

# Lab 0 - Virtual Box & CentOS

[New Attempt](#)

**Due** Jan 18 by 11:59pm    **Points** 25    **Submitting** a file upload

We will be using the minimal version of the [CentOS](https://en.wikipedia.org/wiki/CentOS) [\\_\(<https://en.wikipedia.org/wiki/CentOS>\)](https://en.wikipedia.org/wiki/CentOS) distribution of Linux for this class. Rather than run this operating system natively (ie. directly on your laptop), we will run it inside a Virtual Machine, sometimes referred to as a [VM](https://en.wikipedia.org/wiki/Virtual_machine) [\\_\(\[https://en.wikipedia.org/wiki/Virtual\\\_machine\]\(https://en.wikipedia.org/wiki/Virtual\_machine\)\)](https://en.wikipedia.org/wiki/Virtual_machine). The advantage of running VMs is that you can experiment, abuse and break your VM without compromising anything else on your laptop. Later in the semester, we will also gain experience running and maintaining VMs using the CS Department's private [Cloud](https://en.wikipedia.org/wiki/Cloud_computing) [\\_\(\[https://en.wikipedia.org/wiki/Cloud\\\_computing\]\(https://en.wikipedia.org/wiki/Cloud\_computing\)\)](https://en.wikipedia.org/wiki/Cloud_computing).

The ability to build, modify and destroy VMs is fundamental to mastering the material in this class. If you already have experience with these concepts, then this assignment should be fairly straightforward. If not, be prepared to spend some time working your way through the process and make sure to ask questions if you get stuck.

For the moment, install VirtualBox, CentOS, and your preferred ssh client using the reference links provided in the [Week 1](#) module.

Once you can access your CentOS VM via ssh, please submit a transcript of the following:

## Login in as root

```
cu-genvpn-tcom-10:~ cjherman$ ssh -p 2222 root@localhost
Warning: Permanently added '[localhost]:2222' (ECDSA) to the list of known hosts.
root@localhost's password:
Last login: Sat Aug 22 16:27:10 2020
[root@localhost ~]#
```

## Query the kernel version

```
[root@localhost ~]# uname -a
Linux localhost.localdomain 3.10.0-1160.el7.x86_64 #1 SMP Wed Jun 3 14:28:03 UTC 2020 x86_64 x86_64 x86_64 GNU/Linux
[root@localhost ~]#
```

## Confirm which release of CentOS you've installed

```
[root@localhost ~]# cat /etc/centos-release
CentOS Linux release 7.9.2009 (Core)
[root@localhost ~]#
```

## **Print out the basic network configuration**

```
[root@localhost ~]# ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether 08:00:27:b8:e3:bf brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global noprefixroute dynamic enp0s3
        valid_lft 86173sec preferred_lft 86173sec
    inet6 fe80::27b8:73da:c675:1aa3/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
[root@localhost ~]#
```

## **Shutdown the OS and power off your VM**

```
[root@localhost ~]# shutdown -h now
Connection to localhost closed by remote host.
Connection to localhost closed.
cu-genvpn-tcom-10:~ cjherman$
```