

Interacting with Vagrant & Updating Code

Application Code

During the labs we will be altering the source code so that we can secure it against the various vulnerabilities we encounter. The code for both the coffee shop and the third-party site are located within their respective Vagrant directories. For example, my application code for the coffee site is located at:

```
C:\Users\Stephen OShaughnessy\django-coffeeshop\coffeeshop\vagrant\coffeeshopsite\coffeeshop\
```

We will be using a text or code editor to change the code. You can use any code editor of your choice, e.g., VS Code, Notepad++, or equivalent. All you need is an environment to update the code.

Restarting the Server after Code Updates

Note: after you have updated any application code, you will need to restart the Apache server on the VM. To do this you will have to ssh into the container (see next section) and restart the server using the following command:

```
sudo service apache2 restart
```

Accessing the Vagrant VMs

To enter in any commands within the VM, you will need to use ssh. The VMs are headless servers running in VirtualBox or Docker. To login to the VM, you must be in the Vagrant directory for the application (on command line). You can login using the following command:

```
vagrant ssh
```

You should see an output similar to Figure 1 below:

```

C:\Users\Stephen OShaughnessy\django-coffeeshop\coffeeshop>vagrant ssh
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.4.0-195-generic x86_64)
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.4.0-195-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

System information as of Thu Oct  3 09:02:58 UTC 2024

 * Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
   just raised the bar for easy, resilient and secure K8s cluster deployment.

  https://ubuntu.com/engage/secure-kubernetes-at-the-edge

Expanded Security Maintenance for Applications is not enabled.

9 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update
New release '22.04.5 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

vagrant@coffeeshop:~$
```

Figure 1: ssh to vagrant VM

NOTE: the vagrant password is: vagrant

Useful Common Commands

A list of the most common commands you will use is shown in Table 1 below.

Command	Purpose
<code>vagrant up --provider=docker</code>	Build and start the Coffeeshop container
<code>vagrant halt</code>	Stop the container
<code>vagrant destroy</code>	Remove the container (to rebuild from scratch)
<code>vagrant ssh</code>	SSH into the container
<code>sudo service apache2 restart</code>	Restart the web server inside the container
<code>sudo ./rebuild_database.sh</code>	Recreate the database and reload fixtures

Table 1: Useful commands