



Ansible

Ansible resources

- Official Ansible website
 - <https://www.ansible.com>
- Ansible source code on GitHub
 - <https://github.com/ansible/ansible>
- Official Ansible Twitter account
 - <https://twitter.com/ansible>
- Ansible official documentation
 - <https://docs.ansible.com>

Ansible and VS Code

<https://code.visualstudio.com>

The image is a screenshot of the Visual Studio Code (VS Code) interface. On the left, there is a sidebar with the 'EXTENSIONS: MARKETPLACE' view open, showing a list of installed and available extensions. The main editor area displays a JavaScript file named 'blog-post.js' with the following code:

```
src > components > JS blog-post.js > <function> > [e]blogPost
1 import React from "react"
2 import Image from "gatsby-image"
3
4 export default ({ data }) => {
5   const blogPost = data.cms.blogPost
6   return (
7     <div>
8       <blogPost> {e} debug
9       <blogPost> {e} debugger
10      <blogPost> {e} decodeURI
11      <img> {e} decodeURIComponent
12    )
13    <h1>{blogPost.defaultStatus}
14    <div>Post {e} delete
15    <div> {e} departFocus
16    </div>
17    {e} devicePixelRatio
18    {e} dispatchEvent
19  )
20 }
21 export const query = graphql`
```

At the bottom, a terminal window shows the output of a command:

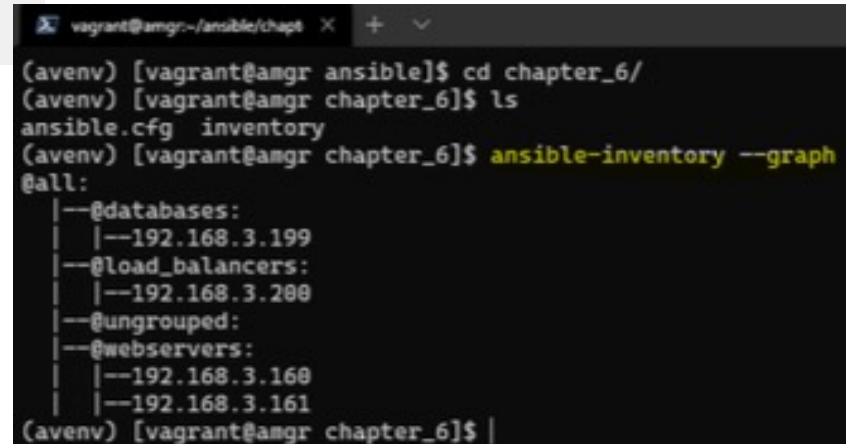
```
info [wdm]: Compiling...
DONE Compiled successfully in 26ms
info [wdm]:
info [wdm]: Compiled successfully.
```

The status bar at the bottom indicates the current file is 'blog-post.js' in the 'Gatsby Develop' workspace, with the language set to 'JavaScript'.

Ansible Code

```
- name: Web Server Playbook
  hosts: webservers
  become: yes

  tasks:
    - name: Pinging web server
      ansible.builtin.ping:
        data: pong
```

A terminal window showing the execution of an Ansible command. The user is in a directory named 'chapter_6' and runs 'ansible-inventory --graph'. The output shows a hierarchical graph of the inventory groups: @all, @databases (192.168.3.199), @load_balancers (192.168.3.200), @ungrouped, and @webservers (192.168.3.160, 192.168.3.161).

```
vagrant@amgr:~/ansible/chapt x + v
(avenv) [vagrant@amgr ansible]$ cd chapter_6/
(avenv) [vagrant@amgr chapter_6]$ ls
ansible.cfg  inventory
(avenv) [vagrant@amgr chapter_6]$ ansible-inventory --graph
@all:
|--@databases:
| |--192.168.3.199
|--@load_balancers:
| |--192.168.3.200
|--@ungrouped:
|--@webservers:
| |--192.168.3.160
| |--192.168.3.161
(avenv) [vagrant@amgr chapter_6]$ |
```

