Create a Linux VM locally

# Download Virtualization Software

I’m using Oracle Virtual Box, but you can use whatever virtualization software you want.

Virtual box is free to use.

<https://www.virtualbox.org/>

# Download Linux Server ISO

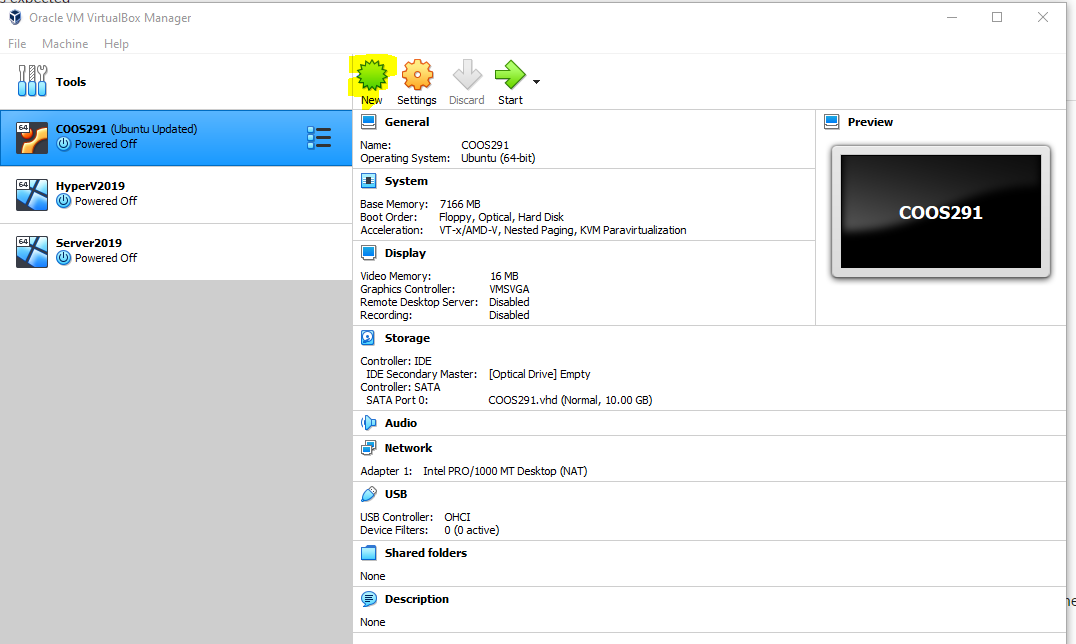
Goto: <https://ubuntu.com/download/server>

Choose option 2 – Manual server installation

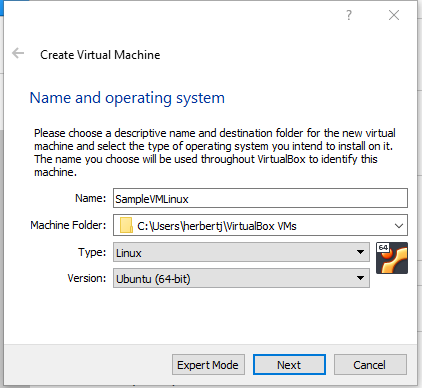
This will download an ISO (cd image file) that you can mount to your blank VM, which will then install Linux

# Create a blank VM

In VirtualBox, click on the “New” icon:

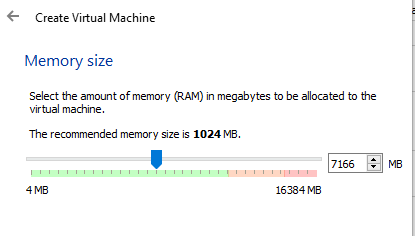


Pick a name, choose Linux as your Type, and Ubuntu(64-bit) as Version (This doesn’t really matter)



Click Next

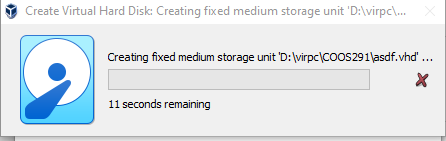
Pick a suitable amount of RAM (I’m using 7GB, but I have 16GB installed locally, so I can spare it)



