

**3--TETHERING
WITH A Wi-Fi "HOTSPOT"
EMANATING FROM AN ANDROID
CELL PHONE
TO A "WINDOWS.." COMPUTER
by Francis Chao
fchao2@yahoo.com**



Web location for this
presentation:

<http://aztcs.apcug.org>

Click on

"Meeting Notes"

SUMMARY

You can use your Android cell phone to create a Wi-Fi hotspot to provide Internet access for a "Windows.." computer.

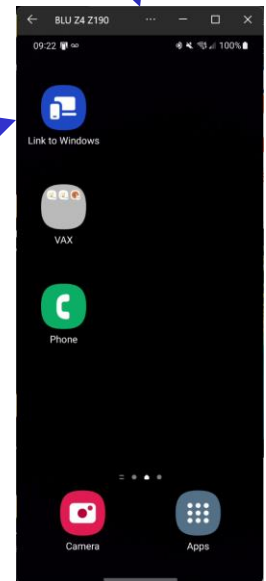
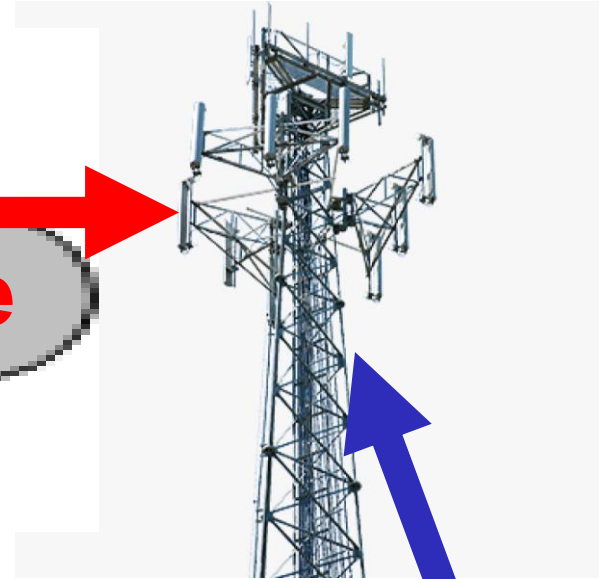
TOPICS

- Advantage of Using A Wi-Fi hotspot from an Android cell phone
- Big Steps (for computer experts)
- Small Steps (for the rest of us)

**Internet Cloud
(= "Data Plan" in cell phone
lingo)**

Option 3:

**Android cell phone provides
a
wireless Wi-Fi "hotspot"
so that the client computer,
tablet, or another cell phone
so that it can access the
Internet**



"TETHERING" AND "HOTSPOT" FOR CELL PHONES

- ~~Four ways to tether or create a hotspot with a cell phone:~~

Option 1: tethering using Wi-Fi

~~Option 2: tethering using a~~
~~"cell phone to USB" cable~~

~~Option 3: tethering using Bluetooth~~

~~Option 4: tethering using an add on~~
~~wired Ethernet adapter~~

ADVANTAGE OF USING A Wi-Fi HOTSPOT FROM A CELL PHONE

- Of the four configurations for tethering from a cell phone, only **OPTION 1: tethering using Wi-Fi** lets you connect more than one device to the Internet-providing cell phone at any given point in time.

OPTION 1 BIG STEPS

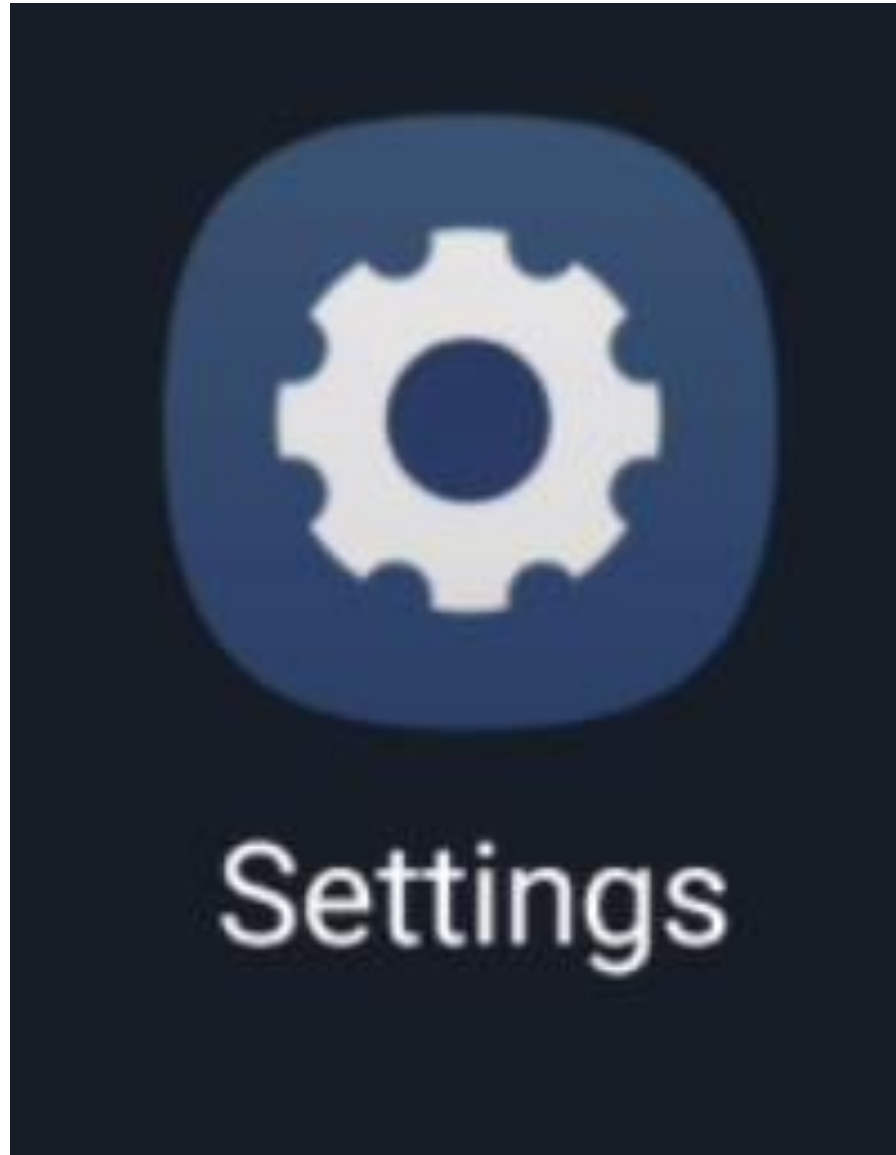
("Option 1:" = tethering using Wi-Fi)

- **BIG STEP 100:**
Set up Wi-Fi "Hotspot" emanating from the the cell phone
- **BIG STEP 200:**
Connect to the Wi-Fi "Hotspot" from inside the client device

BIG STEP 100 (Set up Wi-Fi hotspot
emanating from Android cell phone)

SMALL STEP 101:

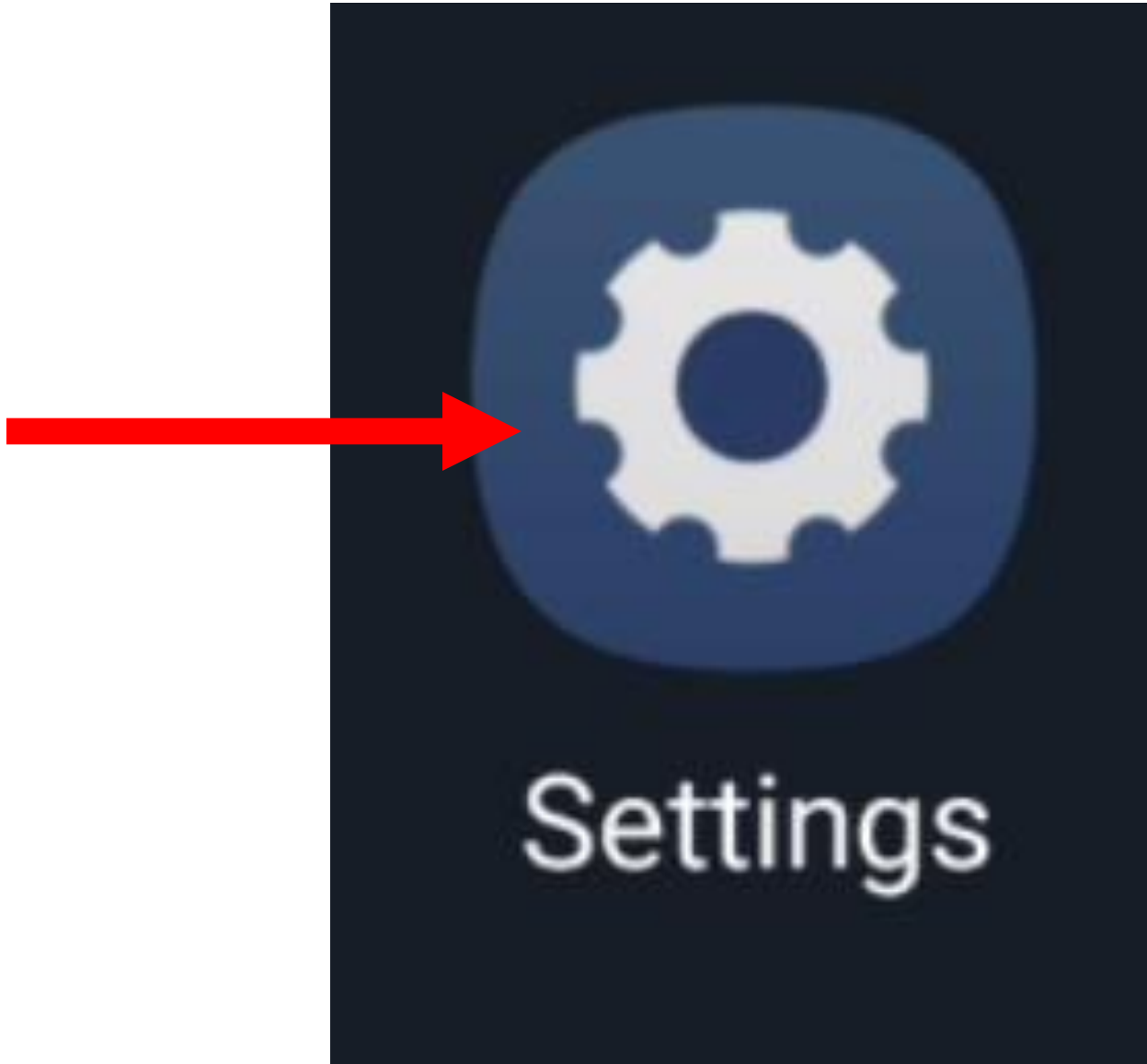
Locate the "Settings" icon in the
Android cell phone:



BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

SMALL STEP 102:

Tap on the "Settings" icon:



BIG STEP 100 (Set up Wi-Fi hotspot
emanating from Android cell phone)
(continued)

SMALL STEP 103:
Tap on "Connections":

11:41

5G UC 100%

Settings



FRANCIS CHAO

Samsung account • fch***@yahoo.com



Connections

Wi-Fi • Bluetooth • Airplane mode



Connected devices

Quick Share • Android Auto



Modes and Routines

Modes • Routines



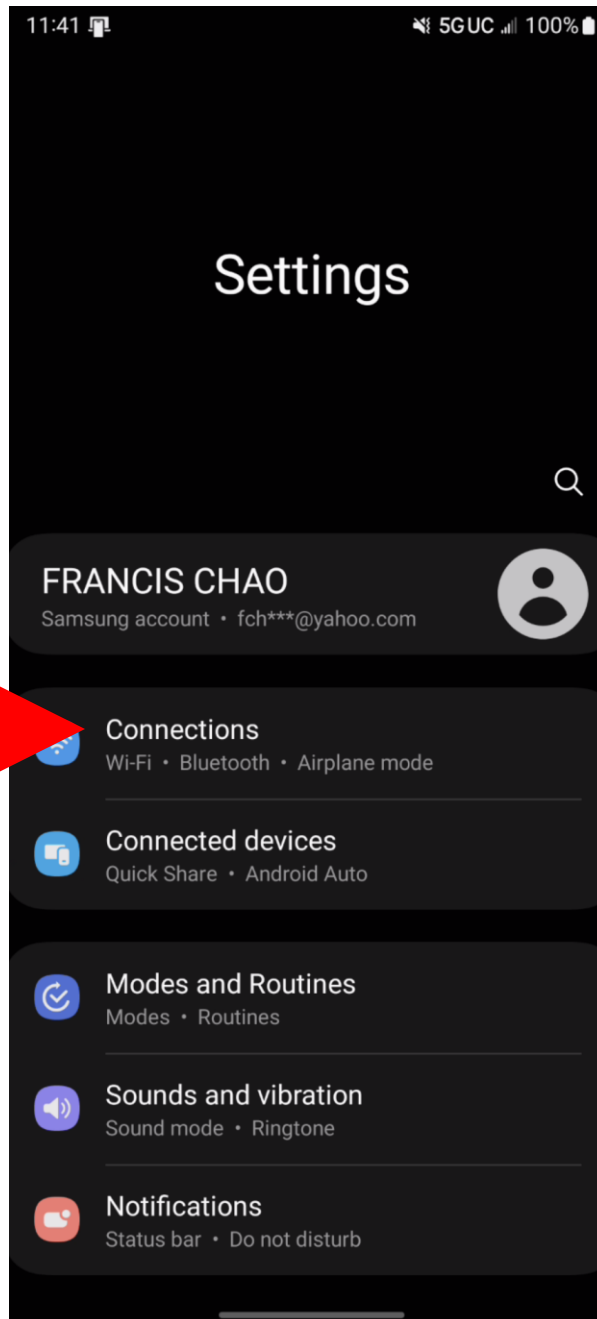
Sounds and vibration

Sound mode • Ringtone



Notifications

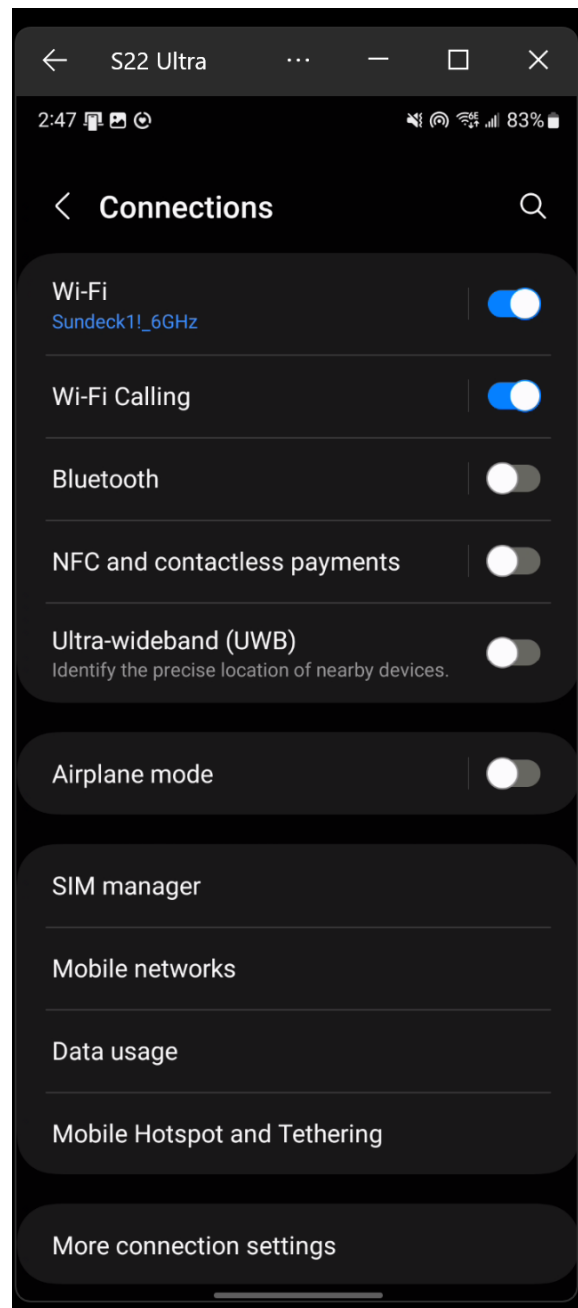
Status bar • Do not disturb

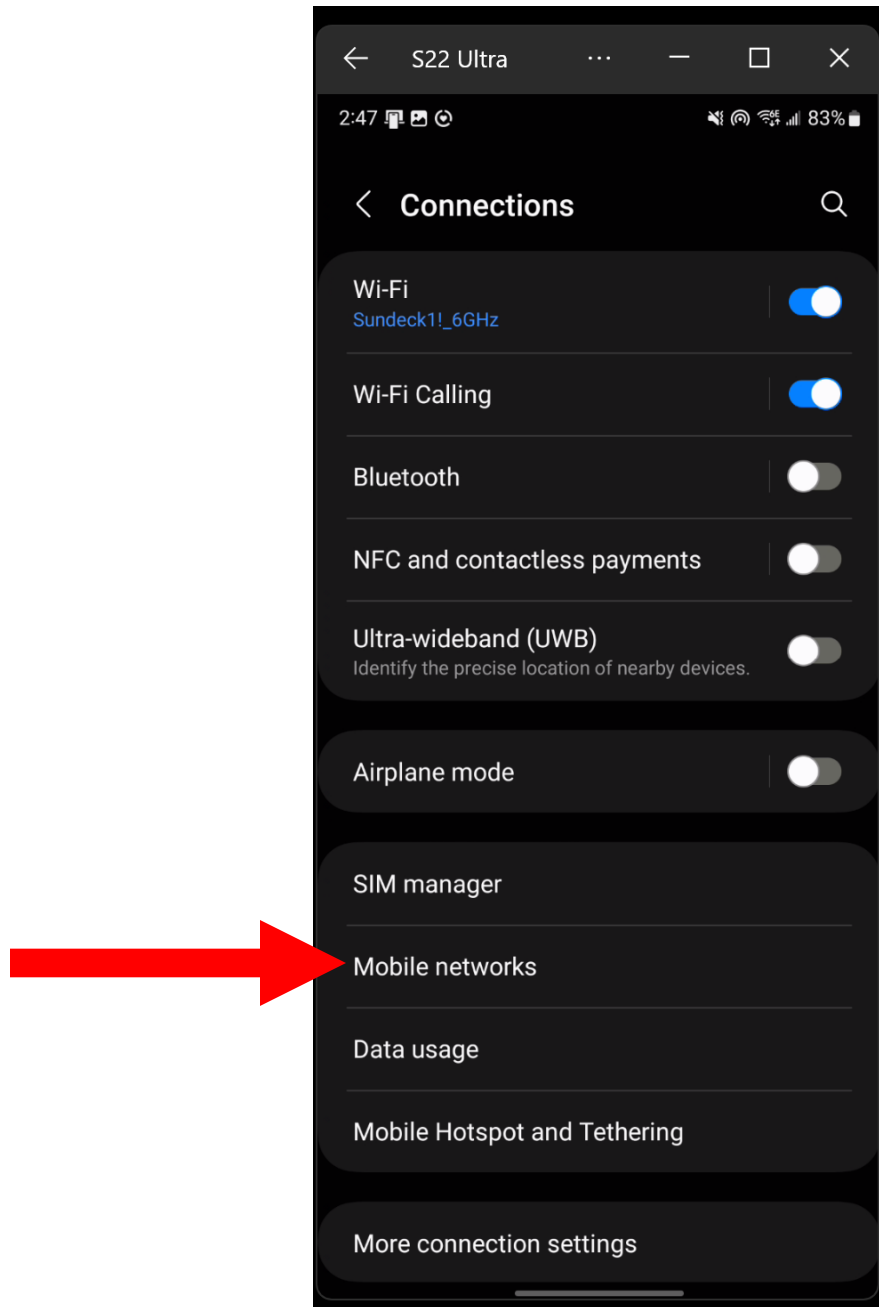


BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

SMALL STEP 105:

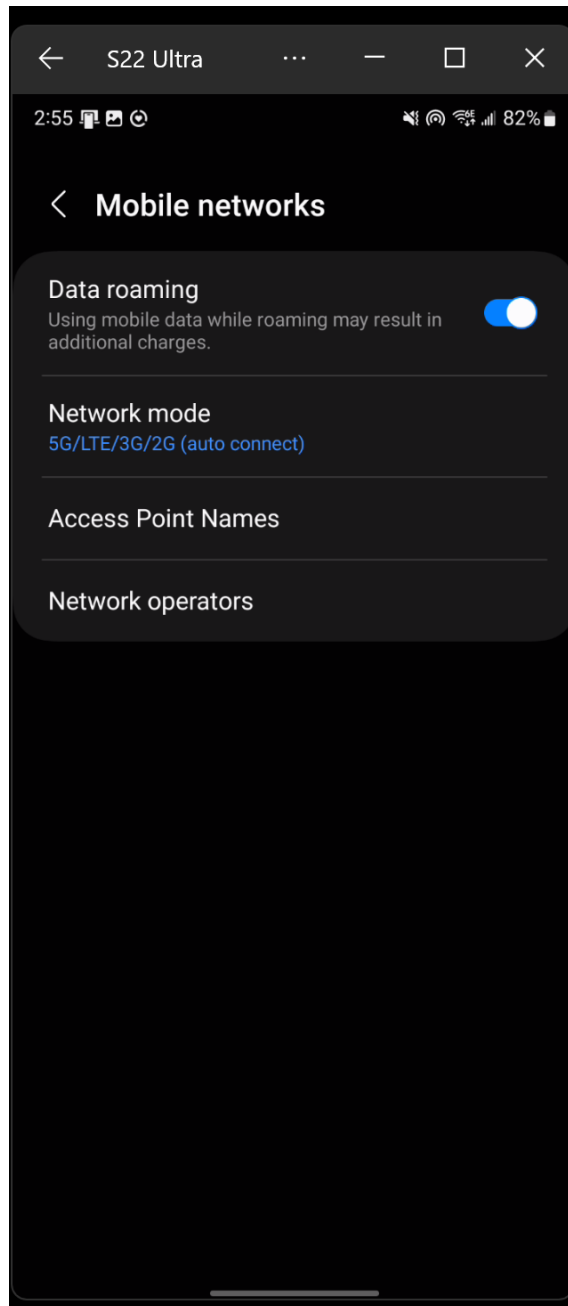
Tap on "Mobile networks":

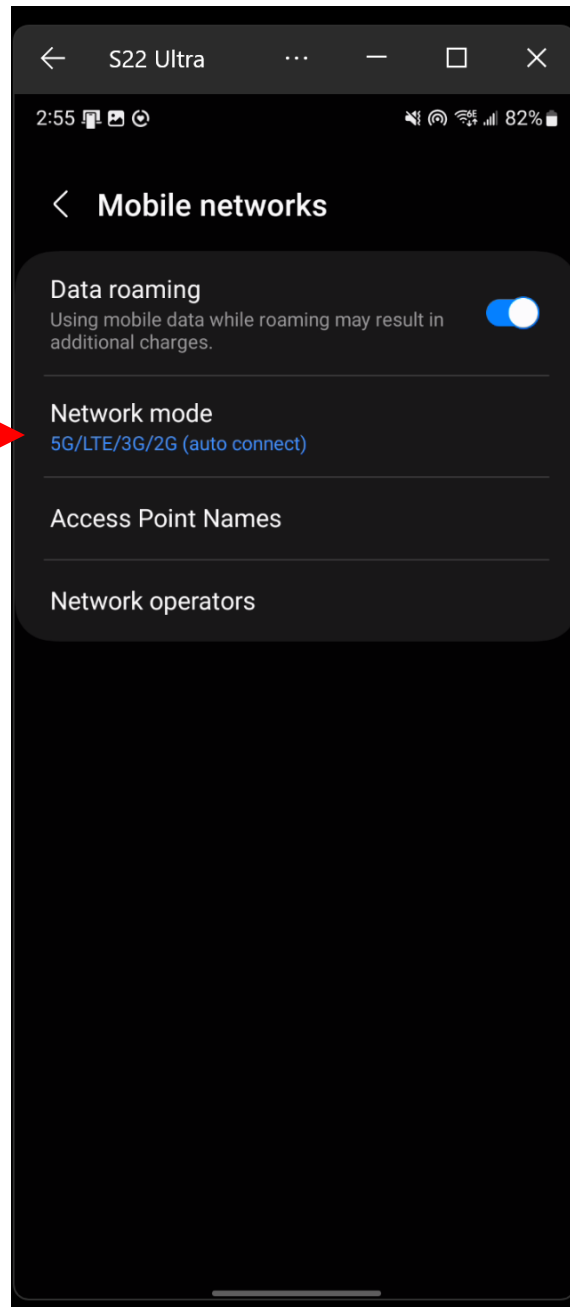




BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

SMALL STEP 106:
Tap on "Network mode".

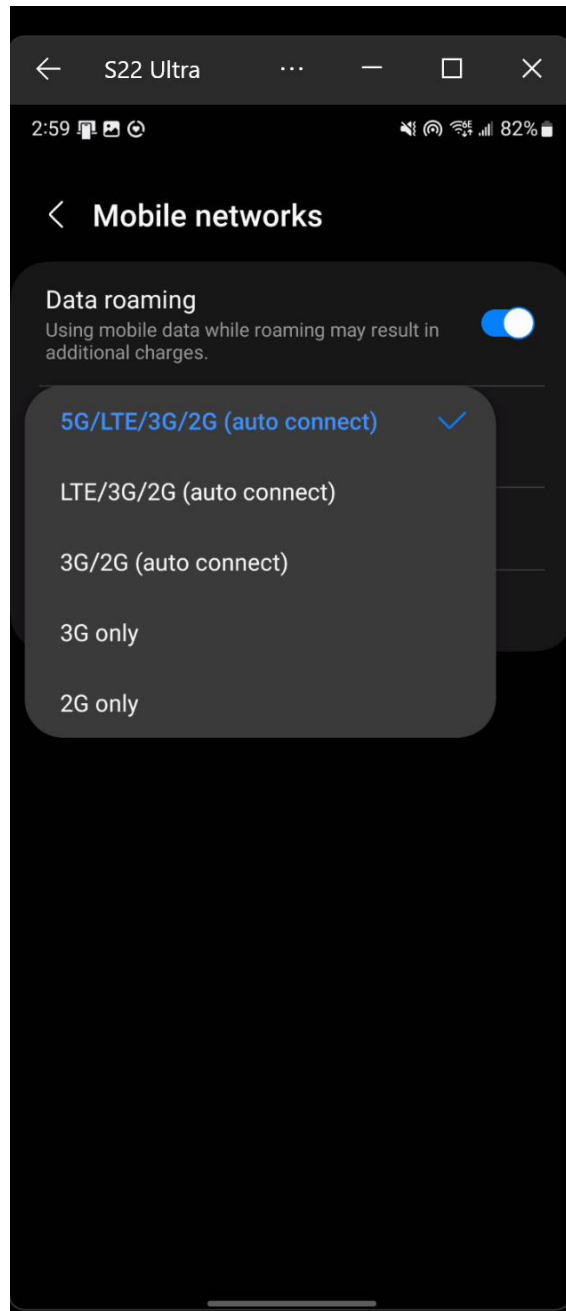


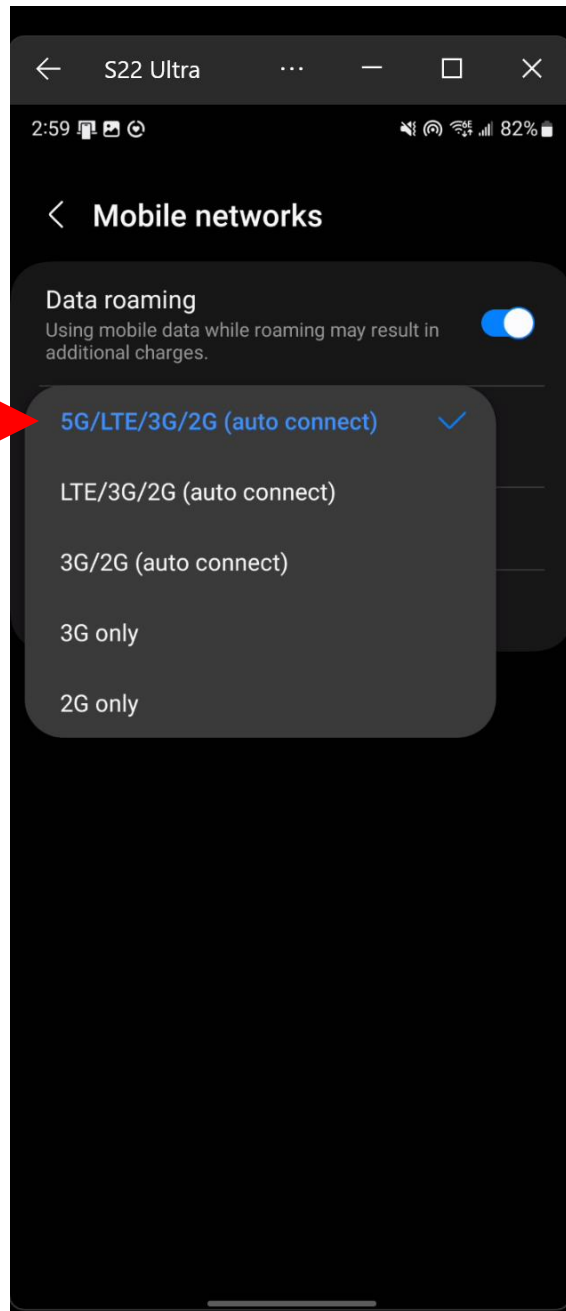


BIG STEP 100 (Set up Wi-Fi hotspot
emanating from Android cell phone)
(continued)

