

Lauren Fromm
404751250

Lab 7 Log

I first needed to connect my beaglebone green wireless board. When I first connected it, I tried to download the necessary software, but it wasn't originally working on my mac. After trying again, I couldn't find the beaglebone connected by my usb cord.

Since I wasn't ever able to fix my beaglebone, I am just going to write what I would have done if it had worked.

First, I use
`$sudo ssh root@192.168.7.2`
to SSH into my beaglebone.

I then want to connect to the wifi, so I use:
`$sudo connmanctl`
`$connmanctl> enable wifi`
`$connmanctl> scan wifi`
`$connmanctl> services`
Which lists all of the discovered access points. Each access point has the following format:
CSD-Guest wifi_506583d4fc5e_544e434150413937414239_managed_psk

Then, I register as the prospective client:
`$connmanctl> agent on`

After finding the access point I want to connect to, I use:
`$connmanctl> connect`
wifi_506583d4fc5e_544e434150413937414239_managed_psk
I then enter the wifi password after it asks for Passphrase?

Now, I'm connected to the wifi, so I exit the connmanctl
`$connmanctl> quit`

By running:
`$ifconfig`
I find the IP address of my beaglebone, which will allow my teammate to SSH into my beaglebone.
My IP address is:

128.97.244.18

I then update the database:

```
$sudo apt-get update
```

I install xauth tool for X11 forwarding:

```
$sudo apt-get install xauth
```

I then install FireFox so I can do the X11 forwarding:

```
$apt-get install firefox-esr-l10n-en-gb
```

Finally, I want to start the actual lab now that the set up is done.

For the server:

I generate public and private keys by using:

```
$ssh-keygen
```

And I use no passwords for these keys.

I then create an account for a client on the server using:

```
$ sudo useradd -d /home/jeanne -m jeanne
```

```
$ sudo passwd jeanne
```

Both the password and username are set to 'jeanne'

Next I create the ssh directory for the new user:

```
$ cd /home/jeanne
```

```
$ sudo mkdir .ssh
```

I want to change the ownership and permission on the .ssh directory:

```
$ sudo chown -R jeanne .ssh
```

```
$ sudo chmod 700 .ssh
```

I then disable password based authentication:

```
$ emacs /etc/ssh/sshd_config
```

And then change password authentication to 'no'

For the client:

I again use:

```
$ ssh-keygen
```

to generate public and private keys.

I copy my public key to the server
for key-based authentication.

```
$ ssh-copy-id -i jeanne@128.97.244.18
```

I add my private key to the authentication
agent (ssh-agent)
\$ ssh-add

Then I SSH to server:

```
$ ssh jeanne@128.97.244.18  
$ ssh -X jeanne@128.97.244.18
```

I then run

```
$ firefox
```

on the remote host to see if I successfully
SSH'd onto the server, which I did.