

WHAT IS ANSIBLE?

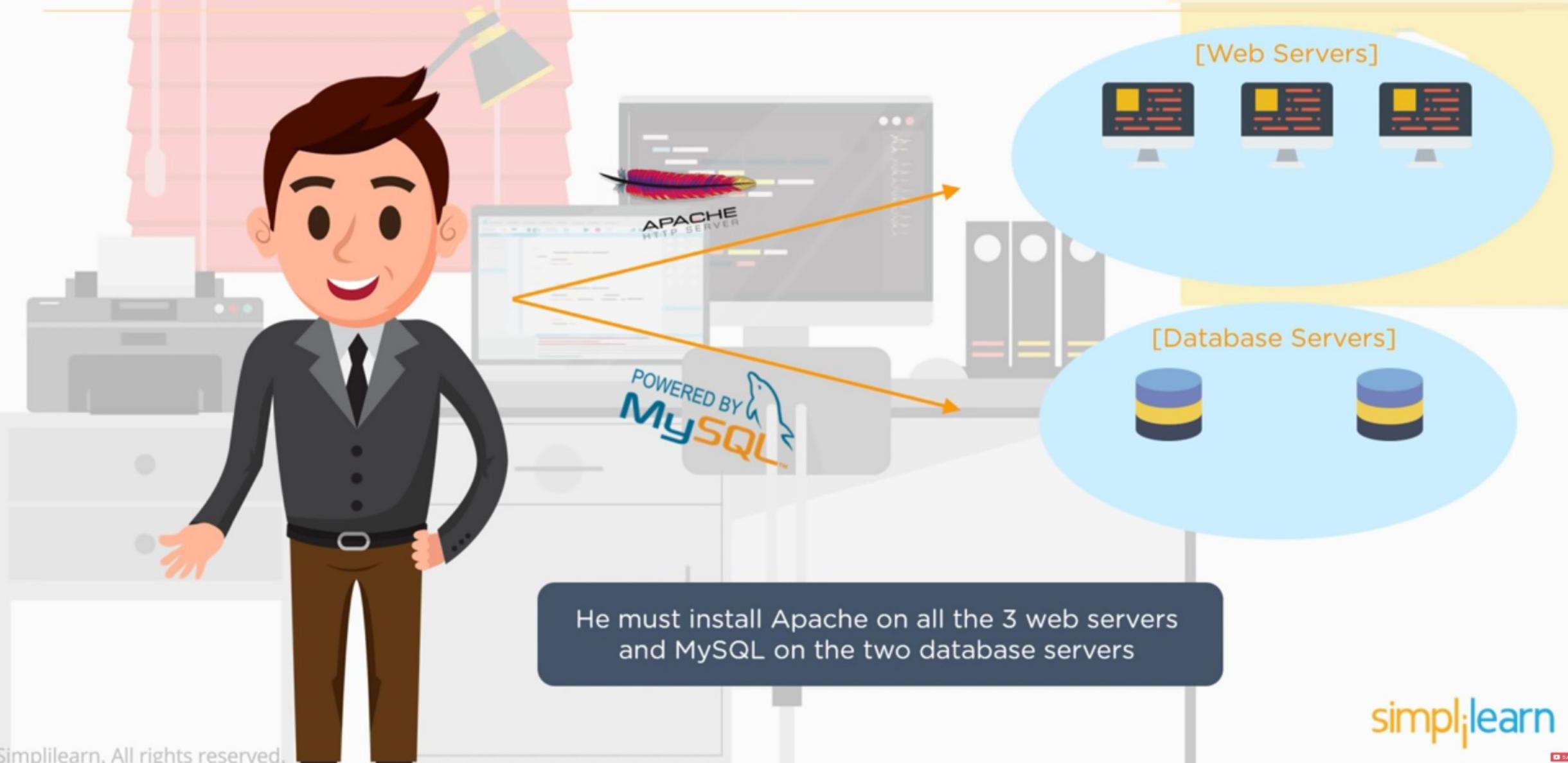


simplilearn

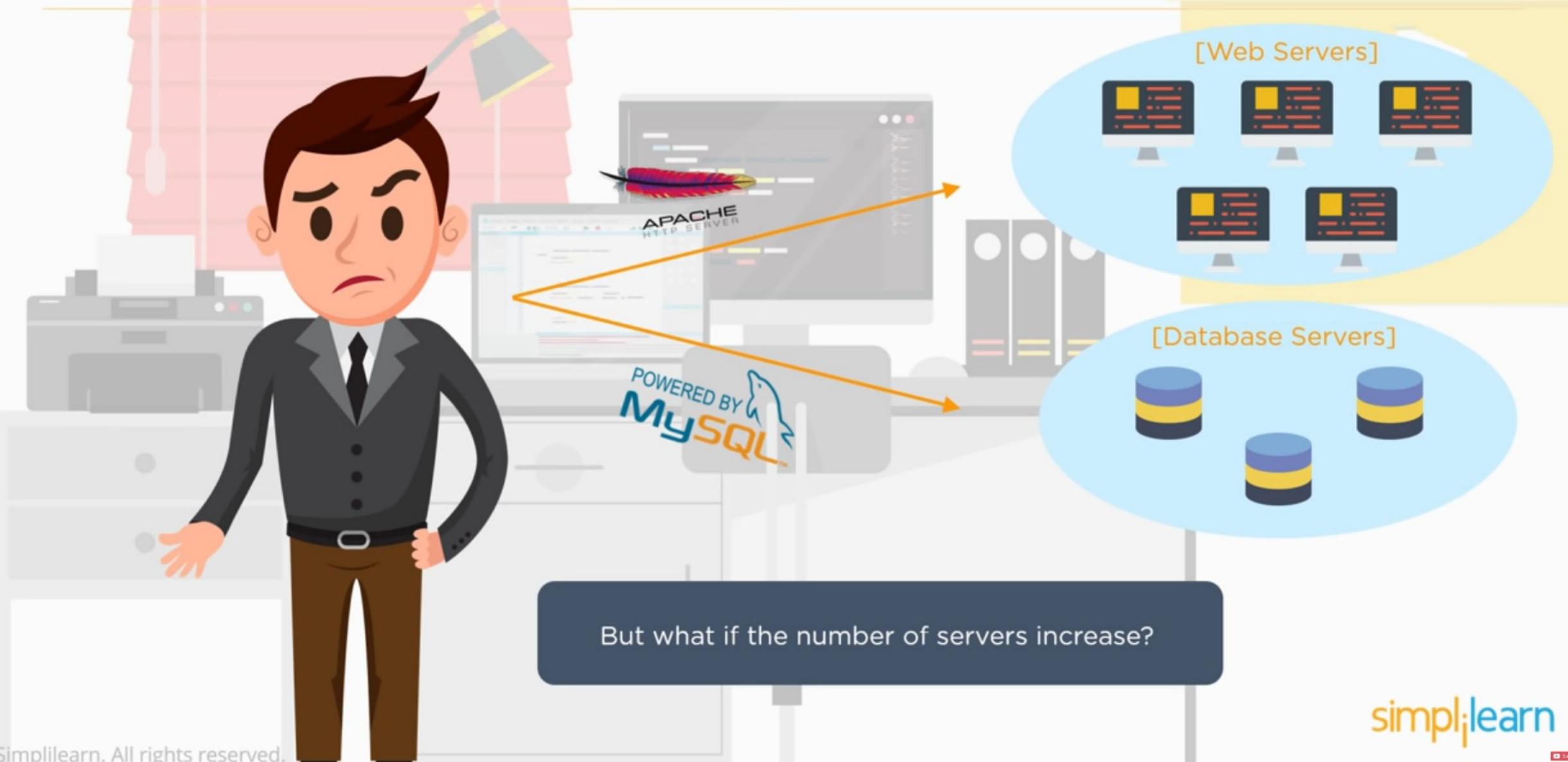
Why Ansible?