SMALL STEP 107:

Tap on the highest level of "Network
mode" that your cell phone is
capable of communicating at:

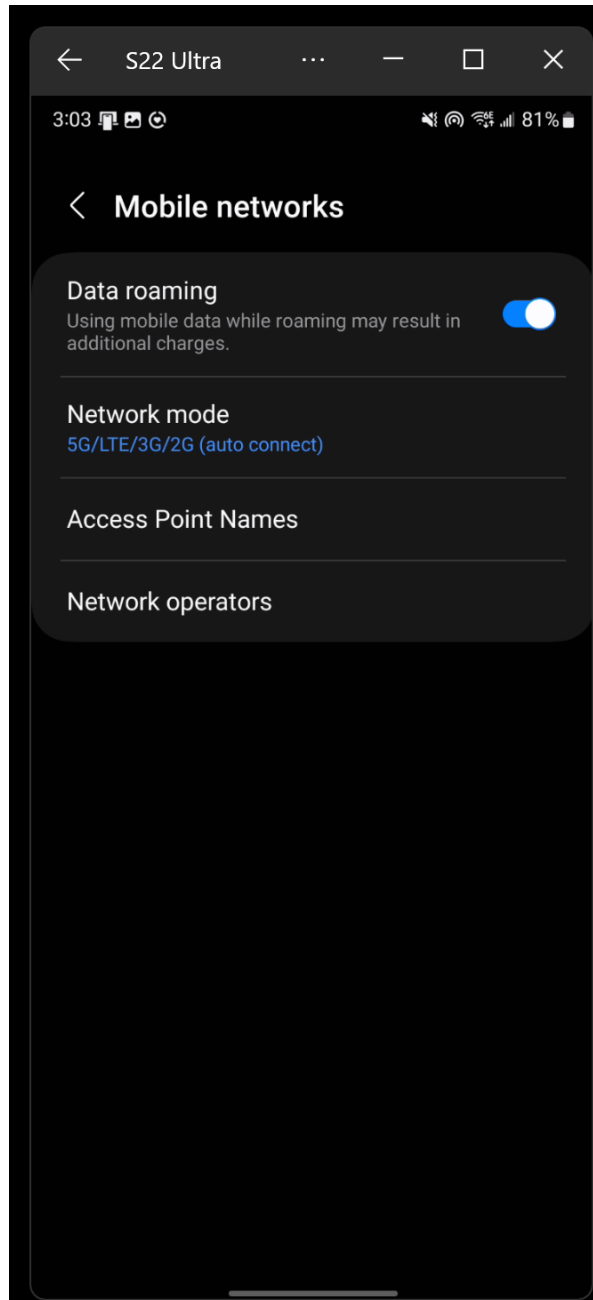


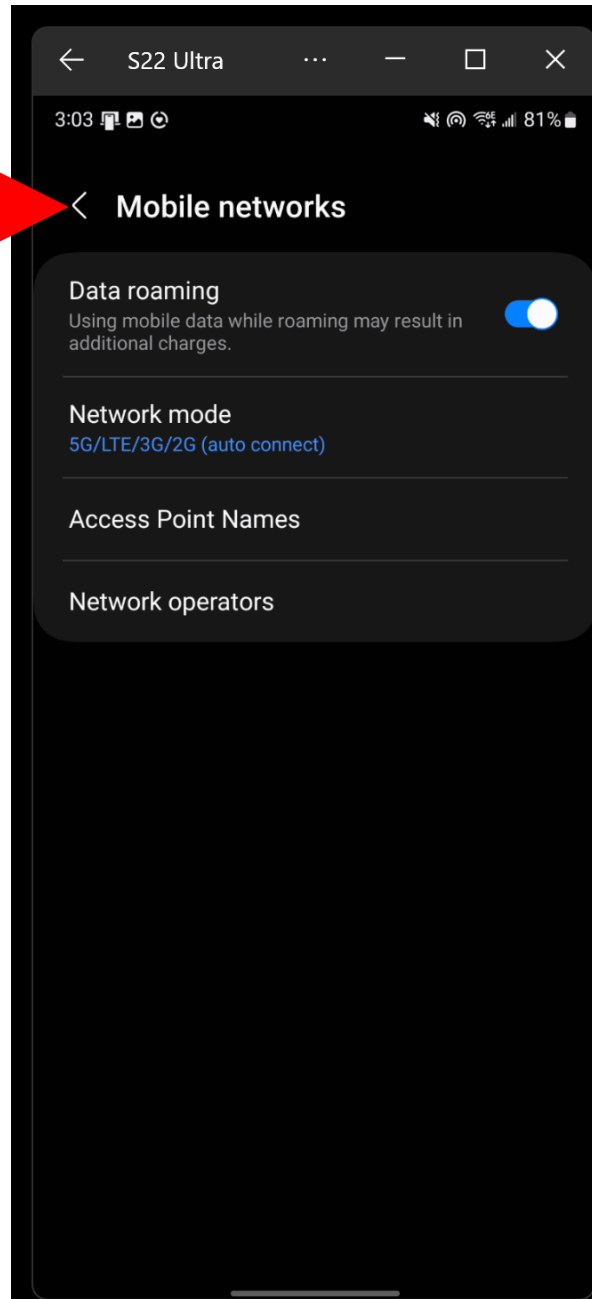


BIG STEP 100 (Set up Wi-Fi hotspot
emanating from Android cell phone)
(continued)

SMALL STEP 108:

Tap on the "<" to the left of "Mobile
networks"

