

ANSIBLE (RH294)

ANSIBLE PROJECT

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SUMMARY

We made a role named `web_site` that shows a web page contain our names and photo of us.

The role contain multiple tasks ta

WEBSITE



Tree

```
student@workstation:~/project
student@workstation ~]$ cd project
student@workstation project]$ tree web_site
web_site
├── defaults
│   └── main.yml
├── files
│   └── files
│       ├── 20240318_124354.jpg
│       └── index.html
├── handlers
│   └── main.yml
├── meta
│   └── main.yml
├── README.md
├── tasks
│   └── main.yml
├── templates
│   └── httpd.conf.j2
├── tests
│   ├── inventory
│   └── test.yml
└── vars
    └── main.yml

1 directories, 11 files
student@workstation project]$
```

Index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>PROJECT</title>
</head>
<body>
  <h1>WE ARE THE BEST</h1>
  <p>OMAR SHABAN , AHMED MOSTAFA , ALI KHAMES:</p>
  
</body>
</html>
```

Handlers

handlers file for web_site

```
- name: restart httpd
  ansible.builtin.service:
    name: "{{ web_service }}"
    state: restarted
```

Tasks

tasks file for web_site

```
- name: Packages are installed
  ansible.builtin.dnf:
    name: "{{ web_package }}"
    state: present
```

```
- name: Ensure service is started
  ansible.builtin.service:
    name: "{{ web_service }}"
    state: started
    enabled: yes
```

```
- name: Deploy configuration file
  ansible.builtin.template:
    src: templates/httpd.conf.j2
    dest: "{{ web_config_file }}"
    owner: root
    group: root
    mode: '0644'
    setype: httpd_config_t
    notify: restart httpd
```

```
- name: Deploy index.html file
  ansible.builtin.copy:
    src: files/index.html
    dest: "{{ web_root }}"
    owner: root
    group: root
    mode: '0644'
```

```
- name: Web port is open
  ansible.builtin.firewalld:
    service: "{{ web_fw_service }}"
    permanent: yes
    state: enabled
    immediate: yes
```