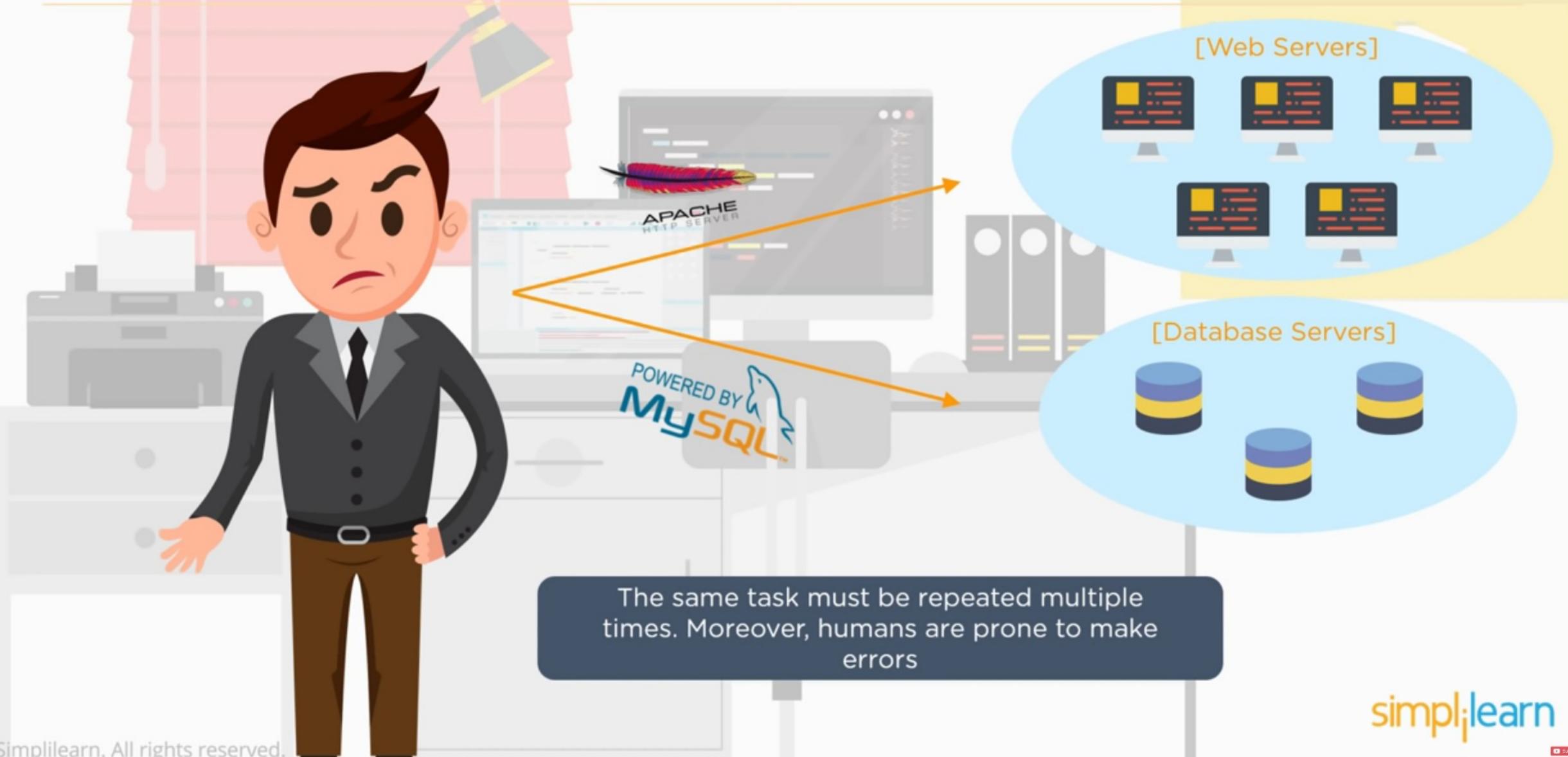
Why Ansible?



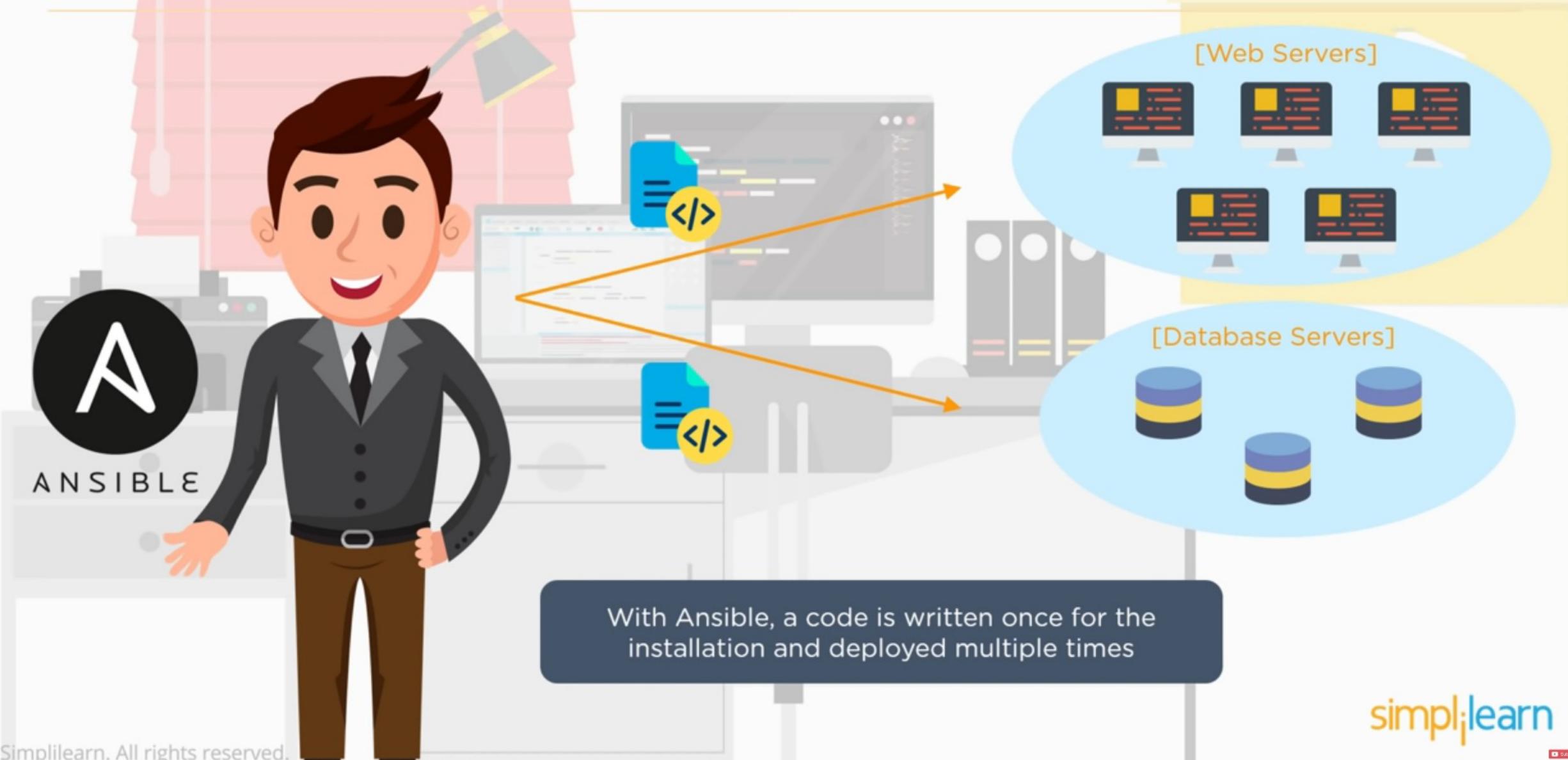
Why Ansible?



Why Ansible?



Why Ansible?



What is Ansible?



What is Ansible?



Ansible is a tool that provides:



IT automation

Instructions are written
to automate the IT
professional's work



Configuration management

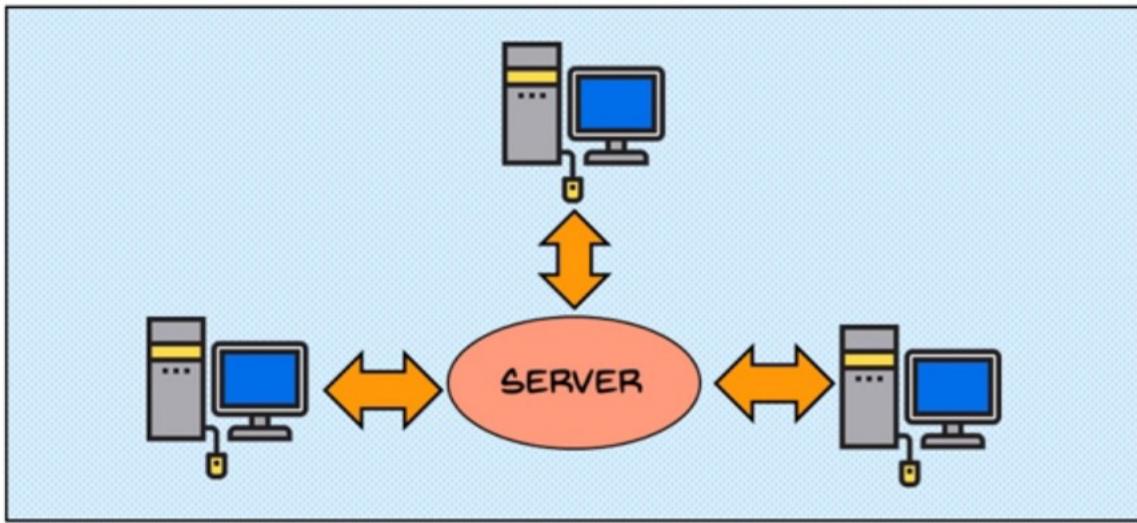
Consistency of all
systems in the
infrastructure is
maintained



