Apache service

```
dev@master-vm:~/q7$ nano apache-setup.yml
dev@master-vm:~/q7$ tree
.
├── apache-setup.yml
├── inventory
└── website
    └── index.html

1 directory, 3 files
```

```
1 directory, 3 files
dev@master-vm:~/q7$ cat website/index.html
<!DOCTYPE html>
<html>
<head>
    <title>My Web Server</title>
</head>
<body>
    <h1>Hello from Ansible!</h1>
    <p>This is a simple HTML page served by Apache/HTTPD.</p>
</body>
</html>
dev@master-vm:~/q7$
```

Playbook

```yaml
- name: Setup Web Server Based on Linux Distribution
  hosts: all
  become: yes

  tasks:
    - name: Install Apache on Debian
      apt:
        name: apache2
        state: present
        update_cache: yes
      when: ansible_facts['os_family'] == "Debian"

    - name: Install HTTPD on RedHat
      yum:
        name: httpd
        state: present
      when: ansible_facts['os_family'] == "RedHat"

    - name: Validate Apache version for Ubuntu
      command: apache2 -v
      register: apache_version
      when: ansible_facts['os_family'] == "Debian"

    - name: Validate HTTPD version for RedHat
      command: httpd -v
      register: apache_version
      when: ansible_facts['os_family'] == "RedHat"

    - name: Show installed version
      debug:
        var: apache_version.stdout
```

```yaml
    - name: Copy website content to remote host
      copy:
        src: ./website
        dest: /var/www/html/
        mode: '0644'
        owner: root
        group: root
      notify: Restart apache

    - name: Start and enable Apache service on Ubuntu
      service:
        name: apache2
        state: started
        enabled: yes
      when: ansible_facts['os_family'] == "Debian"

    - name: Start and enable HTTPD service on RedHat
      service:
        name: httpd
        state: started
        enabled: yes
      when: ansible_facts['os_family'] == "RedHat"

  handlers:
  - name: Restart Apache
    service:
      name: "{{ ansible_facts['os_family'] == 'Debian' | ternary('apache2', 'httpd') }}"
      state: restarted
```

Running

```
dev@master-vm:~/q7$ ansible-playbook -i inventory apache-setup.yml -K
BECOME password:

PLAY [Setup Web Server Based on Linux Distribution] ****************************************************************************

TASK [Gathering Facts] ********************************************************************************************************
[WARNING]: Platform linux on host 192.168.153.131 is using the discovered Python interpreter at /usr/bin/python3.10, but future installation of
another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
ok: [192.168.153.131]
[WARNING]: Platform linux on host 192.168.153.133 is using the discovered Python interpreter at /usr/bin/python3.10, but future installation of
another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
ok: [192.168.153.133]

TASK [Install Apache on Debian] ***********************************************************************************************
ok: [192.168.153.131]
ok: [192.168.153.133]

TASK [Install HTTPD on RedHat] ************************************************************************************************
skipping: [192.168.153.131]
skipping: [192.168.153.133]

TASK [Validate Apache version for Ubuntu] *************************************************************************************
changed: [192.168.153.131]
changed: [192.168.153.133]

TASK [Validate HTTPD version for RedHat] **************************************************************************************
skipping: [192.168.153.131]
skipping: [192.168.153.133]

TASK [Show installed version] *************************************************************************************************
ok: [192.168.153.131] => {
```

```
TASK [Validate Apache version for Ubuntu] ************************************************************************
changed: [192.168.153.131]
changed: [192.168.153.133]

TASK [Validate HTTPD version for RedHat] ************************************************************************
skipping: [192.168.153.131]
skipping: [192.168.153.133]

TASK [Show installed version] ***********************************************************************************
ok: [192.168.153.131] => {
    "apache_version.stdout": "VARIABLE IS NOT DEFINED!"
}
ok: [192.168.153.133] => {
    "apache_version.stdout": "VARIABLE IS NOT DEFINED!"
}

TASK [Copy website content to remote host] **********************************************************************
ok: [192.168.153.131]
ok: [192.168.153.133]

TASK [Start and enable Apache service on Ubuntu] ****************************************************************
ok: [192.168.153.133]
ok: [192.168.153.131]

TASK [Start and enable HTTPD service on RedHat] *****************************************************************
skipping: [192.168.153.131]
skipping: [192.168.153.133]

PLAY RECAP **************************************************************************************************
192.168.153.131            : ok=6    changed=1    unreachable=0    failed=0    skipped=3    rescued=0    ignored=0
192.168.153.133            : ok=6    changed=1    unreachable=0    failed=0    skipped=3    rescued=0    ignored=0
```

Working after performing curl with port 8080

```
dev@worker1-vm:~$ curl localhost:8080

<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8" />
        <title>Apache Tomcat/9.0.100</title>
        <link href="favicon.ico" rel="icon" type="image/x-icon" />
        <link href="tomcat.css" rel="stylesheet" type="text/css" />
    </head>

    <body>
        <div id="wrapper">
            <div id="navigation" class="curved container">
                <span id="nav-home"><a href="https://tomcat.apache.org/">Home</a></span>
                <span id="nav-hosts"><a href="/docs/">Documentation</a></span>
                <span id="nav-config"><a href="/docs/config/">Configuration</a></span>
                <span id="nav-examples"><a href="/examples/">Examples</a></span>
                <span id="nav-wiki"><a href="https://cwiki.apache.org/confluence/display/TOMCAT/">Wiki</a></span>
                <span id="nav-lists"><a href="https://tomcat.apache.org/lists.html">Mailing Lists</a></span>
                <span id="nav-help"><a href="https://tomcat.apache.org/findhelp.html">Find Help</a></span>
                <br class="separator" />
            </div>
            <div id="asf-box">
                <h1>Apache Tomcat/9.0.100</h1>
            </div>
            <div id="upper" class="curved container">
                <div id="congrats" class="curved container">
                    <h2>If you're seeing this, you've successfully installed Tomcat. Congratulations!</h2>
                </div>
                <div id="notice">
                    <img id="tomcat-logo" src="tomcat.svg" alt="[tomcat logo]" />
                    <div id="tasks">
```