```
- name: send photo
  copy:
    src: files/20240318_124354.jpg
    dest: "{{ photo_root }}"
```

templates

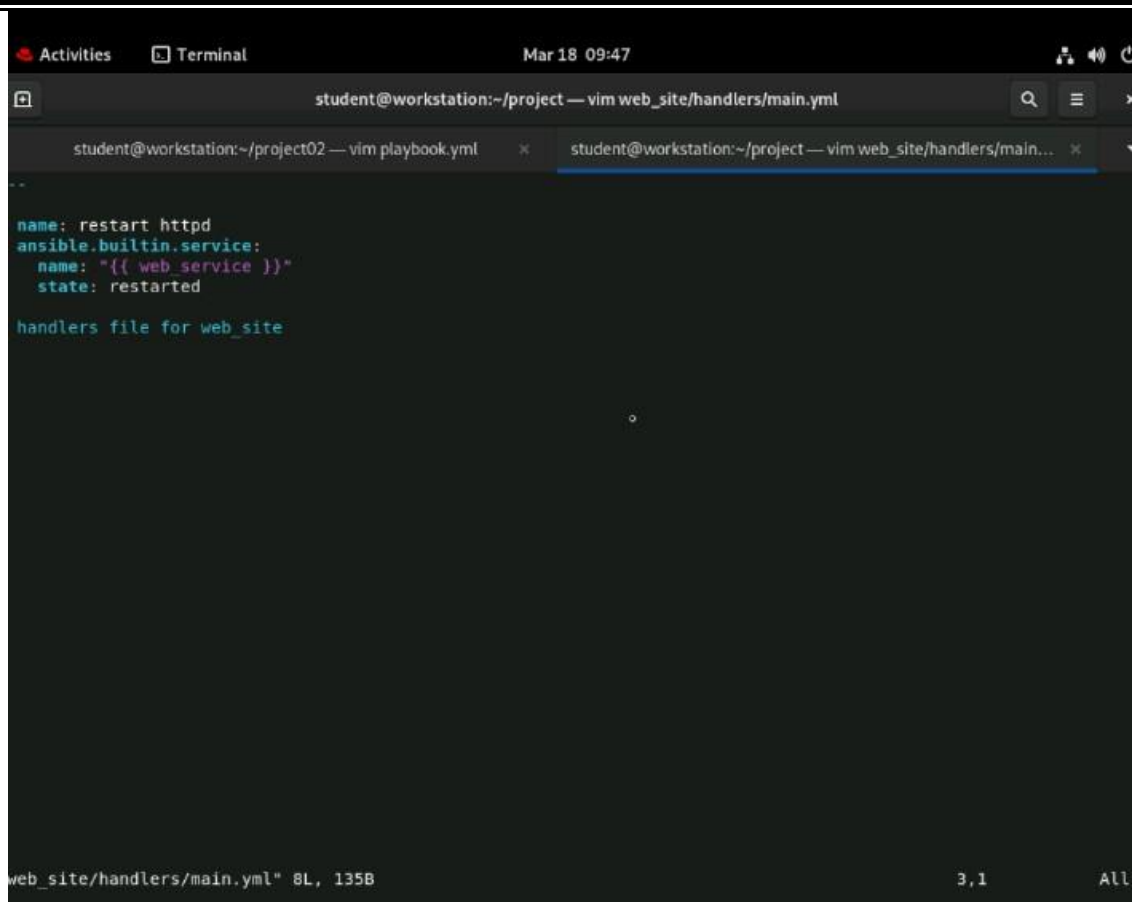
```
ServerRoot "/etc/httpd"
Listen 80
Include conf.modules.d/*.conf
User apache
Group apache
ServerAdmin root@localhost
<Directory />
    AllowOverride none
    Require all denied
</Directory>
DocumentRoot "/var/www/html"
<Directory "/var/www">
    AllowOverride None
    Require all granted
</Directory>
<Directory "/var/www/html">
    Options Indexes FollowSymLinks
    AllowOverride None
    Require all granted
</Directory>
<IfModule dir_module>
    DirectoryIndex index.html
</IfModule>
<Files ".ht*">
    Require all denied
</Files>
ErrorLog "logs/error_log"
LogLevel warn
<IfModule log_config_module>
    LogFormat "%h %l %u %t \"%r\" %s %b \"%{Referer}i\" \"%{User-Agent}i\"" combined
    LogFormat "%h %l %u %t \"%r\" %s %b" common
    <IfModule logio_module>
        LogFormat "%h %l %u %t \"%r\" %s %b \"%{Referer}i\" \"%{User-Agent}i\" %I %O" combinedio
    </IfModule>
    CustomLog "logs/access_log" combined
</IfModule>
<IfModule alias_module>
    ScriptAlias /cgi-bin/ "/var/www/cgi-bin/"
</IfModule>
<Directory "/var/www/cgi-bin">
    AllowOverride None
    Options None
    Require all granted
</Directory>
<IfModule mime_module>
    TypesConfig /etc/mime.types
    AddType application/x-compress .Z
    AddType application/x-gzip .gz .tgz
    AddType text/html .shtml
    AddOutputFilter INCLUDES .shtml
</IfModule>
```



