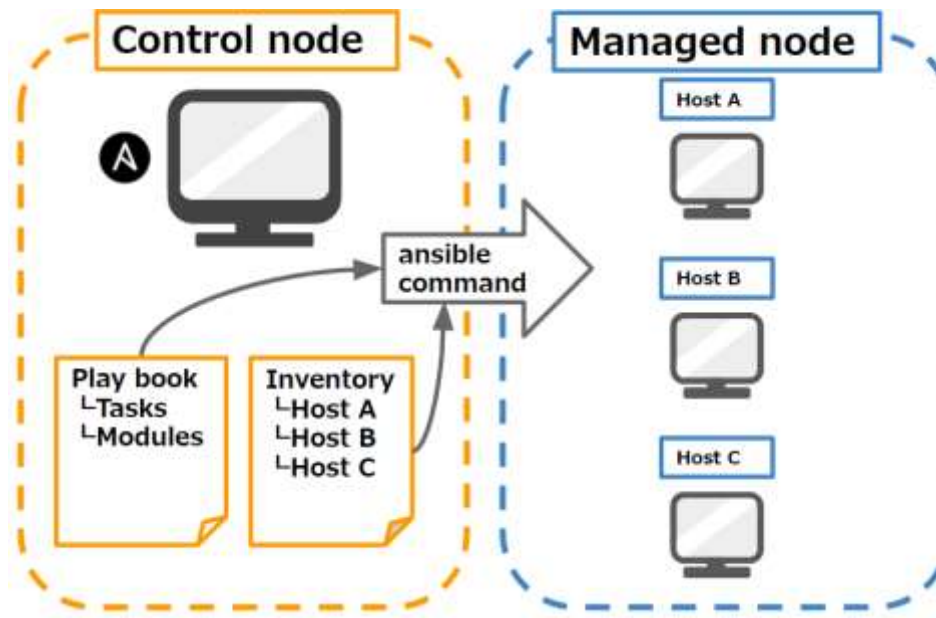
- Ansible is installed and run from a **control node**, and this machine also has copies of your Ansible project files.
- A control node could be an **administrator's laptop**, a system shared by a **number of administrators**.



Managed Nodes

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- **Managed nodes** are listed in an **inventory**, which also organizes those systems into groups for easier collective management.
- The inventory can be defined in a static text file, or dynamically determined by scripts that get information from external sources.



- Inventory is lists of nodes or hosts having their IP addresses, databases, servers, etc. which are need to be managed.

- The Ansible API's works as the transport for the public or private cloud services.

- Ansible connected the nodes and spread out the Ansible modules programs.
- Ansible executes the modules and removed after finished.
- These modules can reside on any machine; no database or servers are required here.
- We can work with the choice of text editor or a terminal or version control system to keep track of the changes in the content

- Plugins is a piece of code that expands the core functionality of Ansible.
- There are many useful plugins, and you also can write our own.

- Instead of writing **complex scripts**, Ansible users create high-level **Plays** to ensure a host or group of hosts are in a particular state.
- **Play** performs a series of **Tasks** on the hosts, in the order specified by the play. These plays are expressed in YAML format in a text file.
- A file that contains one or more plays is called a **playbook**.

Hosts



- In the Ansible architecture, hosts are the node systems, which are automated by Ansible, and any machine such as RedHat, Linux, Windows, etc

- Ansible is used to automate different networks, and it uses the simple, secure, and powerful agentless automation framework for IT operations and development.

- A cloud is a network of remote servers on which you can store, manage, and process the data.
- These servers are hosted on the internet and storing the data remotely rather than the local server.
- It just launches the resources and instances on the cloud, connect them to the servers, and you have good knowledge of operating your tasks remotely.

CMDB - Configuration Management Database

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- Ansible-cmdb reads and includes the host and group variables from the inventory.