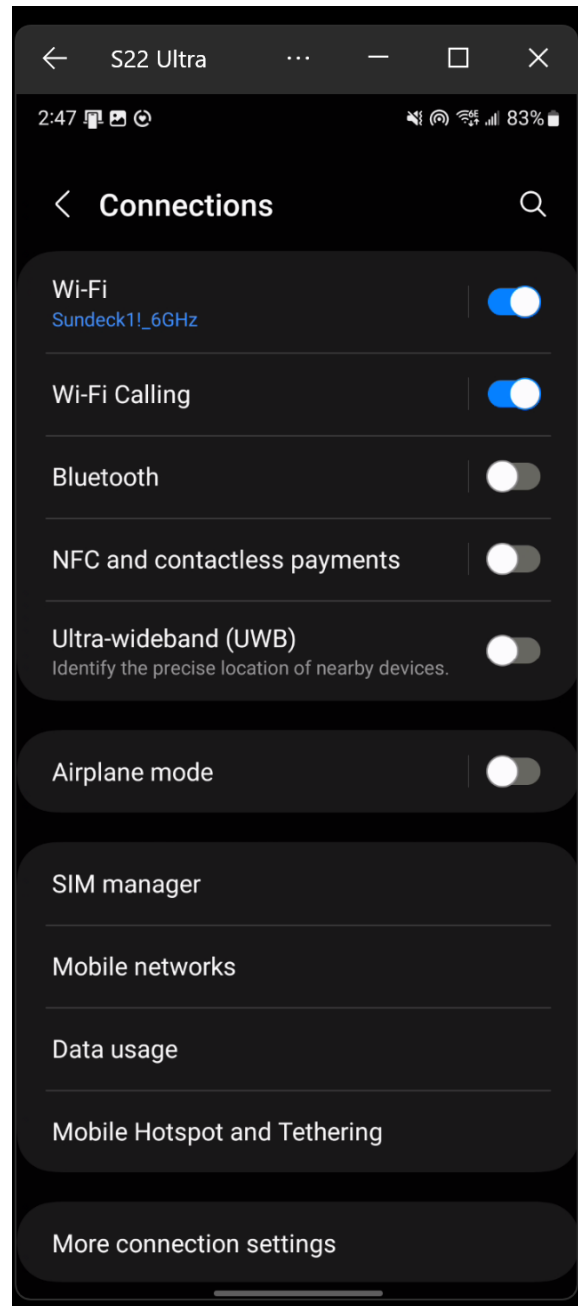


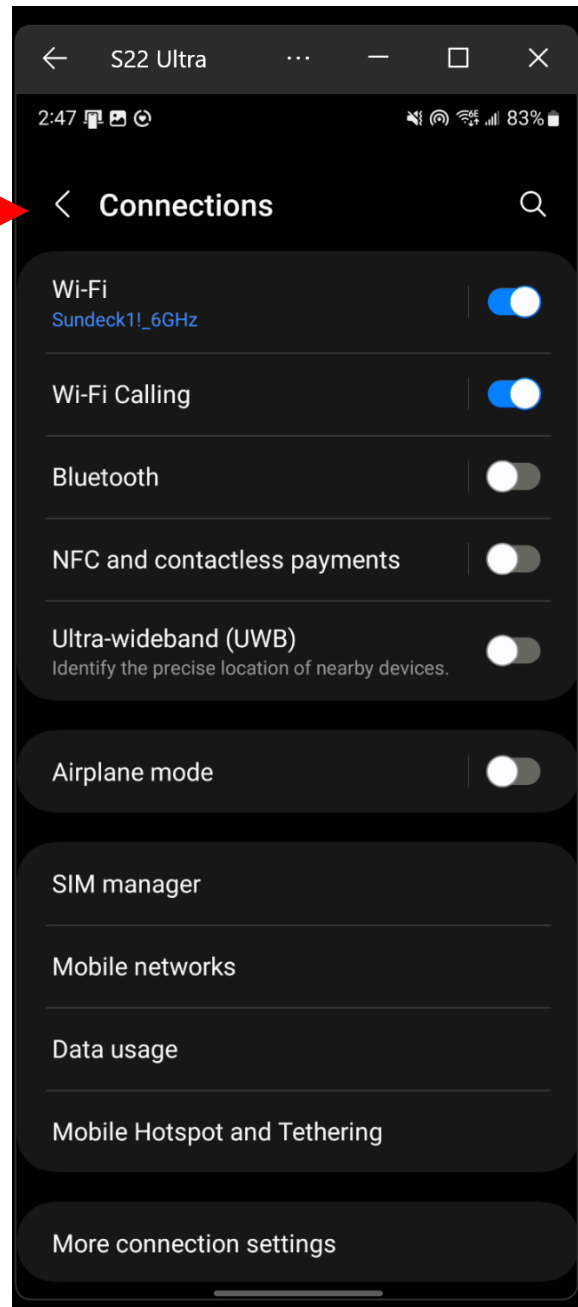


BIG STEP 100 (Set up Wi-Fi hotspot
emanating from Android cell phone)
(continued)

SMALL STEP 109:

Tap on the "<" to the left of
"Connections"





BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

SMALL STEP 110:

You should now be back to the highest level of the "Settings" app.

Tap on "Connections":

11:41

5G UC 100%

Settings



FRANCIS CHAO

Samsung account • fch***@yahoo.com



Connections

Wi-Fi • Bluetooth • Airplane mode



Connected devices

Quick Share • Android Auto



Modes and Routines

Modes • Routines



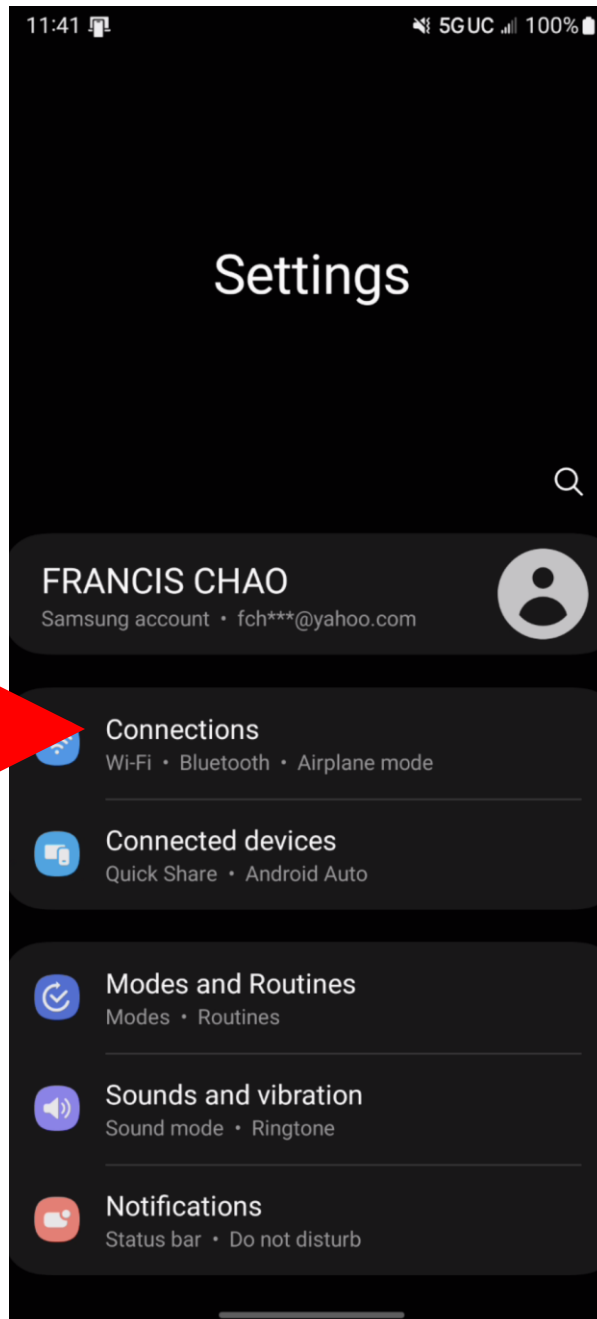
Sounds and vibration

Sound mode • Ringtone



Notifications

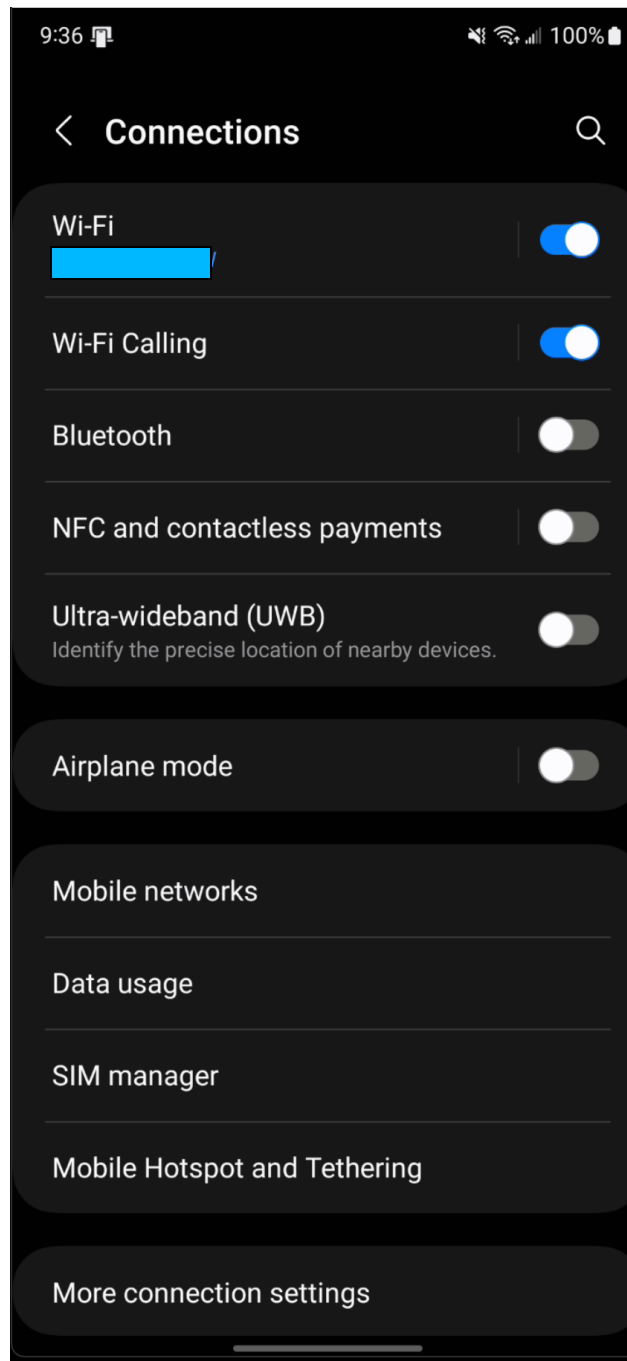
Status bar • Do not disturb

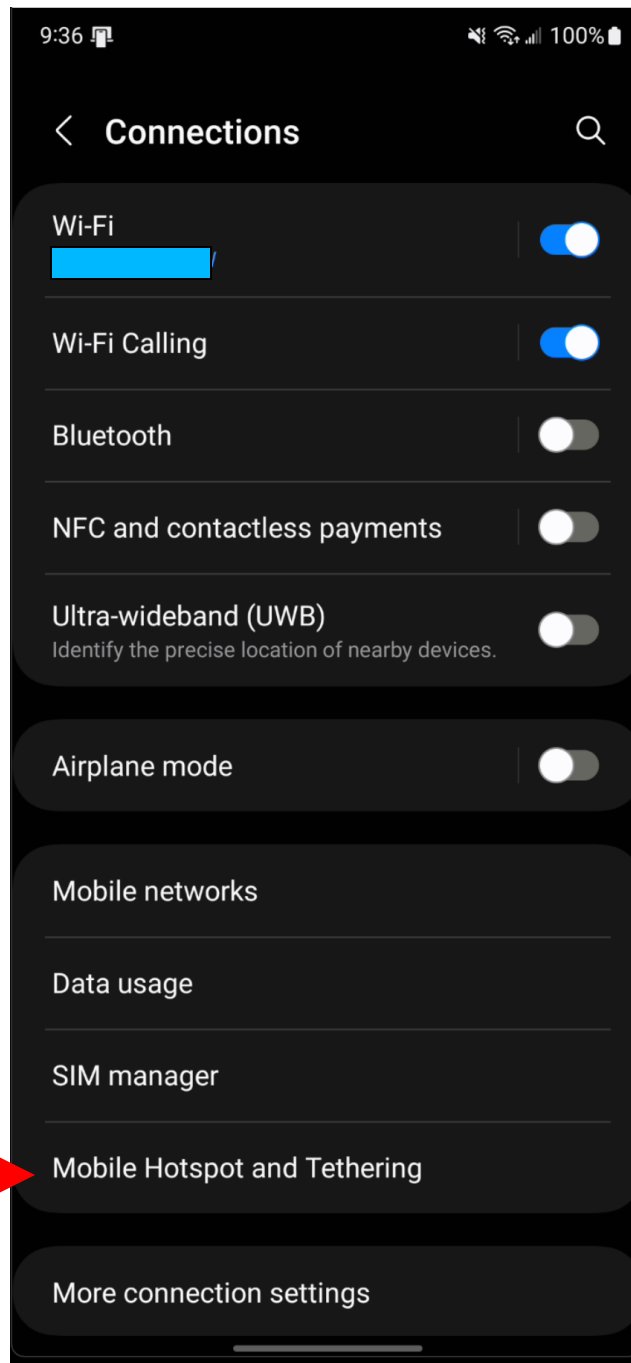


BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

SMALL STEP 111:

Tap on "Mobile Hotspot and Tethering":





BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

SMALL STEP 111:

If the on-off indicator for "Mobile Hotspot" is not enabled, tap on it to enable it.

