

## Connect Ubuntu to Wi-Fi (PEAP)

### Step 1: Identify the Wi-Fi interface (ip a)

Run the command below to find your interface name (e.g., `wlp...` or `wlxa...`):

```
jpu@jpu-MacBookAir6-2:/etc/netplan$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
   link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
   inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
   inet6 ::1/128 scope host noprefixroute
       valid_lft forever preferred_lft forever
2: wlxa8294887d391: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default qlen 1000
   link/ether a8:29:48:87:d3:91 brd ff:ff:ff:ff:ff:ff
   inet 10.10.4.10/24 brd 10.10.4.255 scope global dynamic noprefixroute wlxa8294887d391
       valid_lft 3364sec preferred_lft 3364sec
   inet6 fe80::4971:7181:297a:6c3e/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
jpu@jpu-MacBookAir6-2:/etc/netplan$
```

### Step 2: Create a PEAP profile (nmcli)

Run the nmcli command with the correct interface name, username, and password.

```
jpu@jpu-MacBookAir6-2:/etc/netplan$ sudo nmcli connection add type wifi con-name "DTU SciencePark PEAP" ifname "wlxa8294887d391" ssid "DTU SciencePark" 802-1x.eap
peap 802-1x.phase2-auth mschapv2 802-1x.identity "username" 802-1x.password "password" wifi.mode infrastructure wifi-sec.key-mgmt wpa-eap wifi-s
ec.auth-alg open 802-1x.ca-cert "godaddy-root.crt"
Connection "DTU SciencePark PEAP" (230e388b-7b8e-4b3d-ad54-fc3128691d53) successfully added.
```

### Script (copy/paste)

1. download certificate:

```
wget -q "https://certs.godaddy.com/repository/gdroot-g2_cross.crt" --output-document=godaddy-root.crt
```

2. find WLAN interface name:

```
ip a
```

3. Replace #PLACEHOLDER# below and execute:

```
nmcli connection add type wifi \
con-name "DTU SciencePark PEAP" \
ifname "#INTERFACE NAME#" \
ssid "DTU SciencePark" \
802-1x.eap peap \
802-1x.phase2-auth mschapv2 \
802-1x.identity "#USERNAME#" \
802-1x.password "#PASSWORD#" \
wifi.mode infrastructure \
wifi-sec.key-mgmt wpa-eap \
wifi-sec.auth-alg open \
802-1x.ca
```