

Setting up your VM

Step 1: Check your computer type

There are **two versions** of the course VM, matched to your computer's processor. You must download the correct one.

- Apple Silicon Mac (M1, M2, M3, or M4 chip) - download `SecEng2026-ARM64.ova`
- Windows PC, or Intel-based Mac - download `SecEng2026-x86.ova`

Step 2: Install VirtualBox

1. Go to <https://www.virtualbox.org/wiki/Downloads>
2. Download the installer for your operating system (Windows hosts, or macOS / Apple Silicon hosts)
3. Run the installer and accept the default options

Mac users: if macOS blocks the installer with a security warning, right-click (or Control-click) the installer file, choose **Open**, then click **Open** again in the dialog that appears.

Step 3: Download the course VM file

Log in to the course Canvas page and navigate to **Modules** → **Week 2**. Download the `.ova` file matching your computer type (see Step 1).

This file is large (several GB) — please download it on a stable connection.

Step 4: Import the VM

1. Open **VirtualBox**
2. Go to **File** → **Import Appliance** (or click the **Import** button in the toolbar)
3. Click the folder icon and select the `.ova` file you downloaded
4. Click **Continue**
5. You will see an **Appliance Settings** screen showing the VM's name, CPU, memory, and disk settings

-
- The default settings are fine — you do not need to change anything
 - If your computer has less than 8GB of free RAM, you may reduce the **Memory** value, but do not go below 4096 MB

6. Click **Import** and wait for the process to finish (this can take several minutes)

Step 5: Start the VM

1. In the VirtualBox main window, select the imported VM from the list
2. Click **Start**
3. Wait for it to boot to the login screen

Login credentials

Username: ubuntu
Password: ubuntu123

Step 6: Setup Port Forwarding

Port forwarding lets you access services running inside the VM (like Jupyter Notebook or DVWA) from your host machine's own browser, using `localhost`. This only needs to be set up once per VM.

You can configure port forwarding whether the VM is **running or fully shut down** — there is no need to start it first.

1. In VirtualBox Manager, select your VM from the list
2. Go to **Settings** → **Network**
3. Under **Adapter 1**, confirm it is attached to **NAT**, then click **Advanced** → **Port Forwarding**
4. Click the green **+** icon to add a new rule for each service below, filling in **Host Port** and **Guest Port** as shown (leave **Host IP** and **Guest IP** blank):

Name	Protocol	Host Port	Guest Port
dvwa	TCP	8080	80
jupyter	TCP	8888	8888
ssh	TCP	2222	22

5. Click **OK** to save the rules, then **OK** again to close Settings

Once the VM is running, you can reach these services from your host browser at:

<http://localhost:8080/dvwa/> DVWA
<http://localhost:8888> Jupyter Notebook