Automatic deployment

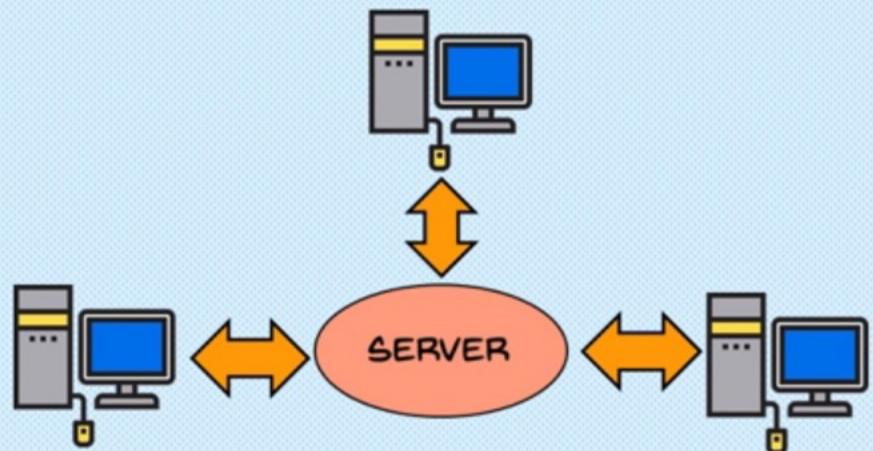
Applications are
deployed automatically
on a variety of
environments

Ansible - Pull configuration tool

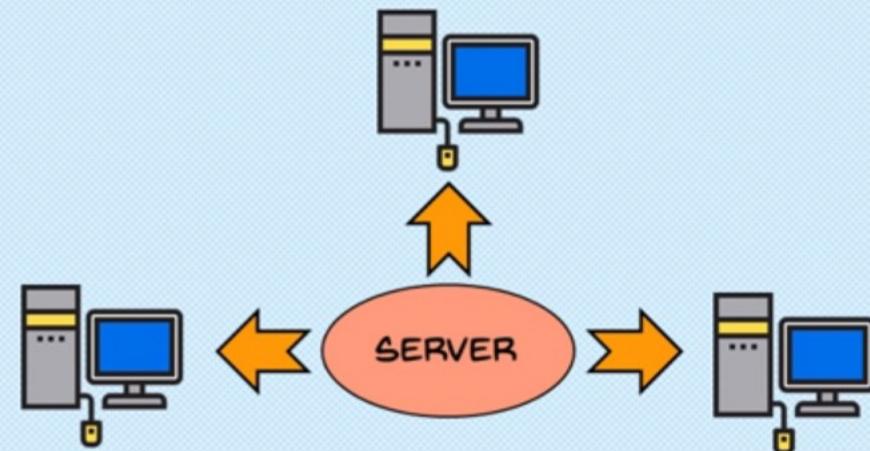


Pull configuration: Nodes check with the server periodically and fetch the configurations from it

Ansible - Pull configuration tool



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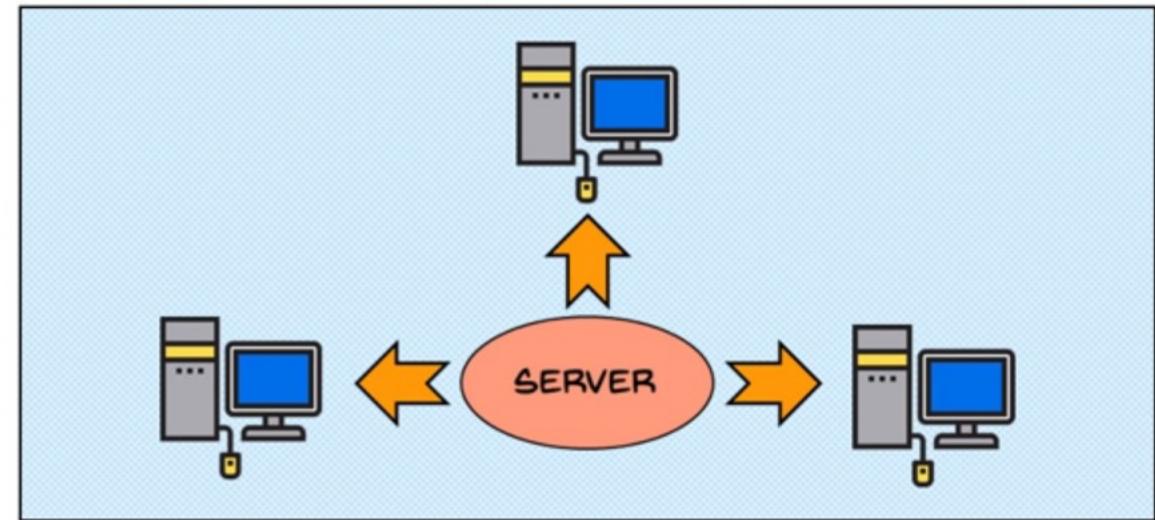