Choose “Create a virtual hard disk now” option for Hard Disk

Choose VHD (Virtual Hard Disk) option for Hard disk file type

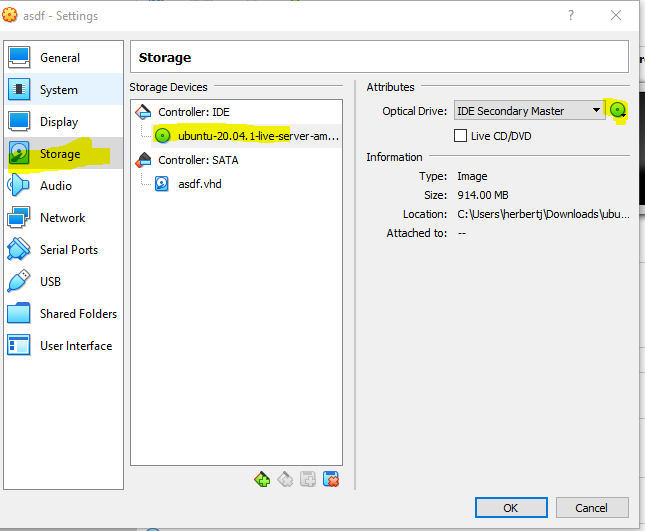
Choose Fixed Size for Storage on physical hard disk (10GB)

This will create a VHD file for your VM:  


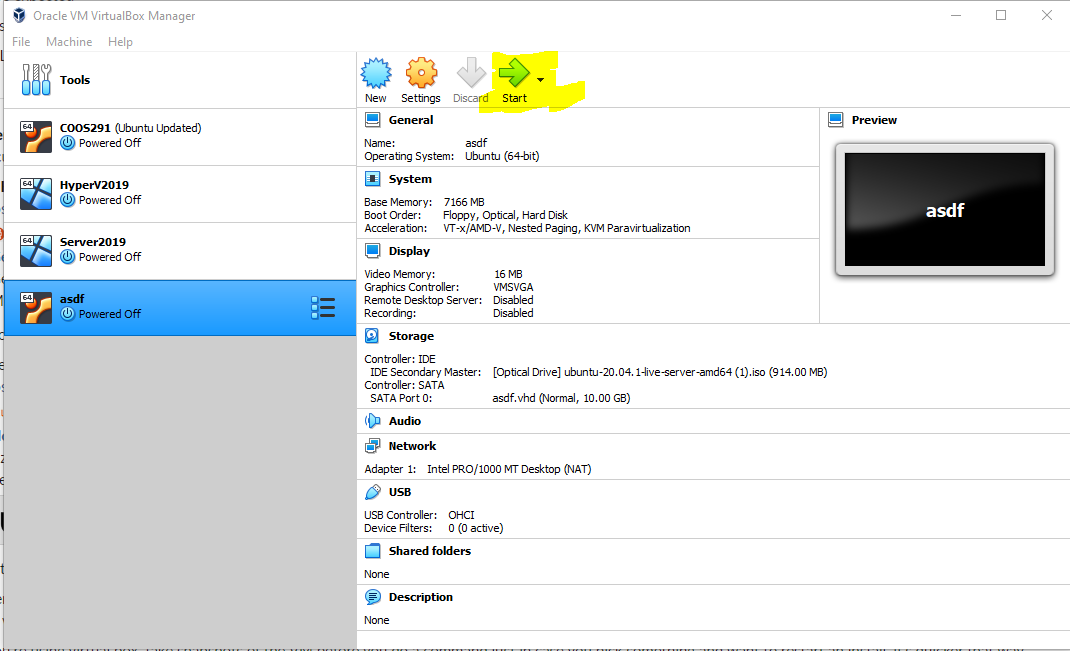
Once complete, your VM is created.