```
AddDefaultCharset UTF-8
<IfModule mime_magic_module>
    MIMEMagicFile conf/magic
</IfModule>
EnableSendfile on
IncludeOptional conf.d/*.conf
```

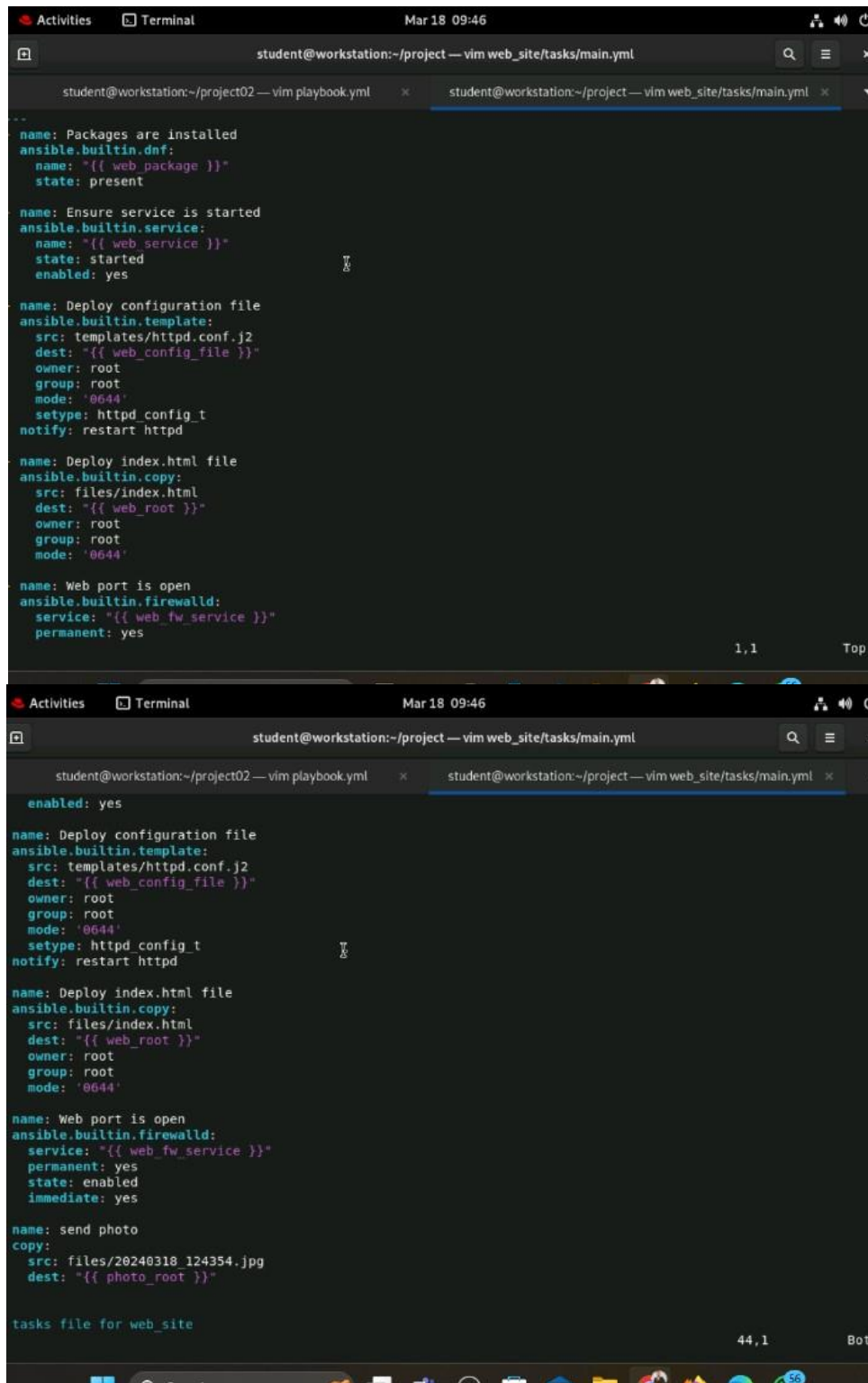
```
vars
---
# vars file for web_site
web_package: httpd
web_service: httpd
web_config_file: /etc/httpd/conf/httpd.conf
web_root: /var/www/html/index.html
photo_root: /var/www/html/20240318_124354.jpg
web_fw_service: http
```

```
playbook
---
- name: HTTPD server is installed
  hosts: webdev
  become: true
  roles:
    - web_site
```



```
name: restart httpd
ansible.builtin.service:
  name: "{{ web_service }}"
  state: restarted
handlers file for web_site
```

web_site/handlers/main.yml" 8L, 135B 3,1 All



The image displays two screenshots of a terminal window with a vim editor open, showing Ansible playbook tasks. The terminal title bar indicates the user is 'student@workstation' and the date is 'Mar 18 09:46'. The editor shows a file named 'main.yml' in the directory '~/project/web_site/tasks/'.

The first screenshot shows the following tasks:

```
--
name: Packages are installed
ansible.builtin.dnf:
  name: "{{ web_package }}"
  state: present

name: Ensure service is started
ansible.builtin.service:
  name: "{{ web_service }}"
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name: Deploy configuration file
ansible.builtin.template:
  src: templates/httpd.conf.j2
  dest: "{{ web_config_file }}"
  owner: root
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  mode: '0644'
  setype: httpd_config_t
  notify: restart httpd

name: Deploy index.html file
ansible.builtin.copy:
  src: files/index.html
  dest: "{{ web_root }}"
  owner: root
  group: root
  mode: '0644'

name: Web port is open
ansible.builtin.firewalld:
  service: "{{ web_fw_service }}"
  permanent: yes
```

The second screenshot shows the continuation of the tasks, including the 'enabled: yes' line for the service task, and a new task to send a photo:

```
enabled: yes

name: Deploy configuration file
ansible.builtin.template:
  src: templates/httpd.conf.j2
  dest: "{{ web_config_file }}"
  owner: root
  group: root
  mode: '0644'
  setype: httpd_config_t
  notify: restart httpd

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  service: "{{ web_fw_service }}"
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  state: enabled
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name: send photo
copy:
  src: files/20240318_124354.jpg
  dest: "{{ photo_root }}"

tasks file for web_site
```