Push configuration: Server pushes configuration to the nodes

Ansible - Pull configuration tool



Unlike Chef and Puppet, Ansible is push type configuration management tool

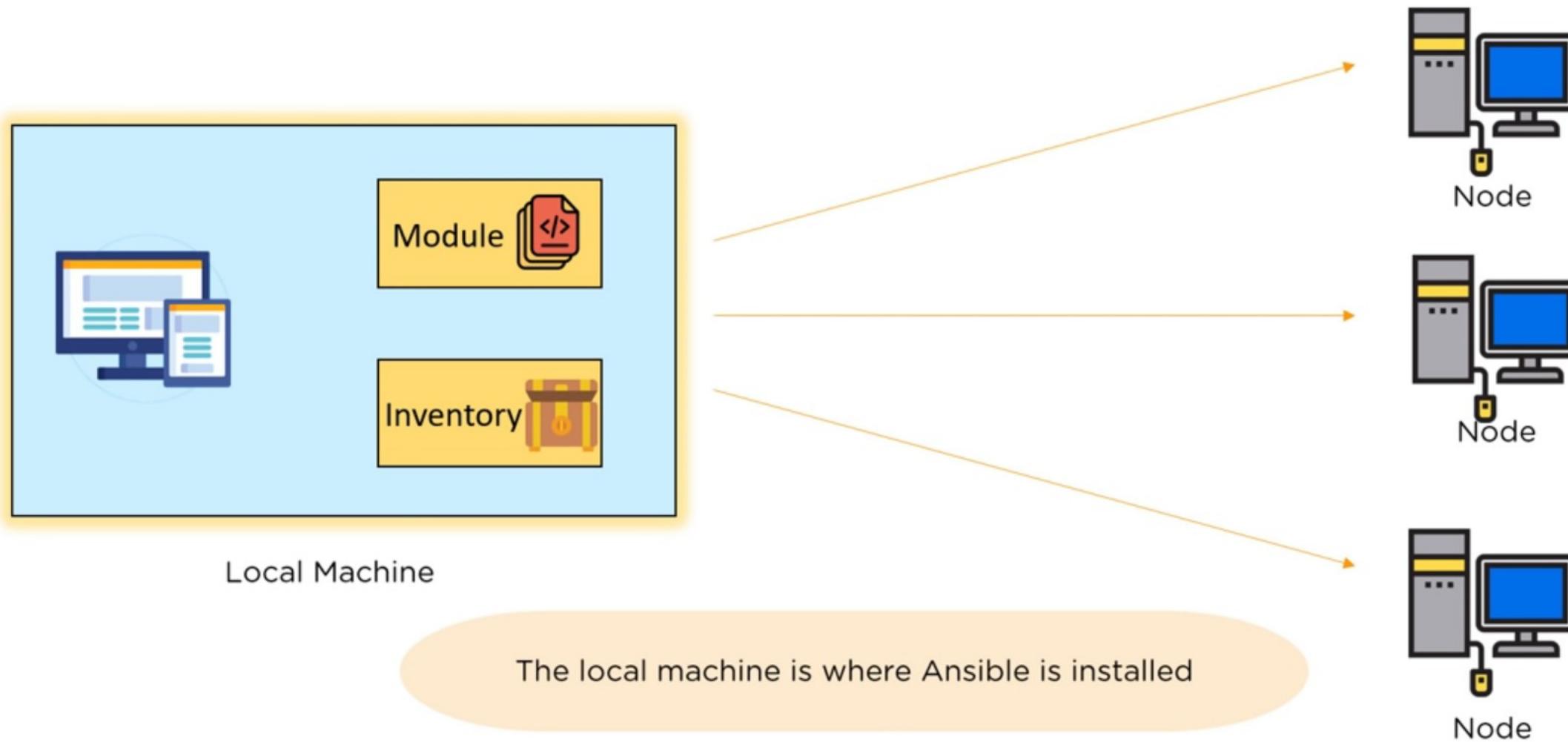


Push configuration: Server pushes configuration to the nodes

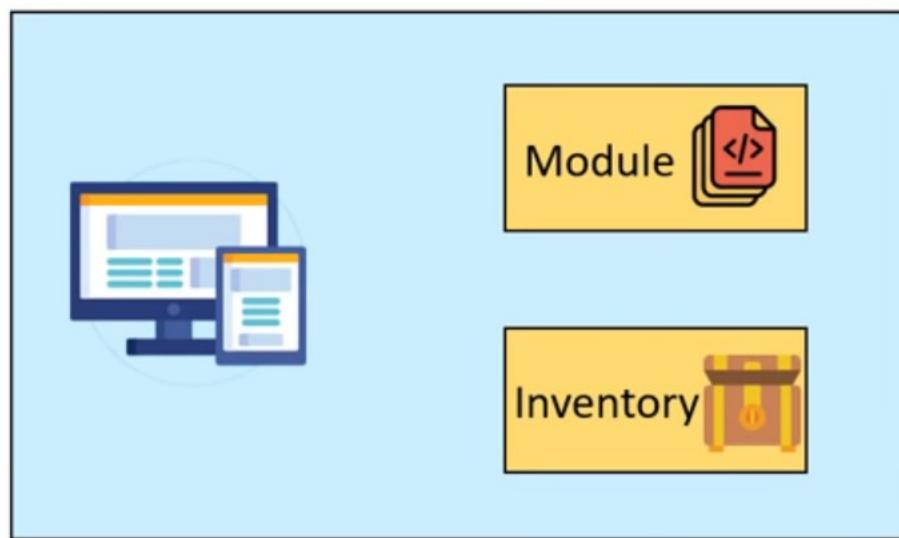
Ansible architecture



Ansible architecture

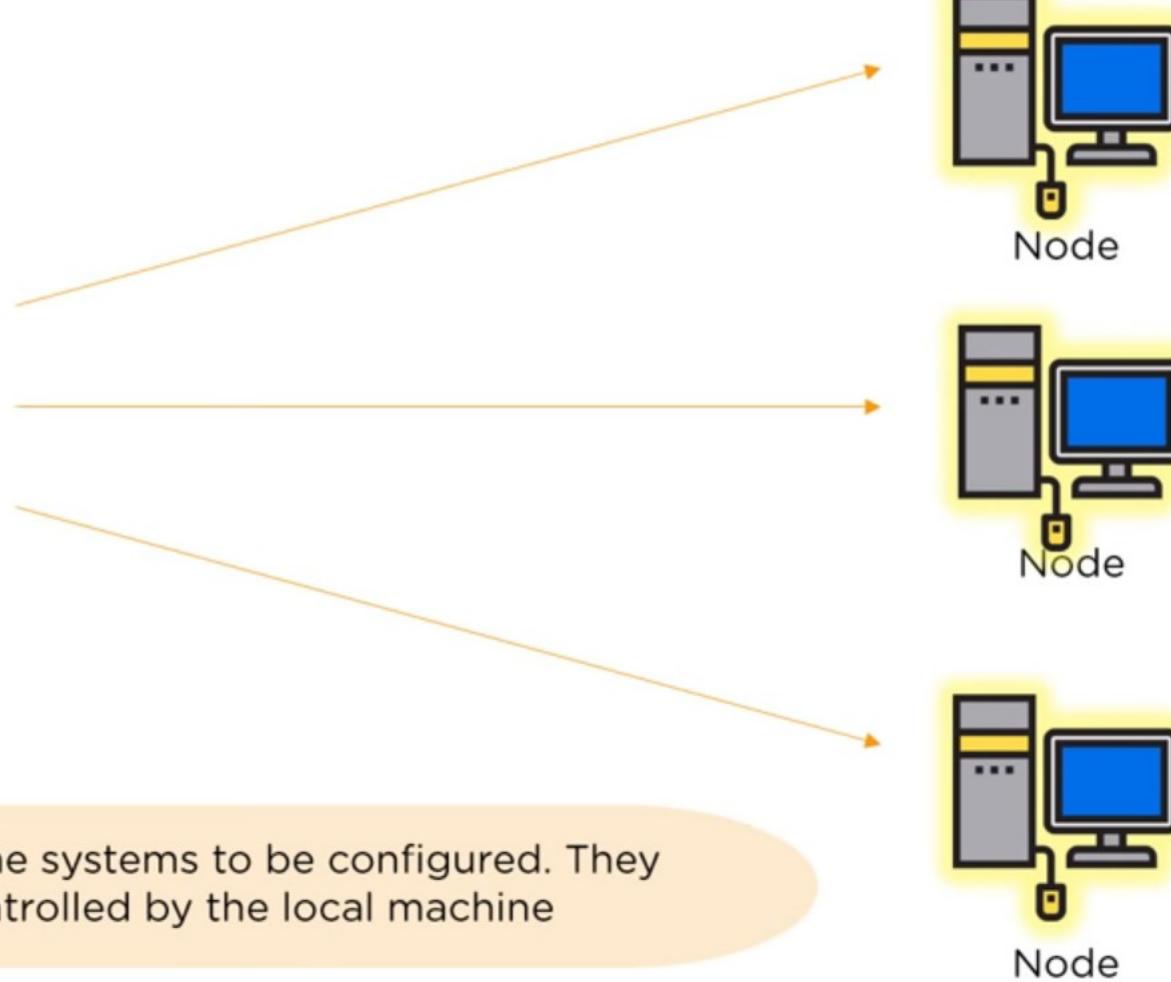


Ansible architecture



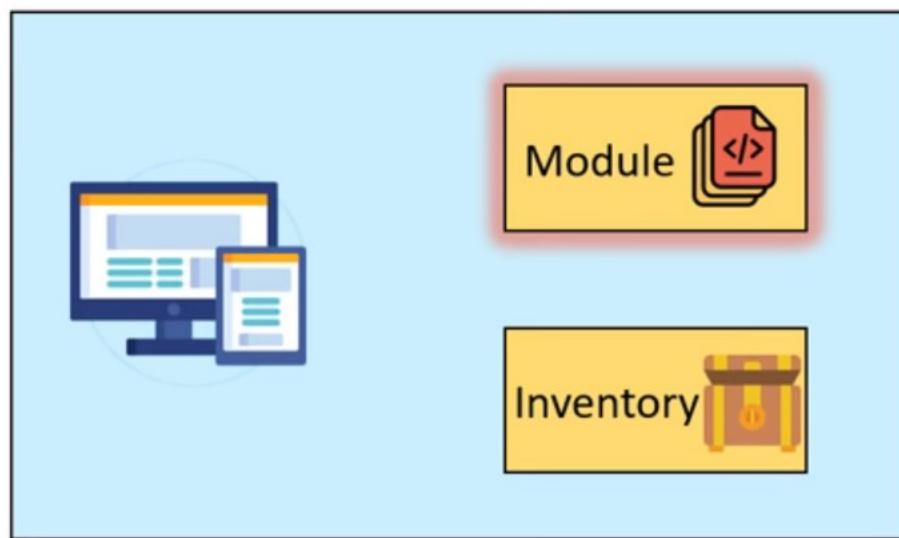
Local Machine

Nodes are the systems to be configured. They are controlled by the local machine

