

## The 2023 ICPC Greater NY Regional Contest

- You will need a USB flash drive that is *at least* 32GB. Try to get the fastest one you can. For the contest itself, the Greater NY region uses these <u>SanDlsk 32GB Ultra Fit USB 3.1 available on Amazon</u>. There are better ones available, and if you can get a faster one, you should.
- 2) Make sure your system has at least **45GB** of disk space available. The ZIP file is about **10GB** and the unzipped image is about **30GB**.
- 3) Download the ZIP of the image from here: <u>http://acmgnyr.org/downloads/GNY\_082923.zip</u>
- 4) Unzip the downloaded ZIP file. This will create a file called: **GNY\_082923.img** which is about 30GB.
- 5) Download the *Rufus* utility you will use to burn the image to a flash drive from this link: <u>https://rufus.ie/en/</u> If you are on a *Microsoft Windows* 64bit system, here is the direct link to the executable: <u>https://github.com/pbatard/rufus/releases/download/v4.2/rufus-4.2.exe</u> If you have your own tool to copy an image directly to a flash drive you can use that. For example, if you are on a *Linux* system, you can use "*dd*" to copy the image to your flash drive.

If you are trying to install the image on a Mac, first, good luck - it is rumored to work on an MBP, but we don't officially support it - you are more or less "on your own". However, this page may be helpful if you're brave: <u>buring a boot image on a Mac</u>

- 6) Plug in the flash drive you want to transfer the image to. All contents of the flash drive will be destroyed once you start the flash image copy.
- 7) Run the *Rufus* utility. You should see your flash drive listed in the "**Device**" box. Make sure it's the right device!
- 8) Press the "SELECT" button to choose the UNZIPPED image from step 4 (GNY\_082923.img).
- 9) Press the "**START**" button. This will take about 30-40 minutes depending on how fast your USB device is (it may go faster with a faster flash drive).

🖉 Rufus 4.2.2074		_		×	
Drive Properties					
Drive Properties					
NO LABEL (Dick 1) [32 GB]				~	
Rest selection					
GNY_082923.img	~	$\oslash$	SELECT	<b> -</b>	
Partition scheme	Target syste	Target system			
MBR ~	BIOS (or U	BIOS (or UEFI-CSM) $\sim$			
<ul> <li>Show advanced drive properties</li> </ul>					
32 GB File system	Cluster size				
FAT32 (Default)	16 kilobyte	16 kilobytes (Default)			
<ul> <li>Show advanced format options</li> <li>Status</li> </ul>					
REAL	ŊΥ				
§ (i) ≵ I	STAR	ſ	CLOSE		
l device found					



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- 10) After it completes, boot the newly created flash drive. You may have to select a different boot device from your BIOS. Some systems let you press F10, F11 or F12 or some other key (Lenovo uses *Enter* sometimes) to enter a special boot menu when the system is first turned on. Here, you can select the USB flash drive. Your best bet is to do a Google search for "boot function keys" with the make and model of your laptop.
- 11) It will take about 30 60 seconds to boot up.

## **WIFI Network Setup**

NOTICE: If your WIFI network requries you to login using a landing page or other credentials or to bring up a web page to log in, this will not work. The WIFI must connect with just the SSID and Password for the WIFI. Things like EDUROAM will not work!

- 1) Login as user "user" with password "user".
- 2) From the *Applications* menu, choose *System Tools*, and under that choose the "*Terminal*" choice. A terminal window should appear.
- 3) At the command prompt, type:

sudo setup\_wifi NetworkName NetworkPassword

(of course, replace NetworkName and NetworkPassword with YOUR WIFI information!)

It is imperative that your laptop is able to connect to your WIFI network. If it can't connect to your's, it will not be able to connect to the WIFI at the contest! It is your responsibility to make sure that your laptop is able to connect to WIFI.

- a) You may have to wait for up to a minute for it to connect, but it should assign an IP address. If it hangs for a long time, start another terminal window as described above, and type: sudo bash
- b) At the # command prompt type: iwconfig You should see something like this:

```
# iwconfig
lo no wireless extensions.
enp0s25 no wireless extensions.
wwan0 no wireless extensions.
wlp3s0 IEEE 802.11 ESSID:"<NetworkName>"
Mode:Managed Frequency:2.437 GHz Access Point:
00:7F:28:7F:8E:7E
Bit Rate=52 Mb/s Tx-Power=15 dBm
```



```
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Retry short limit:7 RTS thr:off Fragment thr:off

Power Management:off

Link Quality=63/70 Signal level=-47 dBm

Rx invalid nwid:0 Rx invalid crypt:0 Rx invalid frag:0

Tx excessive retries:0 Invalid misc:14 Missed beacon:0
```

Note the name of your wireless interface, in the above example, it is "**wlp3s0**", yours may be different, but it should start with "**wl**". If you don't see one, then your WIFI device is not recognized by the system. Try a different computer.

Now, make sure you WIFI network information is correct by typing:

```
cat /etc/network/interfaces.d/YOURWIRELESSDEVICE
Ex:
# cat /etc/network/interfaces.d/wlp3s0
allow-hotplug wlp3s0
iface wlp3s0 inet dhcp
wpa-essid NetworkName
wpa-psk NetworkPassword
```

The NetworkName and NetworkPassword should be the ones you typed in for the setup\_wifi command. If not, then you should re-run the setup\_wifi command with the correct values.

If you are satisfied the network information is correct, try to reboot the PC: **sudo reboot** Sometimes the WIFI device has to reset if the WIFI info changed, so rebooting usually fixes that.

If you are still having issues, please contact us on the <u>slack channel</u> and be prepared to send us the output of the commands above.

4) When your WIFI is up and running, you can then log out of the "user" account and attempt to log in to the "team##" account that was assigned to your team by the Regional Contest Director. If you do not set up the network properly, your team login will not work right!