

# Setting Up A Linux Environment With VirtualBox

- These instructions should work for either a MacOS or Windows host machine
- Note that this will work on Intel-based Macs ... if you have an M1 or M2 ARM-based Mac, VirtualBox is not compatible, and you will have to install the UTM Virtualization software instead. See the separate instructions for that!

## Step 1: Install VirtualBox

1. Download and Install VirtualBox from [VirtualBox.org](https://www.virtualbox.org)
2. Make sure to download the appropriate version for your host system (MacOS or Windows)
3. Run the installer and choose the defaults
4. Start up VirtualBox ... the first time, you will be asked to install the Oracle VM Virtual Box Extension Pack ... do this!

## Step 2: Install a Linux OS within VirtualBox

1. Download the Ubuntu 22.04 VirtualBox image from here: <https://www.osboxes.org/ubuntu/>
2. N.B. ... Yes, there are newer versions of Ubuntu, but this version has been thoroughly tested and you will have fewer compatibility issues going forward. It is also the version that Google runs on its cloud servers, incidentally.
3. N.B. 2 ... This is a LARGE file, and so the download will take some time.
4. N.B. 3 ... You will have scroll down a bit on the link given above to find the Ubuntu 22.04 VirtualBox image!
5. The resulting download will produce a file in your Downloads directory called 64bit.7z ... unpack this archive with a RAR extractor for your system.
6. Once unpacked, you should have a file called **~/Downloads/64bit/Ubuntu 22.04.6 (64bit).vdi (or something like that - it might be slightly different depending on updates to the Ubuntu image over time).**

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6. Within VirtualBox, choose "New"
  7. Give the OS a name ... something like Ubuntu 22.04
  8. The type should be Linux, and the Version should be Ubuntu (64-bit).  
The machine folder will probably be something directly underneath your

home directory on your machine, which is fine.

9. Hit continue
  10. My experience is that choosing an amount of memory greater than the suggested amount results in better performance. VirtualBox usually suggests 1GB ... I would suggest 4GB instead.
  11. Hit Continue
  12. On this window, choose to create a VM from an existing file, and choose the \*.vdi file that was created in Step 6 above!
  13. You should now have a new virtual machine called Ubuntu 22.04 VirtualBox!
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14. Open up the Settings menu
  1. General->Advanced->Shared Clipboard: Bidirectional
  2. General->Advanced->Drag'n'Drop: Bidirectional
  3. Shared Folders->Click the green + folder button on the right to add a new shared folder
    1. Folder Path: <your downloads folder on the host system>
    2. Folder Name: Downloads
      1. Choose Auto-mount, do NOT choose Read-only
    3. Mount Point: Downloads
15. Start the virtual machine
16. The account will be [osboxes.org](https://osboxes.org), and the password will also be [osboxes.org](https://osboxes.org)
17. You should see a shared drive mounted on the Desktop called sf\_Downloads ... this is your main Downloads folder on the host machine, and it is quite convenient to you use your main machine to Download things from the web, and then immediately have access to them within the virtual machine.