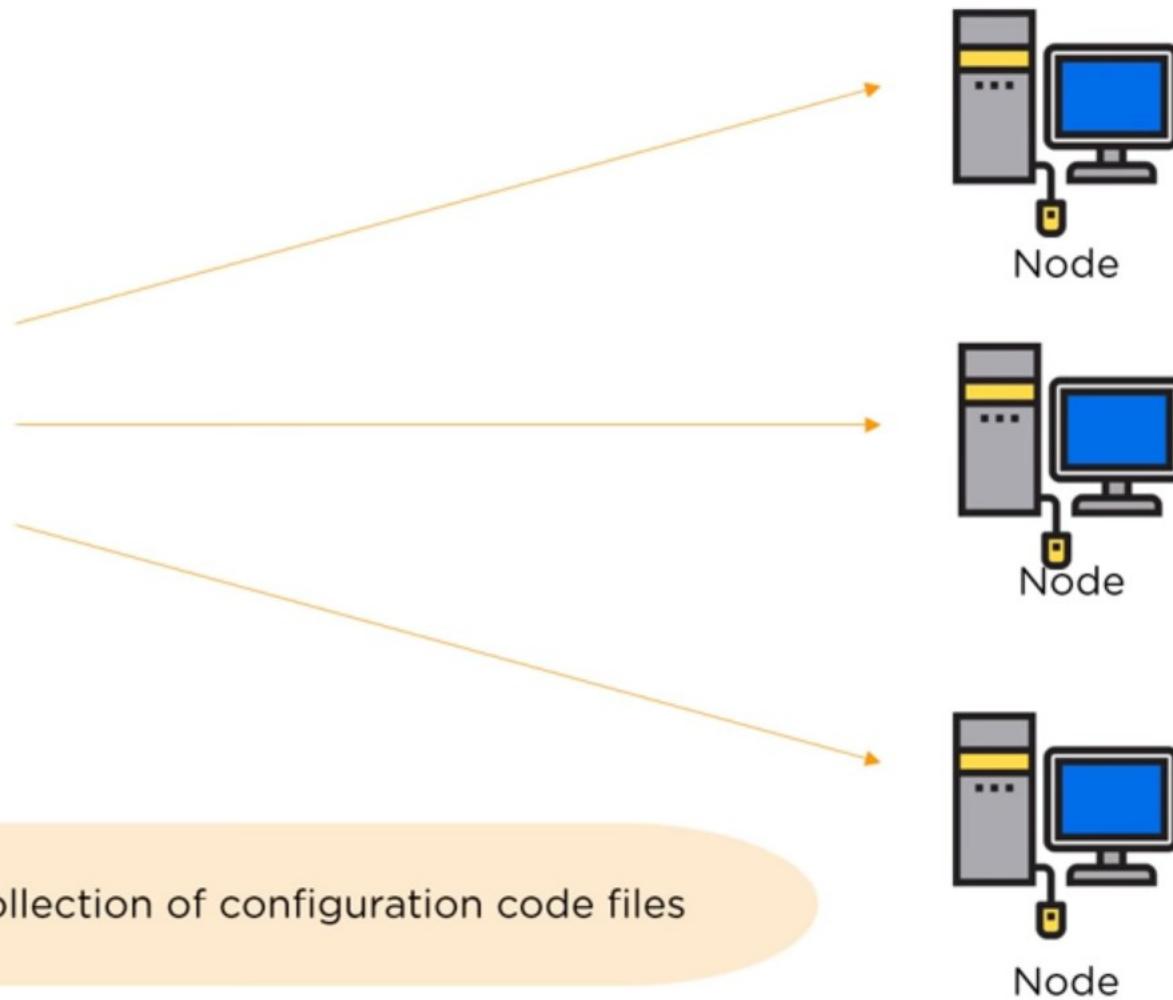


Node

Ansible architecture

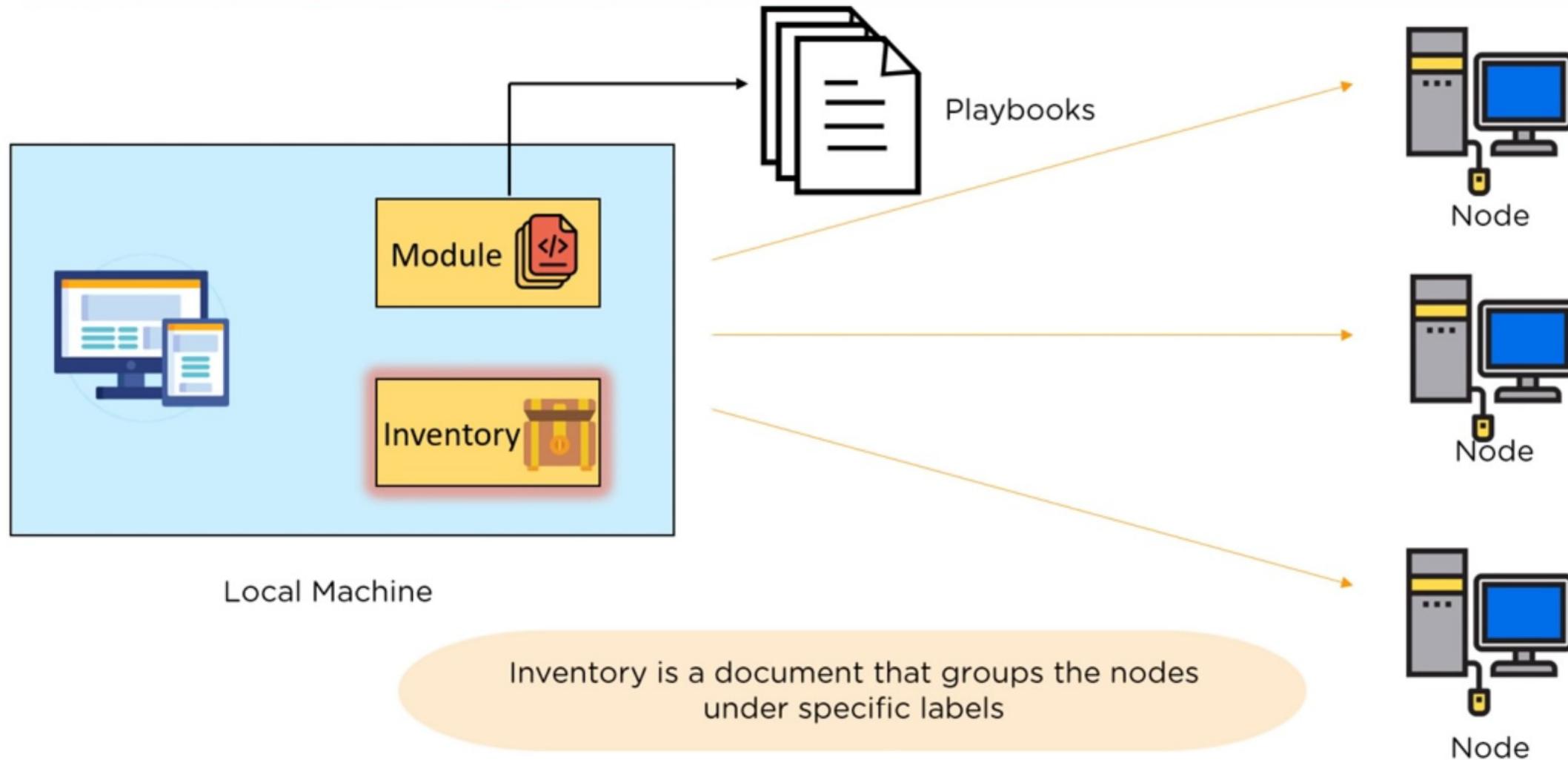


Local Machine

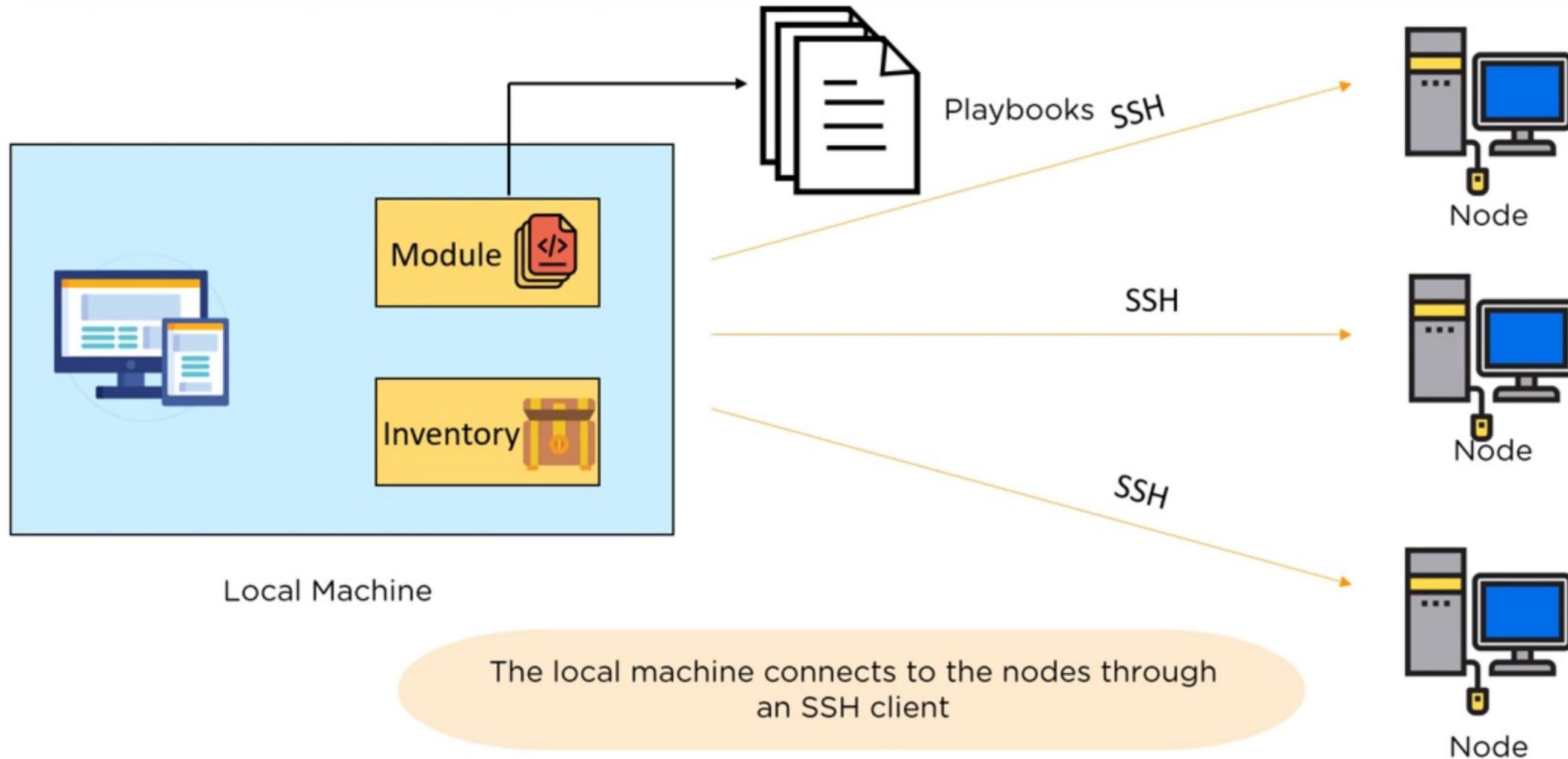


Module is a collection of configuration code files

Ansible architecture



Ansible architecture



Playbook



Playbook



Playbook



Playbook

Playbooks are the instructions
to configure the nodes



Playbook



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They are written in YAML, a
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Playbook