You’ll need to mount your ISO that you downloaded before turning on the VM in Virtual Box:

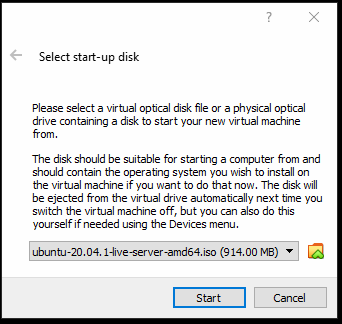
Goto Settings of the VM, then goto Storage, then find your cd drive and mount the ISO:



Once complete, you can Start your VM:



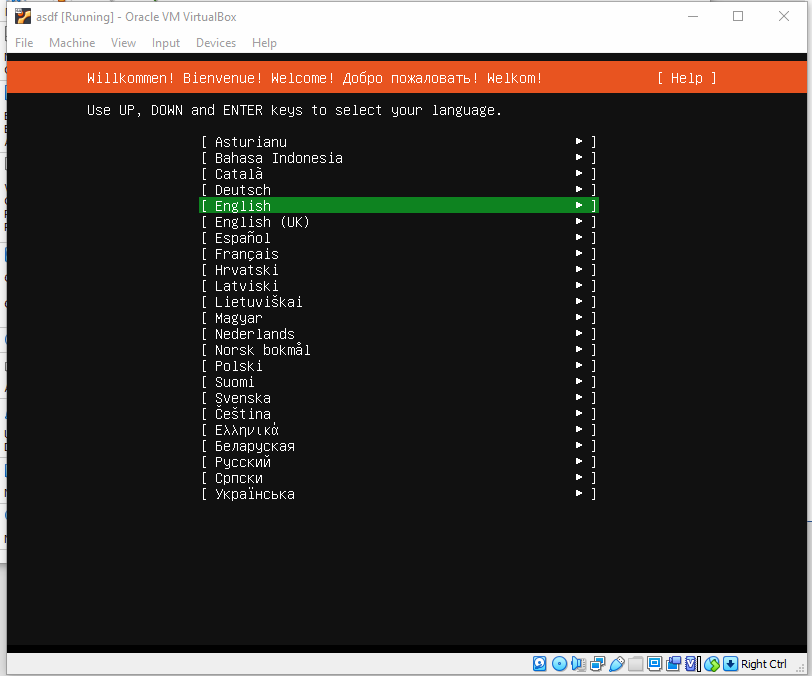
Confirm your Start-up disk:



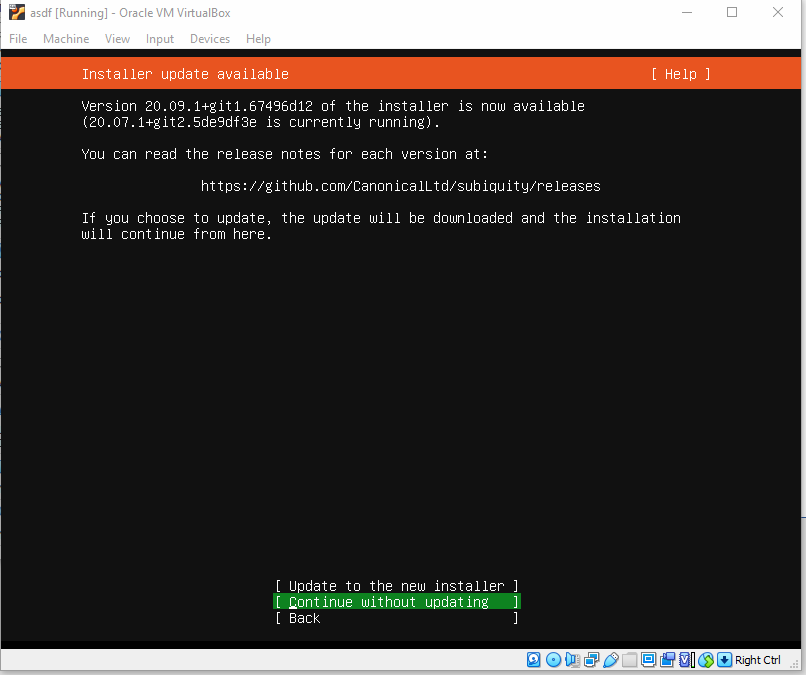
This will then launch the Ubuntu install

# Installing Linux

Choose English:



Continue without Updating:



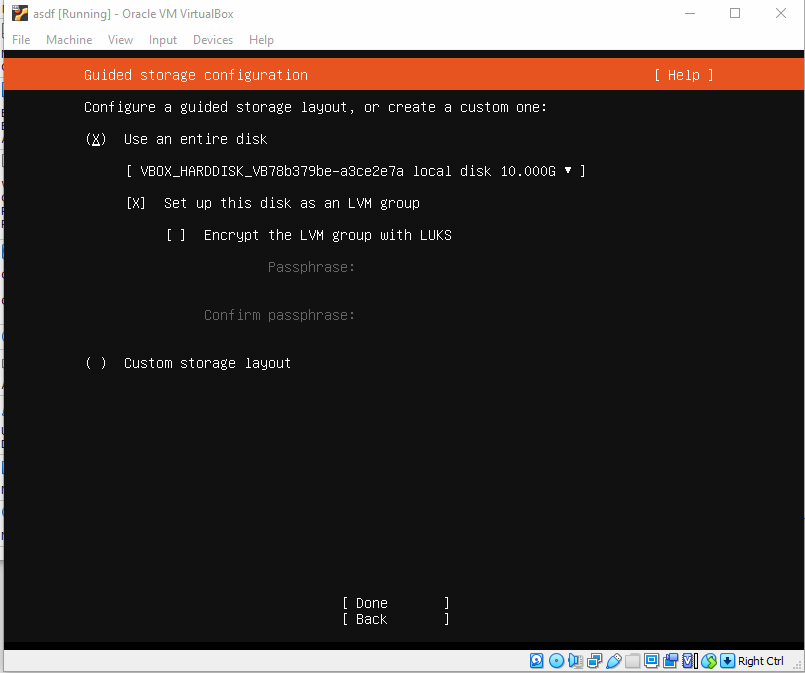
Select Done

Select Done for Network Connections

Select Done for Configure Proxy (don’t enter a Proxy address, unless you need to)

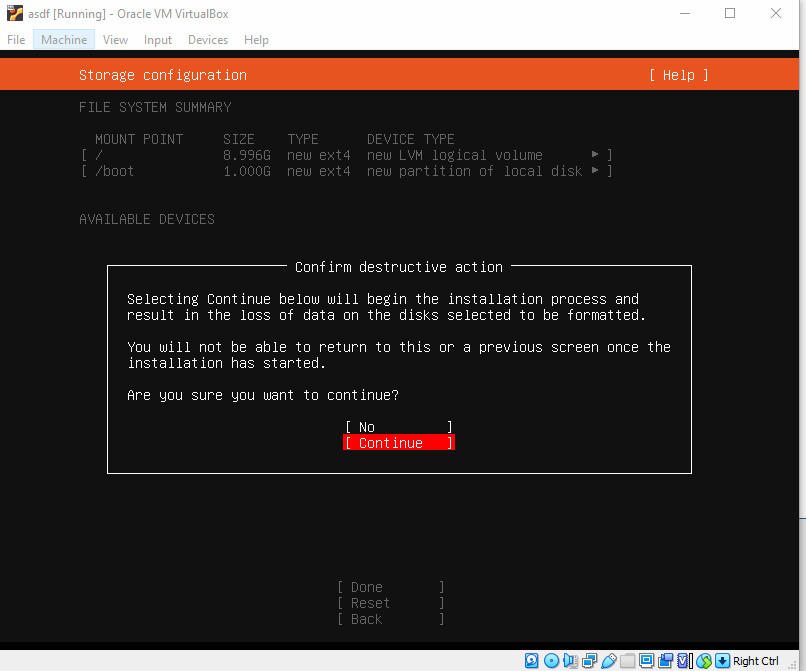
Select Done for Configure Ubuntu archive mirror

Select “Use an entire disk” under those options and click Done:

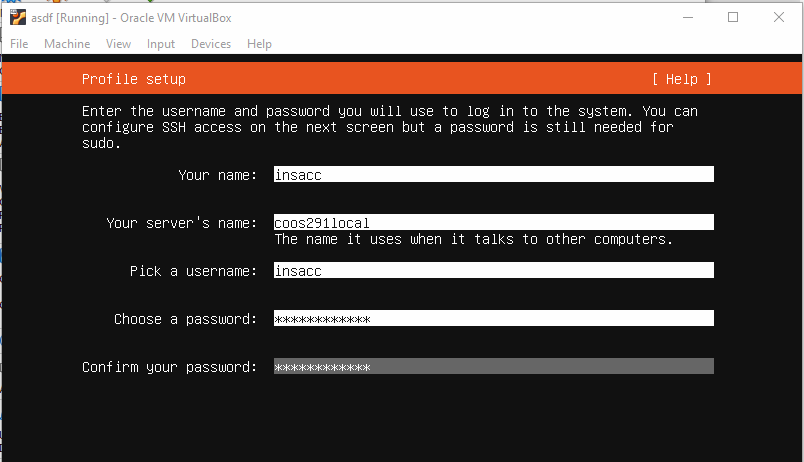


Select Done for Storage configuration

Select Continue:



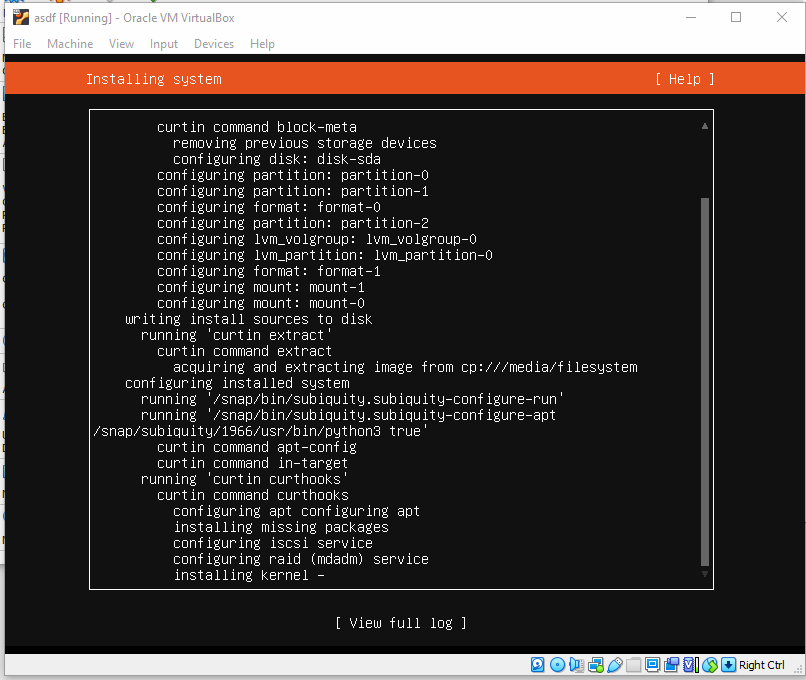
Use the following settings for Profile setup:



The password I picked was “Polytech123!”

You don’t need to install SSH or any other Featured Server Snaps

It will then install the kernel, which will take awhile:



# Configuring your install:

Once your computer reboots, log in via the root user: insacc with password: Polytech123!

Follow the instructions here: <https://blog.hildenco.com/2019/07/creating-ubuntu-desktop-instance-on.html>

## Skip all the Azure configuration, and start executing the commands from “Installing the Required Tools” section.

Namely, run the following commands:

|  |  |
| --- | --- |
| sudo apt-get update && sudo apt-get upgrade | Updates the system libraries |
| sudo apt install tmux git ranger vim | Installs some tools |
| sudo apt-get install xrdp -y | Installs xrdp |
| sudo groupadd CST2 | Adds a user group CST2 |
| sudo useradd -m -g CST2 cstUser1 | Adds a new user cstUser1 |
| sudo useradd -m -g CST2 cstUser2 | Adds a new user cstUser2 |
| sudo usermod -G adm,sudo cstUser1 | Add user to adm and sudo groups |
| sudo usermod -G adm,sudo cstUser2 | Add user to adm and sudo groups |
| sudo passwd cstUser1 | Sets the user password, use “cstuserpass” |
| sudo passwd cstUser2 | Sets the user password, use “cstuserpass” |
| sudo apt install ubuntu-desktop | Downloads and installs ubuntu desktop (our XDE that we will use) |

# Installing X-Windows

Once you run the following command:

sudo apt install ubuntu-desktop

It will download the necessary library files. You’ll then be taken to the desktop install.

Once installed, you can reboot your machine via the “sudo reboot” command

It will reboot and you’ll be presented with your desktop environment.