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Connecting the Robot to Your Network

Connect your workstation to the robot as described in Connecting a Workstation and Starting the Robot. If you haven't connected the robot to your network yet, the robot is still connected to its own network, which is called `ubiquityrobotXXXX`, and your workstation is connected to that.

Before you go on, you should change the hostname of your robot, to distinguish your robot from others. Open a new terminal window, and log in to the robot with ssh:

```
ssh ubuntu@ubiquityrobot.local
```

using the password which is "ubuntu".

OPTIONAL: In the interests of security, you can change the user password. Just type:

```
passwd
```

and follow the prompts.

To change the hostname you can use pifi. Type the command:

```
sudo pifi set-hostname NEWHOSTNAME
```

Note: "sudo" is a Linux command that allows administrative actions.
Linux will often ask you for your password (it's "ubuntu", if you haven't changed it) when you use sudo (`sudo` stands for Super-User DO).

If you now reboot the robot the new hostname will be used

```
sudo reboot
```

Now you can log in to the robot with NEWHOSTNAME:

```
ssh ubuntu@NEWHOSTNAME.local
```

Use pifi to list the nearby networks:

```
pifi list seen
```

> MyNetwork
> Neighbor's network
> Other Network

We want to switch to MyNetwork, and we have now verified that it's present. So we can command:

```
sudo pifi add MyNetwork password
```

NOTE: `MyNetwork` is SSID and `password` is password of your wireless network.

Now reboot the robot again.

```
sudo reboot
```

The robot will reboot and try to attach to the "MyNetwork" wifi network. But your workstation is not connected to "MyNetwork", because we left it connected to `ubiquityrobotXXXX`. So, on a Linux machine, connect your workstation to "MyNetwork".

If your workstation is a virtual machine, it accesses the network through its host. So on the host, change the network from `ubiquityrobotXXXX` to "MyNetwork". Than return to the virtual machine.

To test,

```
ping NEWHOSTNAME.local
```

The ping result shows the network address of the robot:

> PING NEWHOSTNAME.local (10.0.0.113) 56(84) bytes of data.
> 64 bytes from 10.0.0.113: icmp_seq=1 ttl=64 time=97.6 ms
> 64 bytes from 10.0.0.113: icmp_seq=2 ttl=64 time=5.70 ms

Press control-c to stop the pinging.

If something goes wrong here, the robot may come back up in Access Point mode–that is, on the network named `ubiquityrobotXXXX`. Reboot everything and start over.

Now ssh into the robot.

```
ssh ubuntu@NEWHOSTNAME.local
```

As before:

> The authenticity of host '10.0.0.113 (10.0.0.113)' can't be established. ECDSA key fingerprint is SHA256:sDDeGZzL8FPY3kMmvhwjPC9wH+mGsAxJL/dNXpoYnsc. Are you sure you want to continue connecting (yes/no)?

```
yes
```

> ubuntu@10.0.0.113's password:

```
ubuntu
```

> Welcome to Ubuntu 16.04.3 LTS (GNU/Linux 4.4.38-v7+ armv7l)
>
> - Documentation: https://help.ubuntu.com
> - Management: https://landscape.canonical.com
> - Support: https://ubuntu.com/advantage 22 packages can be updated. 12 updates are security updates. Last login: Thu Feb 11 16:31:06 2016 from 10.42.0.143

There is some housekeeping that you can perform at this point, to keep your robot up to date. Begin by checking the date.

```
date  >Mon Aug 14 17:16:26 UTC 2017
```

Now that you have the correct date you can update the robot to get changes that have been made since the robot was manufactured.

```
sudo apt-get update

sudo apt-get upgrade
```

This may take some time, since it may have been a while since the original image was made.

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