Playbook

```
---
```

```
-name: play 1
hosts: webserver
tasks:
  -name: install apache
    yum:
      name: apache
      state: present
  -name: start apache
    service:
      name: apache
      state: start
-name: play 2
hosts: databaseserver
tasks:
  -name: install MySQL
    yum:
      name: MySQL
      state: present
```



Playbook

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-name: play 2
hosts: databaseserver
tasks:
 -name: install MySQL
 yum:
 name: MySQL
 state: present
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```



Playbook

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The name is followed by instructions to execute the task

Playbook

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Inventory

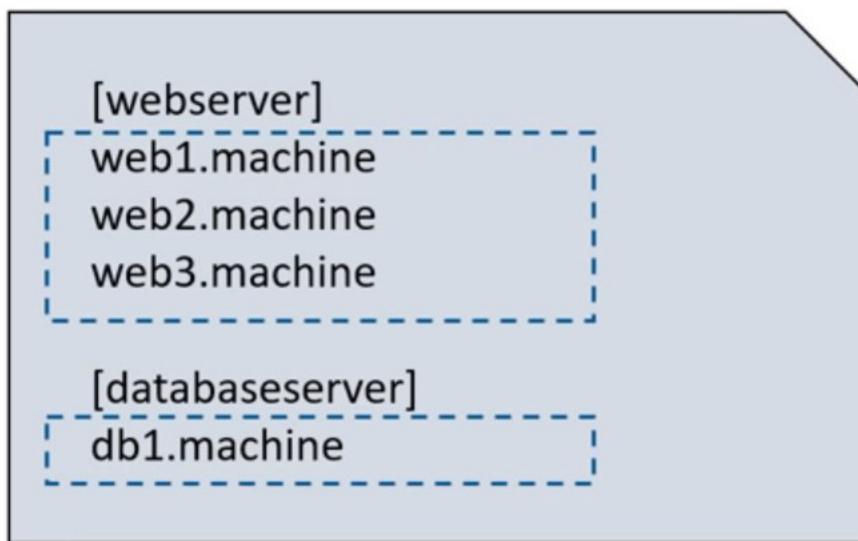


Inventory

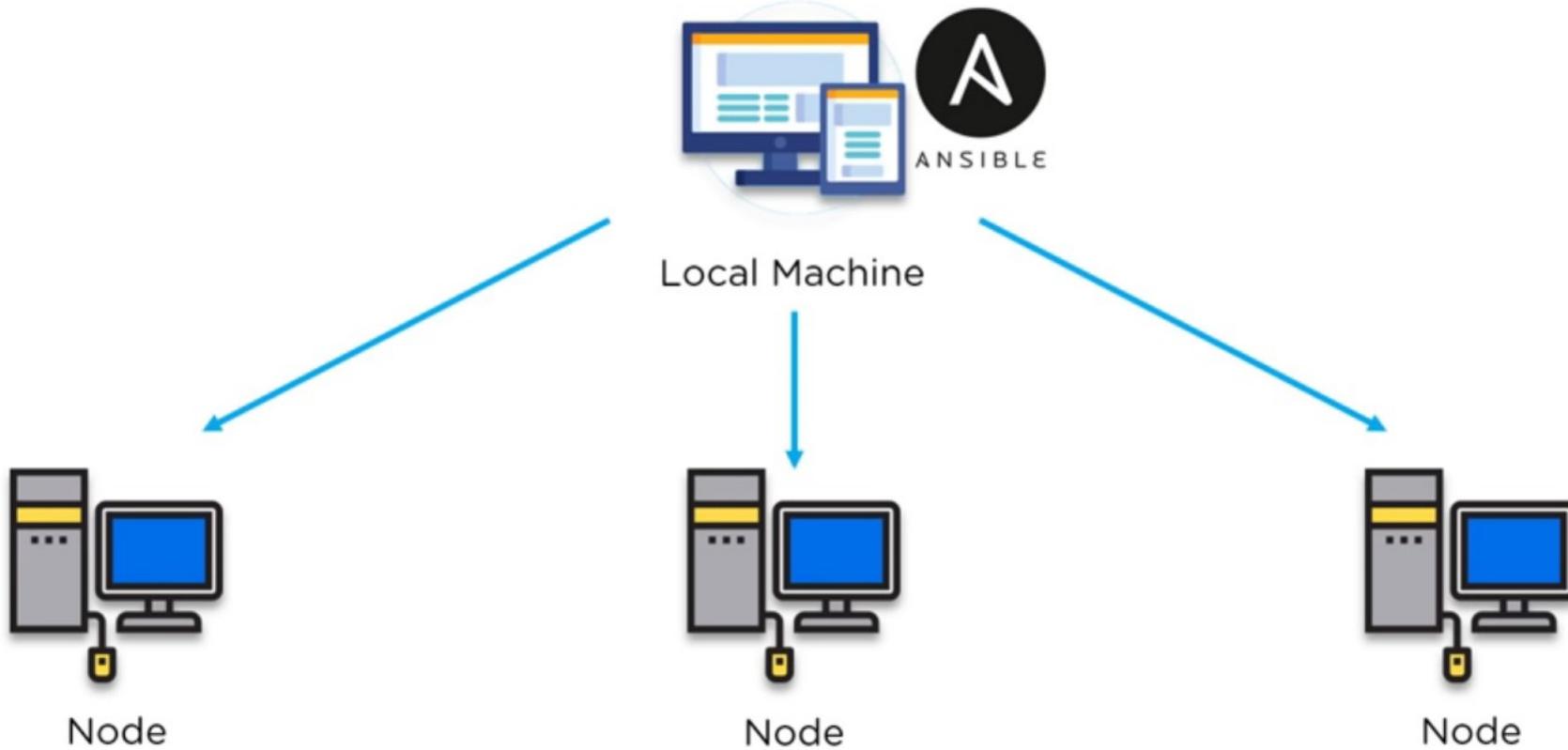
```
[webserver]  
web1.machine  
web2.machine  
web3.machine  
  
[databaseserver]  
db1.machine
```



