

## Password-less Authentication:

Before ssh, set up your *hosts* file located at */etc/hosts* on all the machines

Comment out the first two lines and add below

**Ip addresses    Pc names    Role of the pc's**

Of all the machines in your cluster.

Each file with look something similar to this

```
#127.0.0.1    localhost
#127.0.1.1    ucp-OptiPlex-7020
172.28.8.143  ucp-OptiPlex-7020  slave1
172.28.8.144  ucp-OptiPlex-7020  slave2
172.28.8.169  ucp-OptiPlex-7020  master localhost
```

Also the localhost will be changed to match the IP address of the pc you are currently on. This example is of the *hosts* file of master which is why localhost is written in front of it .

Now you are to set up password less SSH authentication.

First install openssh-server on all 3 machines and make sure it is running

```
$ sudo apt install openssh-server
```

Check its status by using the command

```
$ systemctl status ssh
```

If it is not running start it also make sure to enable it so that it starts automatically. This you will have to look into yourself

Create keys on all boxes by using command:

```
$ ssh-keygen
```

Copy key with command:

```
$ ssh-copy-id -i user@ipaddress
```

Add key of master to itself with (run this on master pc)

```
$ ssh-add
```