What is Ansible

Simple: Playbooks are readable and easy to understand

Powerful: Ansible can manage infrastructure, networks and operating systems

Agentless: Uses Open SSH and Windows Remote Management

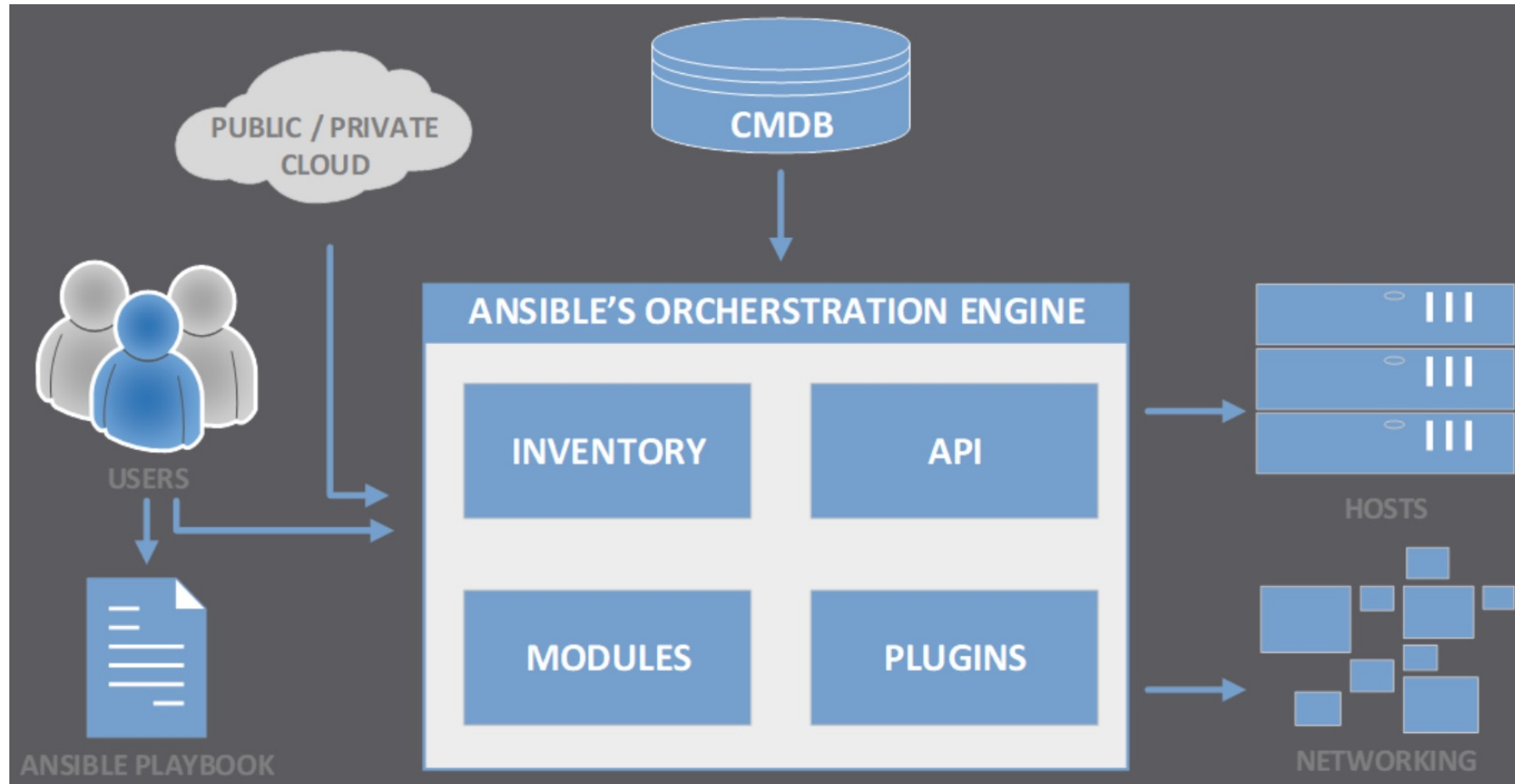
Infrastructure: as code (IaC)

Configuration: maintaining infrastructure and software in a desired and consistent state

Why Ansible?