Inventory

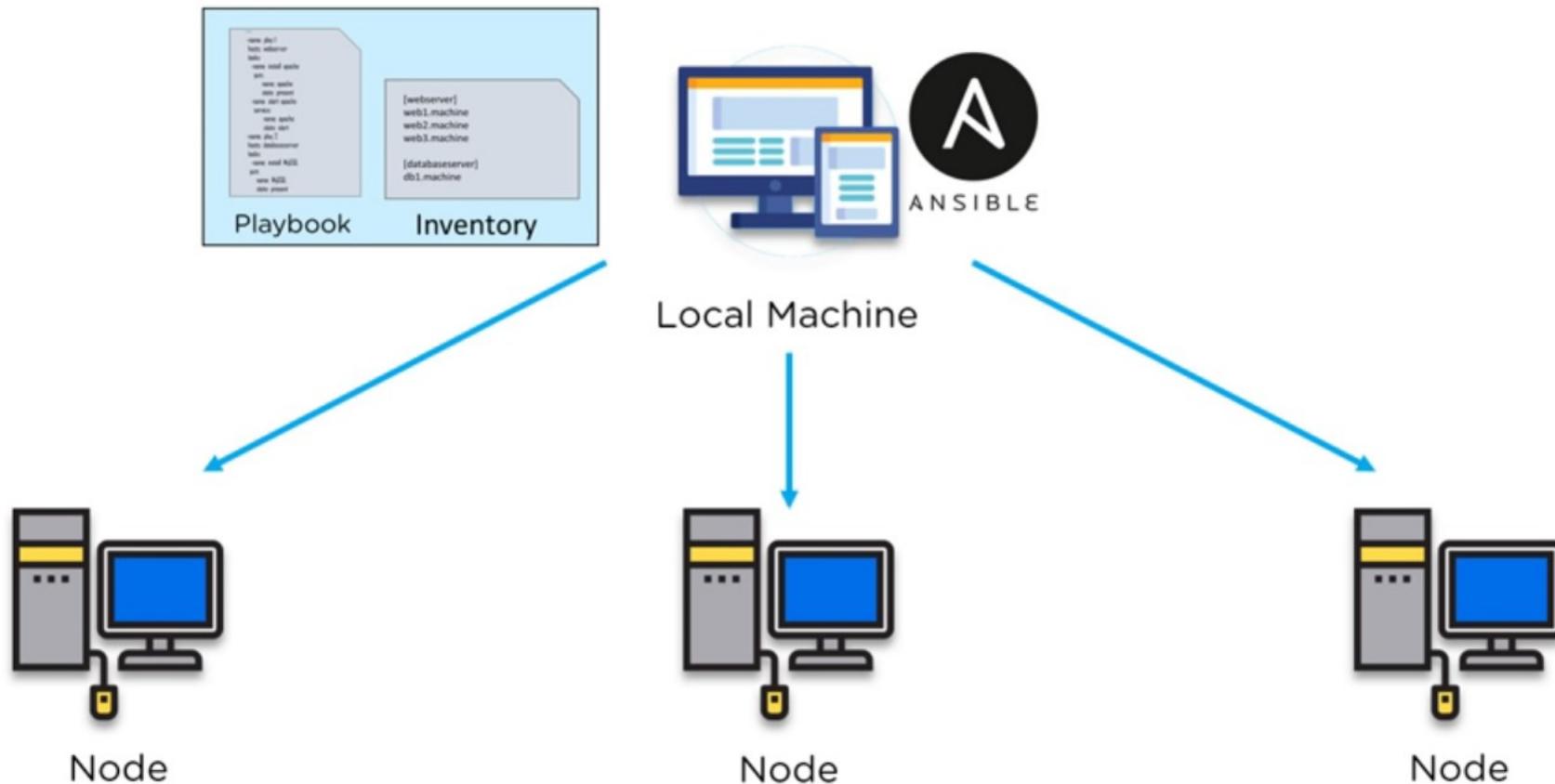


Working of Ansible



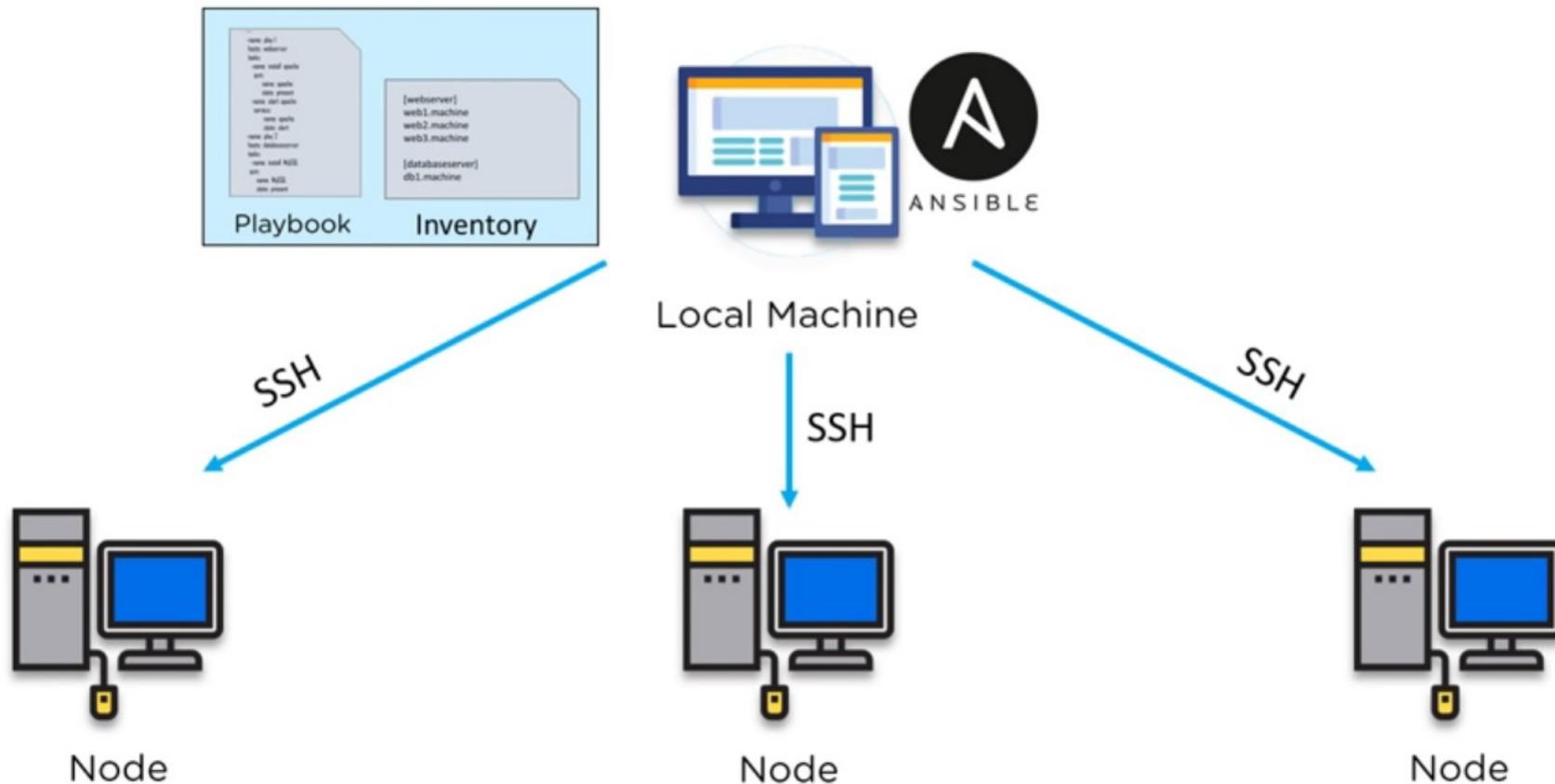
Ansible is installed only on the local machine. This makes Ansible agentless

Working of Ansible



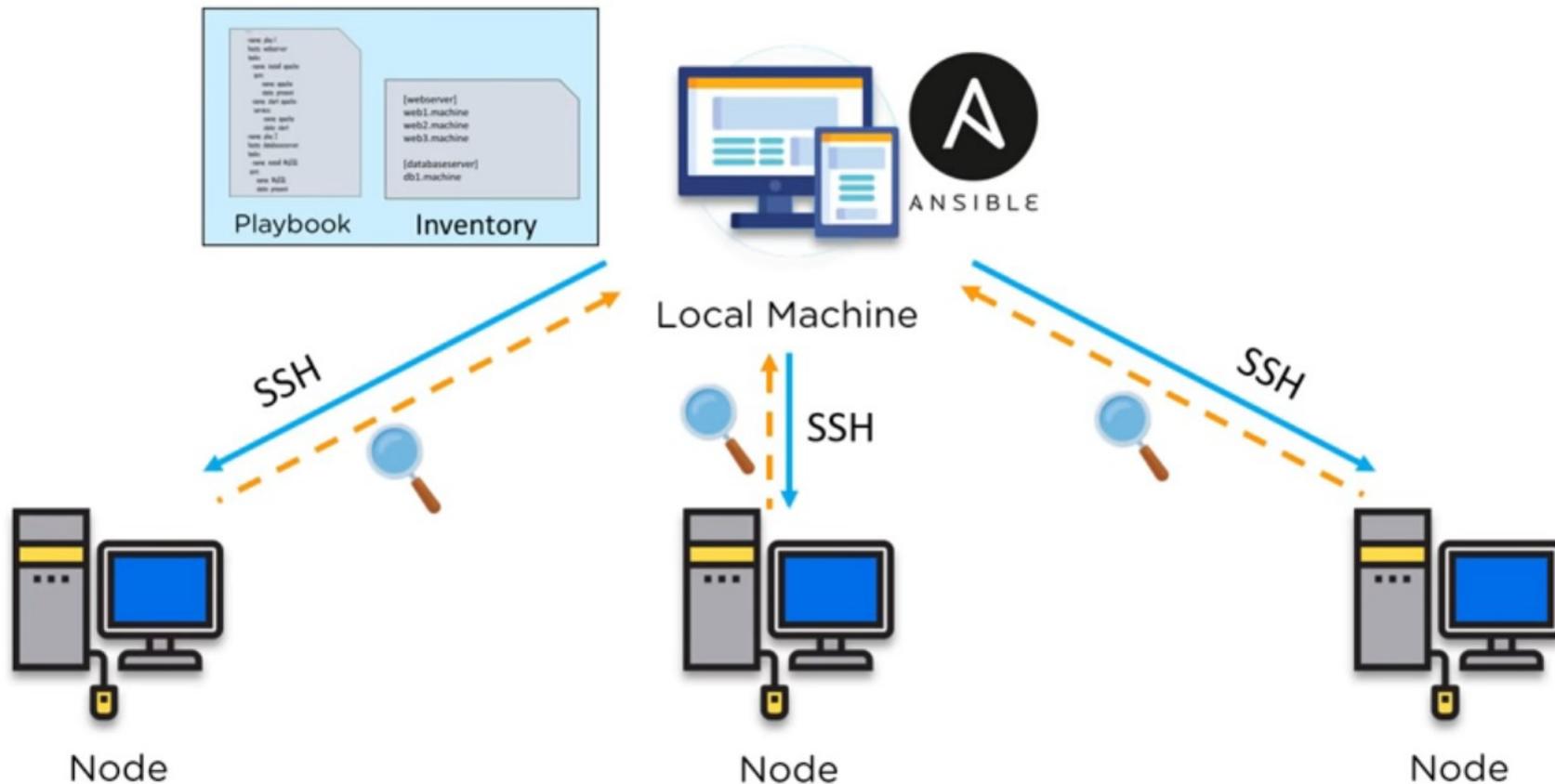
The playbook and inventory are written
at the local machine

