nmcli **Wireless**

Connecto to WiFi

Step 1: List available Wi-Fi networks

In the terminal, type

```
nmcli device wifi list
```

The output will list available access points

```
*  SSID          MODE   CHAN  RATE        SIGNAL  BARS   SECURITY
*  NextThing HQ   Infra  11    54 Mbit/s  100      ▂▄▆█   --
   NextThing Shop Infra  6     54 Mbit/s  30       ▂___   WPA1 WPA2
   2WIRE533       Infra  10    54 Mbit/s
44         ▂▄__    WPA1 WPA2
```

Step 2: Connect to a network
You can connect to password -protected or open access points.

A: No Password

To connect to an open network with no password, use this command:

```
sudo nmcli device wifi connect '(your wifi network name/SSID)' ifname wlan0
```

These commands will respond with information about the connection.

B: Password Protected

To connect to a password protected network, use this command, inserting your own network name and password:

```
sudo nmcli device wifi connect '(your wifi network name/SSID)' password '(your wifi password)'
ifname wlan0
```

C: Hidden SSID and Password Protected

To connect to a hidden network, append hidden yes to the command, after ifname wlan0

Step 3: Test your Connection

You can verify and test your wireless network connection.

Verify

You can verify your connection using the command

```
nmcli device status
```

which outputs a list of the various network devices and their connections. For example, a successful connection would look like this:

```
DEVICE   TYPE     STATE          CONNECTION
wlan0    wifi     connected      NextThing HQ
wlan1    wifi     disconnected   --
```

```
ip6tnl0  ip6tnl    unmanaged    --
lo       loopback  unmanaged    --
sit0     sit       unmanaged    --
```

Because it is worth knowing that Linux offers many ways of doing things, another command that shows your current active connection is

```
nmcli connection show --active
```

which outputs like so:

```
NAME  UUID                                   TYPE             DEVICE
NTC   59962bac-3441-437b-94ea-bf31dee66e8f   802-11-wireless  wlan0
```

After you have connected once, your C.H.I.P. will automatically connect to this network next time you reboot (or start NetworkManager services).

Create Hotspot

```
sudo nmcli dev wifi hotspot ifname wlan0 ssid "SandyBox-AP" password "sandybox123"
```