If the on-off indicator for "Mobile Hotspot" is enabled, tap on it twice to disable and then re-enabled it:

< Mobile Hotspot and Tethering

Mobile Hotspot



Bluetooth tethering

Share your phone's internet connection using Bluetooth.



USB tethering

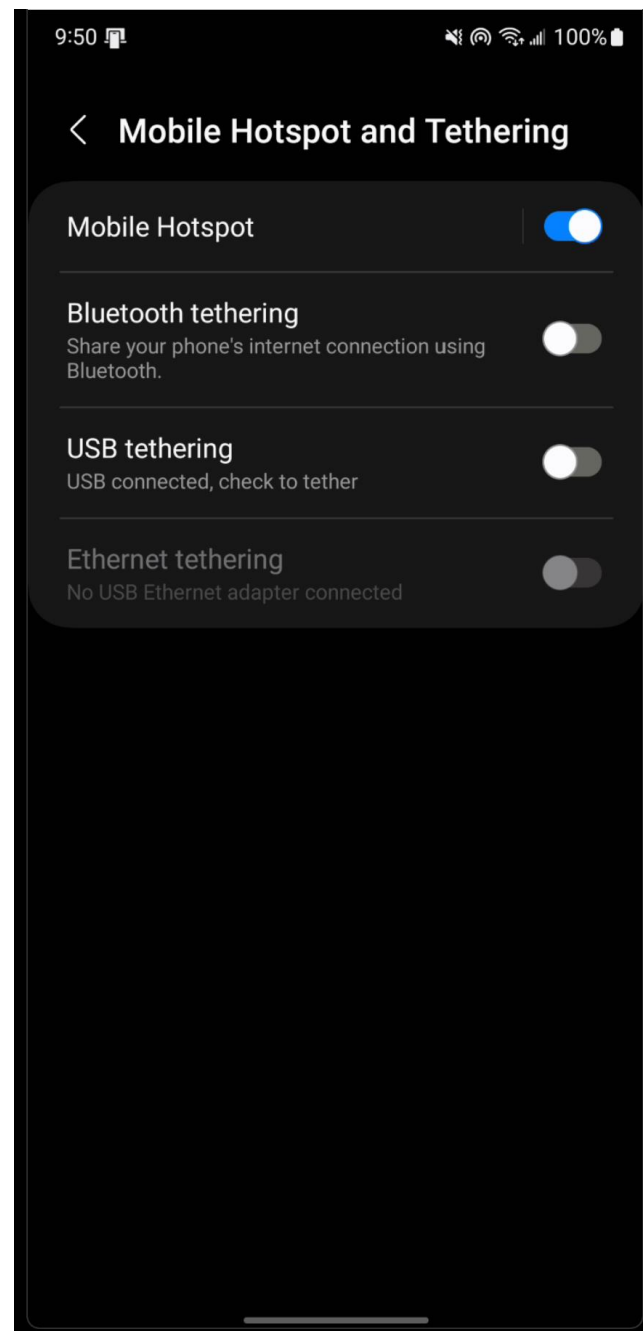
USB connected, check to tether



Ethernet tethering

No USB Ethernet adapter connected

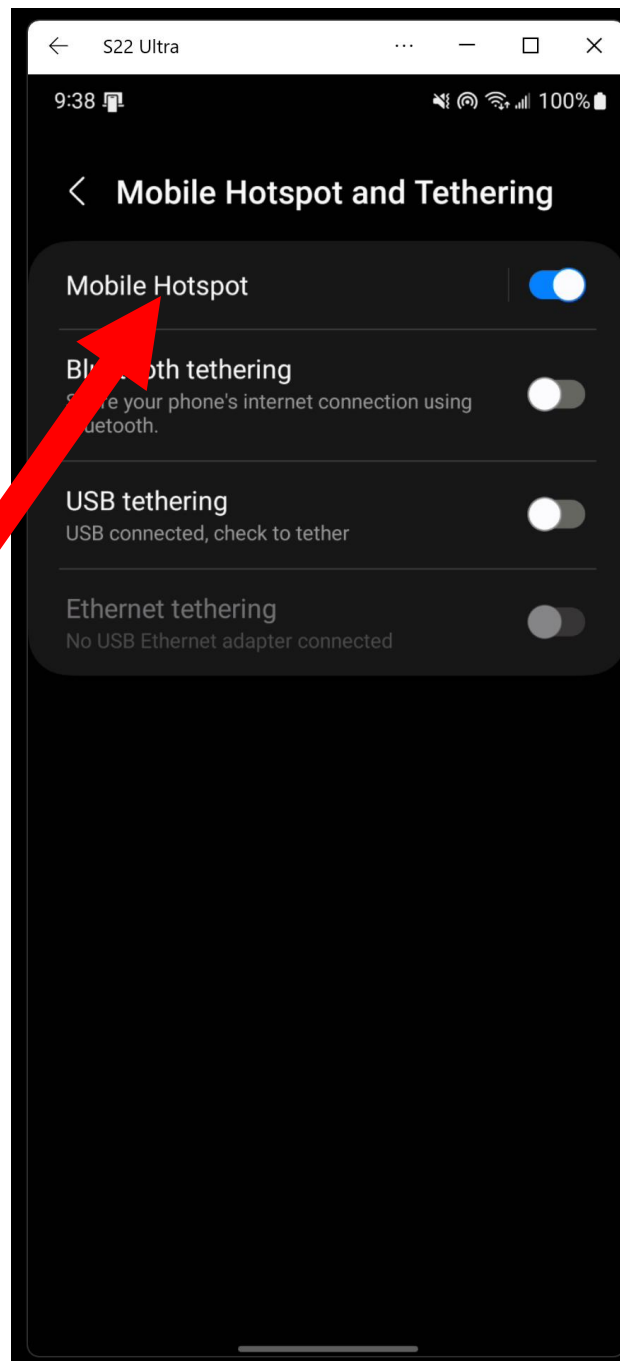


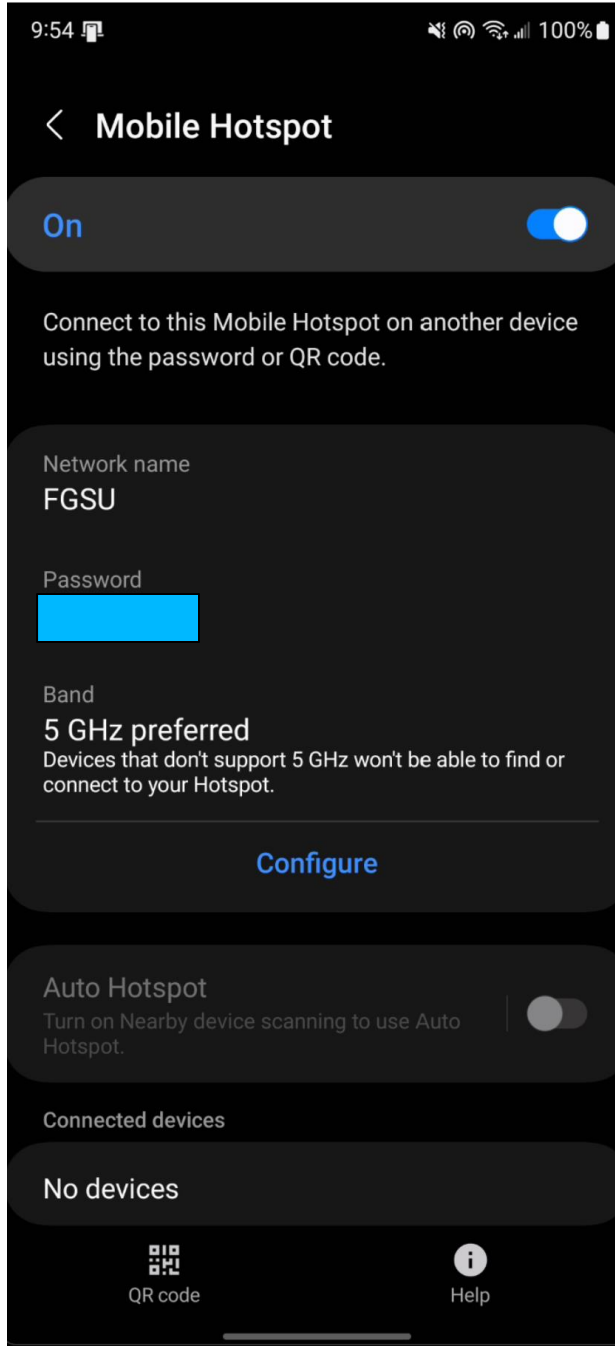


BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

SMALL STEP 112:

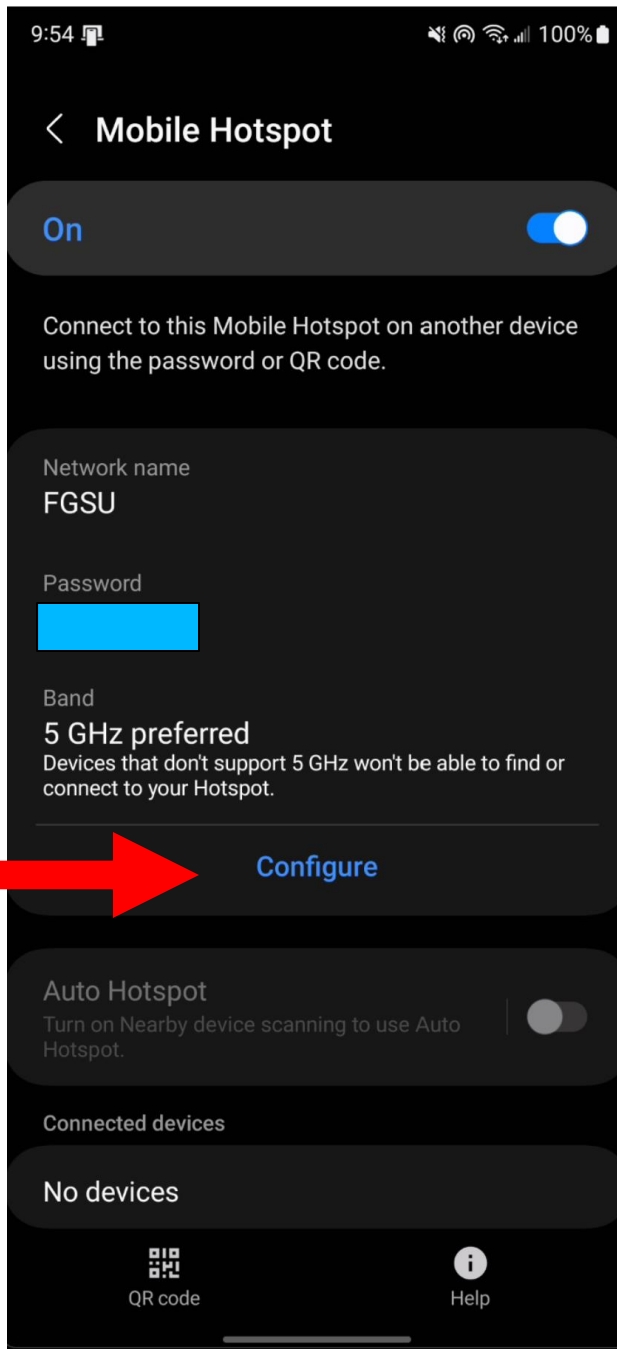
Tap on the words "Mobile Hotspot"
(not the on-off indicator):





BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

SMALL STEP 113:
Tap on "Configure":



BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

SMALL STEP 114:

Modify the "Network name" if you want to.

The "Network name" is the name of the "Wireless Access Point" which is also known as the

"SSID" = "service set identifier" of the Wi-Fi hotspot that will emanate from the Android cell phone.

< Configure Mobile Hotspot

Network name

FGSU

Password

Band

5 GHz preferred

Devices that don't support 5 GHz won't be able to find or connect to your Hotspot.

Security

WPA2-Personal

▼ Advanced

Cancel

Save

BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

SMALL STEP 115:

Modify the password if you want to.

< Configure Mobile Hotspot

Network name

FGSU

Password

Band

5 GHz preferred

Devices that don't support 5 GHz won't be able to find or connect to your Hotspot.

Security

WPA2-Personal

Advanced

Cancel

Save

BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

SMALL STEP 116:

Then write down the "Network name" and "Password" on a piece of paper somewhere.

BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

- **SMALL STEP 117:**
Tap on "Advanced":

< Configure Mobile Hotspot

Network name

FGSU

Password

Band

5 GHz preferred

Devices that don't support 5 GHz won't be able to find or connect to your Hotspot.

Security

WPA2-Personal

▼ Advanced

Cancel

Save

BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

- **SMALL STEP 118:**
Adjust the "Turn off when no device connected for"
timeout delay to "Never time out":

< Configure Mobile Hotspot

Network name

FGSU

Password

Band

5 GHz preferred

Devices that don't support 5 GHz won't be able to find or connect to your Hotspot.

Security

WPA2-Personal

Set mobile data limit

Used: 0.00 KB (unlimited)

MAC address type

Randomized MAC

Turn off when no device connected for

20 minutes

Hidden network

Your Mobile Hotspot's name won't appear in the list of available Wi-Fi networks.



Cancel

Save

Never timeout

GHz won't be able to find or

5 minutes

10 minutes

20 minutes ✓

30 minutes

60 minutes

Turn off when no device connected for

20 minutes



Never timeout

GHz won't be able to find or

5 minutes

10 minutes

20 minutes



30 minutes

60 minutes



Turn off when no device connected for


20 minutes

Turn off when no device connected for
Never timeout

BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

- **SMALL STEP 119:**
Tap on "Save":


10:23  100% 

 **Configure Mobile Hotspot**

Network name

FGSU

Password



Band

5 GHz preferred

Devices that don't support 5 GHz won't be able to find or connect to your Hotspot.

Security

WPA2-Personal

Set mobile data limit

Used: 0.00 KB (unlimited)

MAC address type

Randomized MAC

Turn off when no device connected for

Never timeout

Hidden network

Your Mobile Hotspot's name won't appear in the list of available Wi-Fi networks.