Working of Ansible



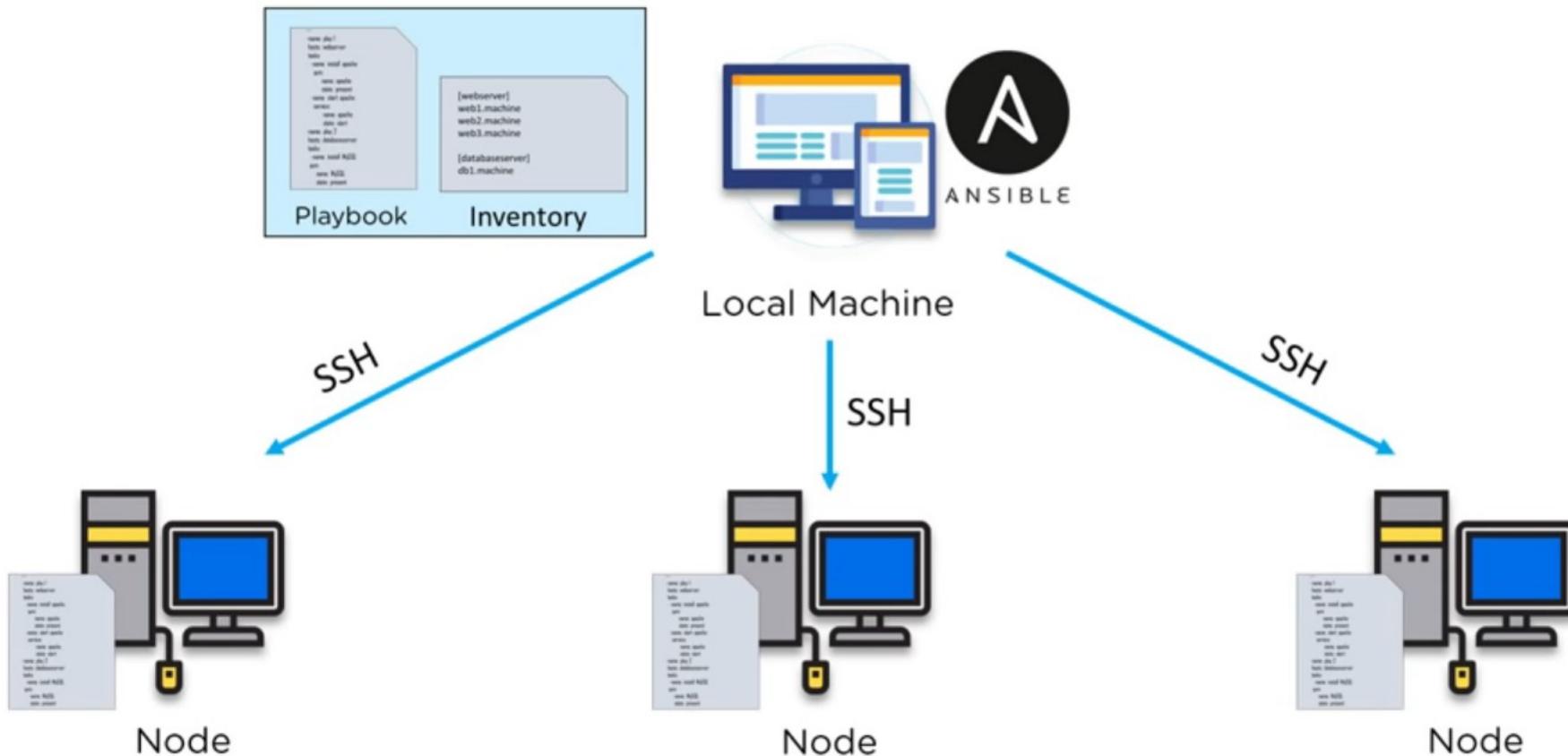
The local machine connects to the nodes through SSH

Working of Ansible



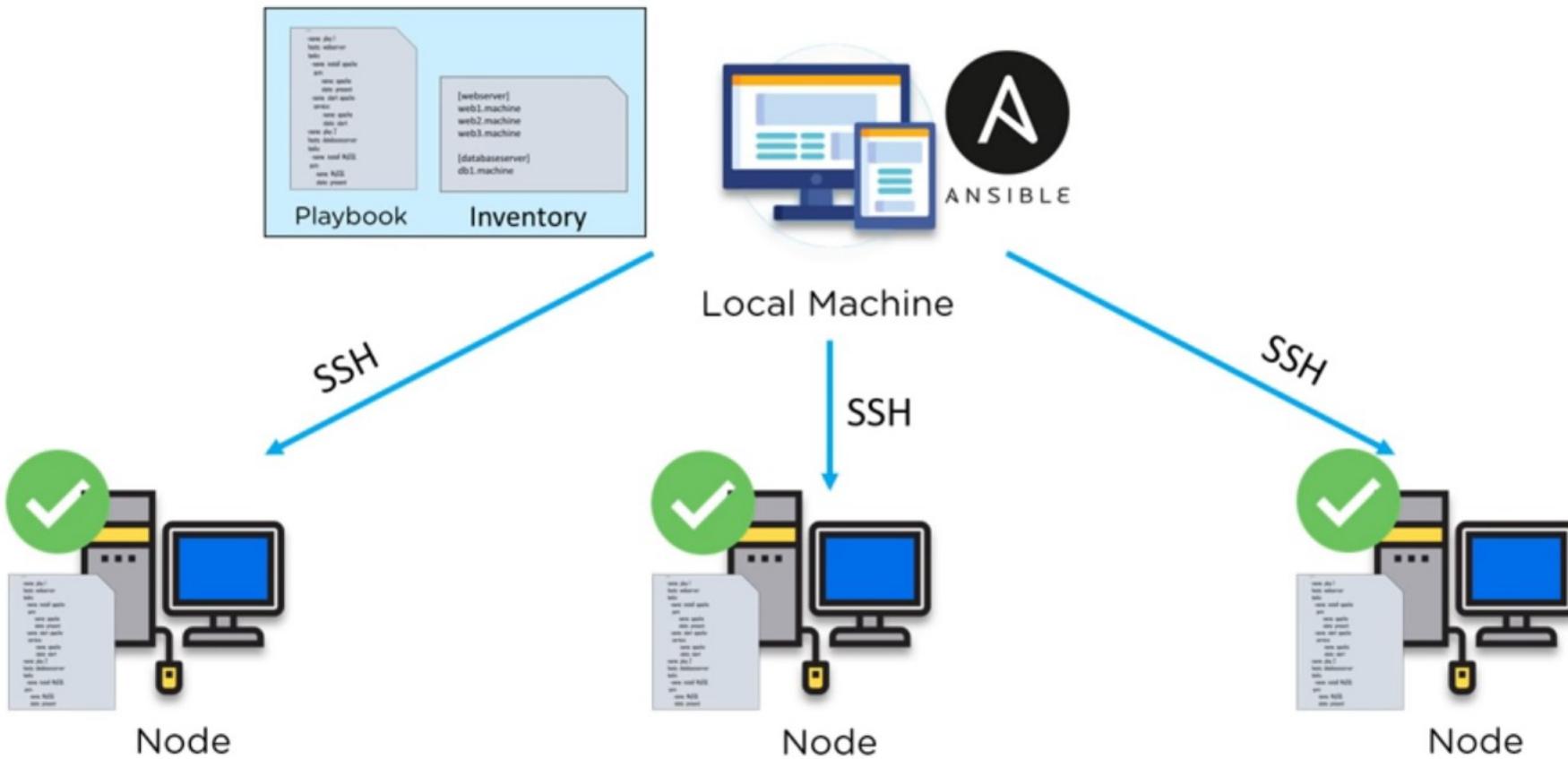
The local machine gathers the facts of each node. Facts indicate the state of the nodes

Working of Ansible



The playbooks are sent to the nodes

Working of Ansible



The playbooks are now executed. This configures the nodes to their desired states