

# Homework 7 - Virtualisation - 2 parts

## Part 1 - Install a virtual Linux machine

25pts Due - May 1

Install a copy of Oracle VirtualBox on your system. Then download Ubuntu 18.04 Desktop and install a virtual server. We will use the virtual server for Wens day's lecture on process management in Unix/Linux type systems.

Virtual Box Download: <https://www.virtualbox.org/wiki/Downloads>

Looks like:



Ubuntu Download: <https://releases.ubuntu.com/18.04.4/>

Looks like:

ubuntu releases

## Ubuntu 18.04.4 LTS (Bionic Beaver)

### Select an image

Ubuntu is distributed on three types of images described below.

#### Desktop image

The desktop image allows you to try Ubuntu without changing your computer at all, and at your option to install it permanently later. This type of image is what most people will want to use. You will need at least 1024MiB of RAM to install from this image.

#### [64-bit PC \(AMD64\) desktop image](#)

Choose this if you have a computer based on the AMD64 or EM64T architecture (e.g., Athlon64, Opteron, EM64T Xeon, Core 2). Choose this if you are at all unsure.

#### Server install image

The server install image allows you to install Ubuntu

#### [64-bit PC \(AMD64\) server install image](#)

Choose this if you have a computer based on the AMD64 or EM64T architecture (e.g., Athlon64, Opteron, EM64T Xeon, Core 2). Choose this if you are at all unsure.

Turn in a screen capture of your Ubuntu system running on your desktop.

Login to your "system" and poke around!

## Part 2 - Install Docker - setup a Docker container

25pts Due - May 1

Docker Download: <https://www.docker.com/products/docker-desktop>

Looks Like:

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# Docker Desktop

The fastest way to containerize applications on your desktop

[Download for Mac](#)[Download for Windows](#)

Docker File - attached

Python Program - attached

Run the sample python program in your docker container - and turn in the output from the sample program.

Once you have docker installed:

Mac or Linux (in some directory where you have your Dockerfile):

```
$ docker pull python
$ docker build -t my-python-app .
$ docker run -it --rm --name my-running-app my-python-app
```

Windows

```
C:\> mkdir my-docker
C:\> cd my-docker
C:\> copy C:\Downloads\Dockerfile .
C:\my-docker> docker pull python
C:\my-docker> docker build -t my-python-app .
C:\my-docker> docker run -it --rm --name my-running-app my-python-app
# echo "You are at the shell in the container"
```