Ansible high level



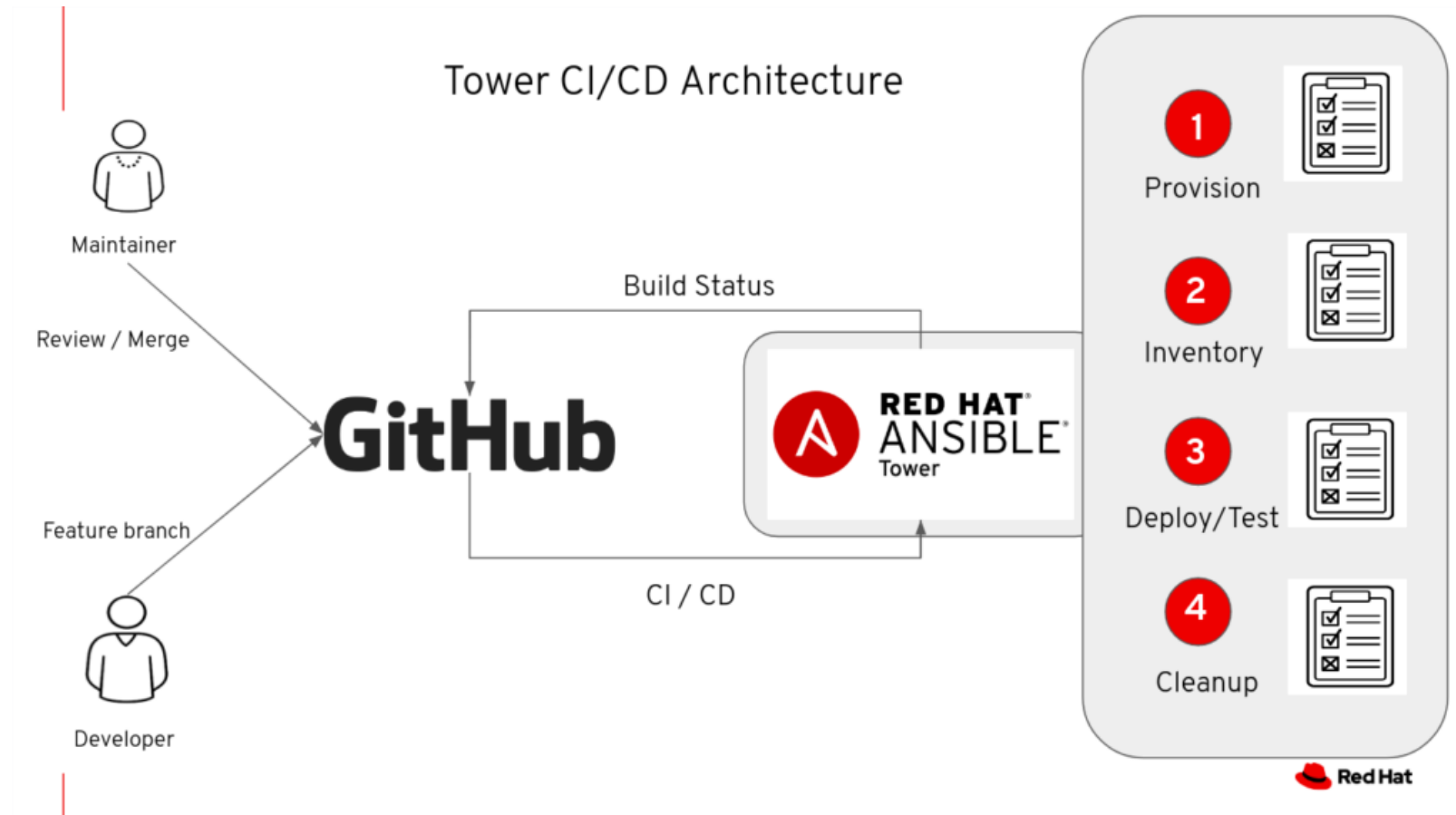
Infrastructure Provisioning

- **Virtualization:** How to provision infrastructure in minutes rather than days.
- **Containerization:** How to provision infrastructure in seconds instead of minutes.
- **Cloud-based resources:** How to provision resources you don't own.
- **Serverless:** How to provision infrastructure on demand.

Configuration Management



Application Deployment



Orchestration

