Securing your wormbot

Since most of the wormbot interface runs through a web server it is important to give some thought to securing it. The simplest and safest approach is to keep the wormbot server behind a network firewall so that computers outside your lab cannot access it. However, it is highly useful to be able to access the WormBot remotely in order to check on experiments from home or traveling or even other parts of your network. Further being able to share results with collaborators is a key goal of the platform, therefore we have implemented standard web server based security for the WormBot server. This can be customized in many ways to limit access to your server but most of the Apache security configuration is beyond the scope of this manual. For more in depth configuration of your webserver we suggest to consult your IT department or a gifted teenager.
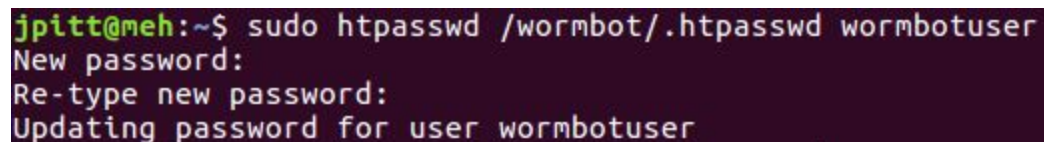
The wormbot software installs a default login/password to protect the software from anyone who may stumble across your web server.   These are:

user: **wormbotuser**
password: **wormbotpassword**

Note: The first time you access the wormbot software from a new machine or device you will be prompted to enter your password a few times. Your browser should cache your login credentials so that in the future you shouldn't need to reenter the password

1. Changing your wormbot password. It is a good idea to alter the password and login for your wormbot. To change the password for wormbotuser open a terminal and type:

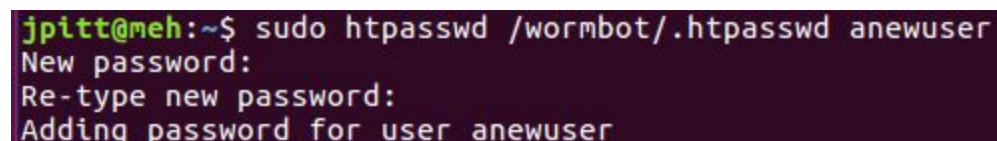   sudo htpasswd /wormbot/.htpasswd wormbotuser

```
jpitt@meh:~$ sudo htpasswd /wormbot/.htpasswd wormbotuser
New password:
Re-type new password:
Updating password for user wormbotuser
```

    You will be prompted to enter a new password and then verify it.

2. Adding a new user. To add a new user from the terminal type:

    sudo htpasswd /wormbot/.htpasswd EnterAnewUserNameHere

```
jpitt@meh:~$ sudo htpasswd /wormbot/.htpasswd anewuser
New password:
Re-type new password:
Adding password for user anewuser
```

3. Deleting a user. To delete a user open a terminal and type:

sudo htpasswd -D /wormbot/.htpasswd UserNameToBeDeleted


```
jpitt@meh:/wormbot$ sudo htpasswd -D /wormbot/.htpasswd wormbotuser
Deleting password for user wormbotuser
```

Assigning your WormBot a domain name

Again, some of this is beyond the scope of this manual, but in order to access your machine from other locations you will want to either get your IT department to give you a static IP address or configure a dynamicDNS service. Both approaches work. To configure a dynDNS see this documentation from Ubuntu:
https://help.ubuntu.com/community/DynamicDNS

For using a static IP address see here:
https://www.howtoforge.com/linux-basics-set-a-static-ip-on-ubuntu#ubuntu-incl-ubuntu-lts

Note: in both cases your network will need to not be blocking port 80 which the web server uses to receive data.