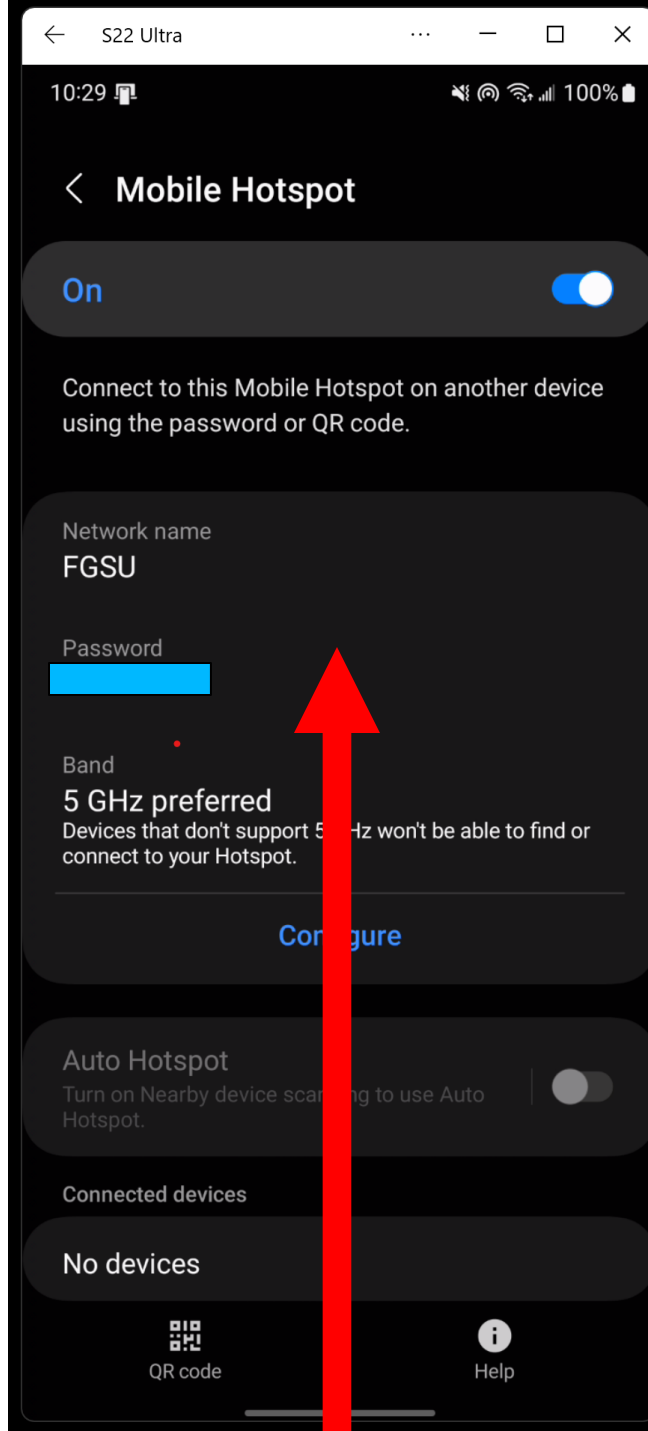
☐

Cancel

Save

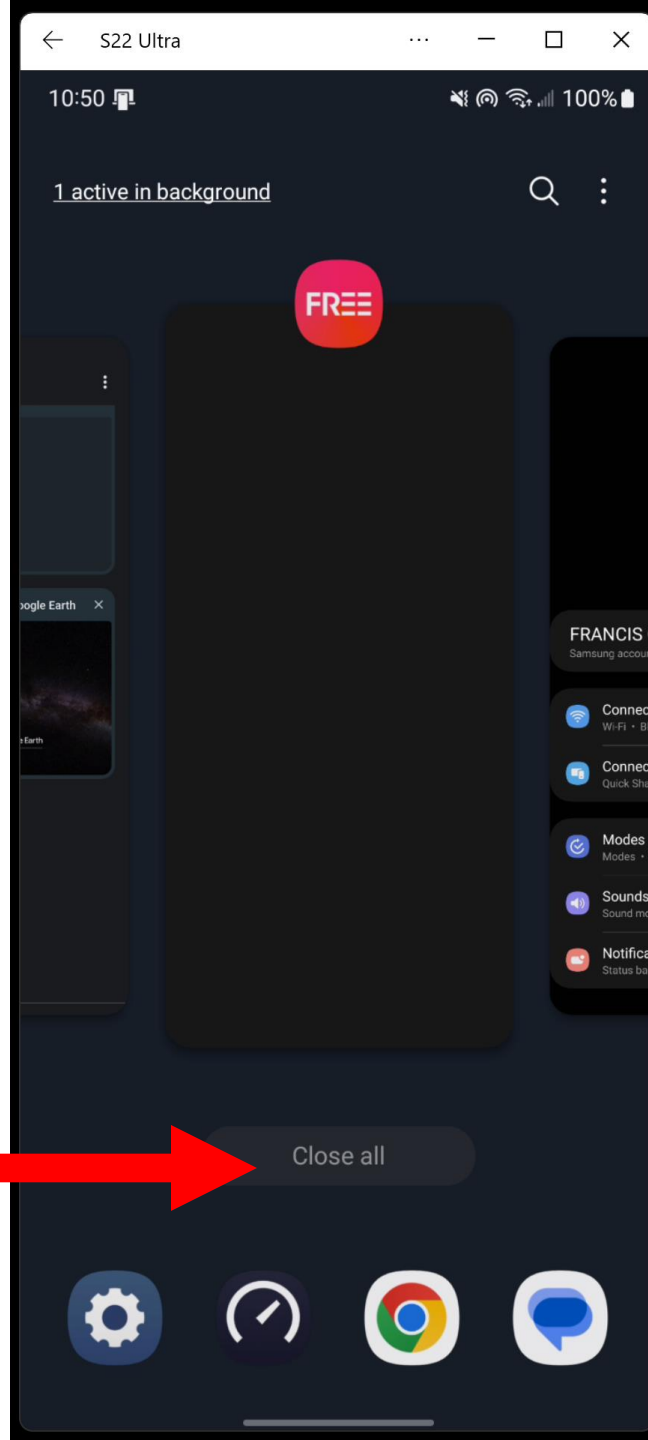
BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

- **SMALL STEP 120:**
Swipe up from the bottom to close the "Settings" app:



BIG STEP 100 (Set up Wi-Fi hotspot emanating from Android cell phone) (continued)

- **SMALL STEP 121:**
Tap on the "Close all" button.

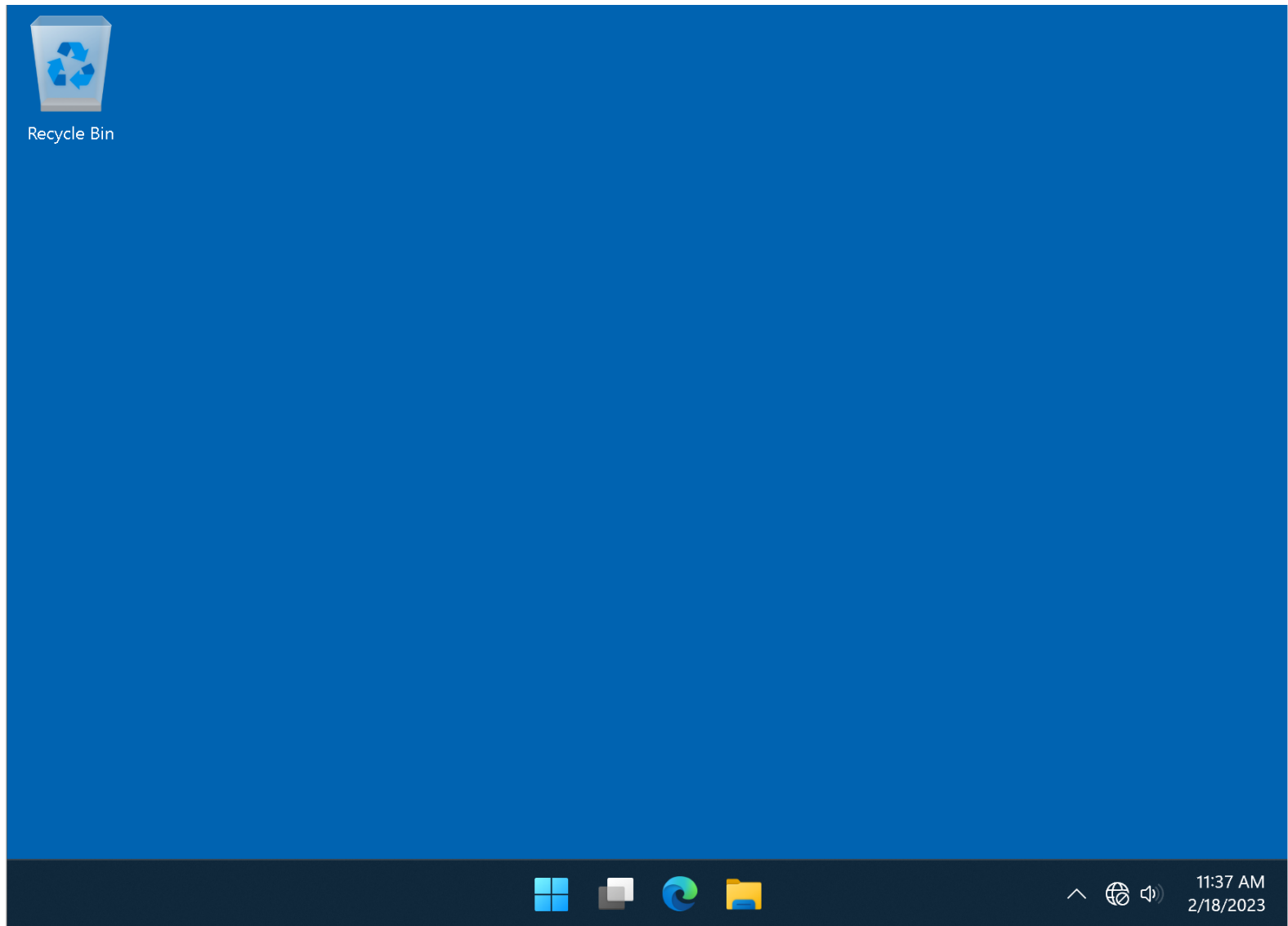


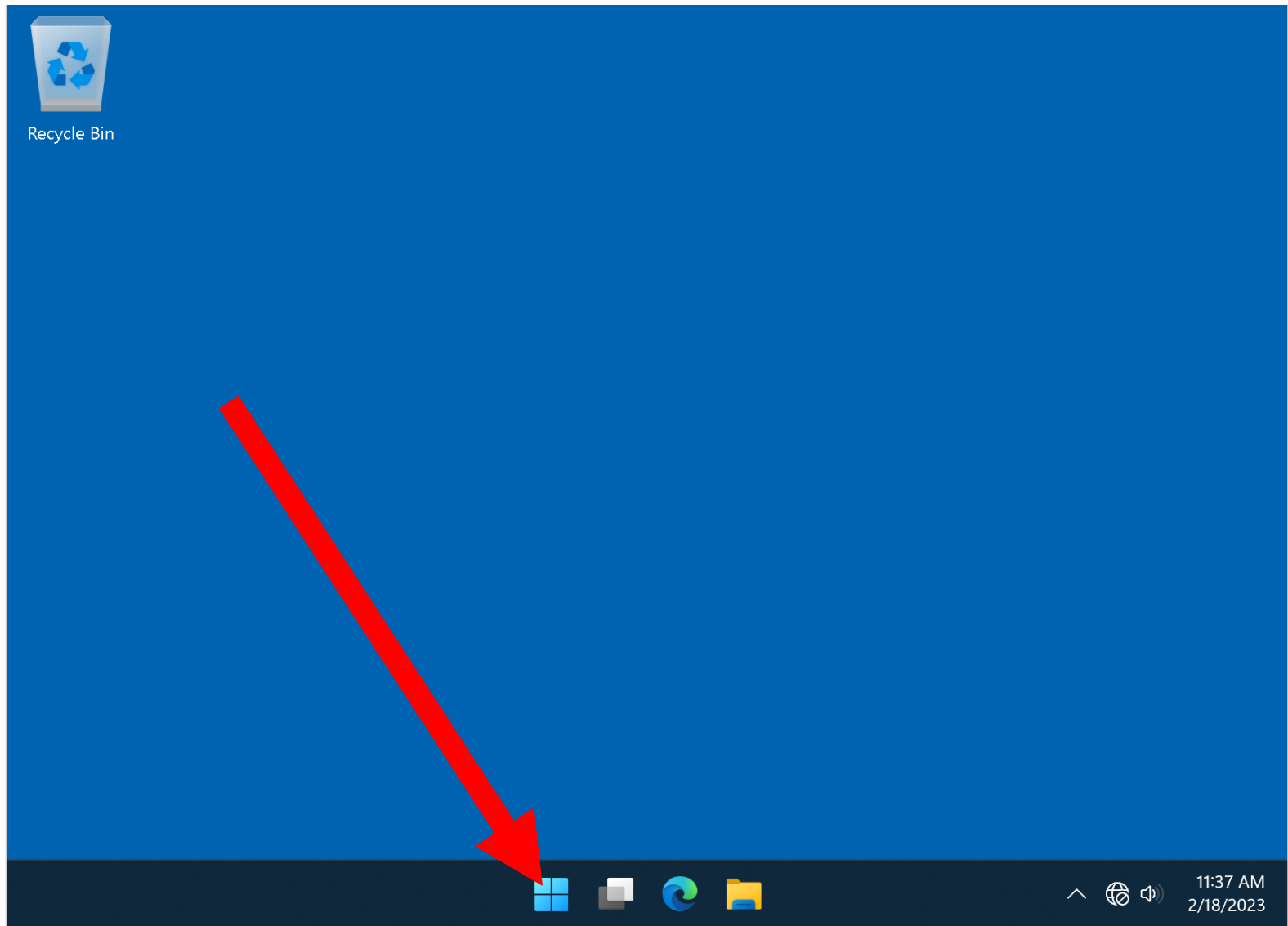
BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device)

- SMALL STEP 201:
From the client computer, tablet, or cell phone (the device that you wish to provide an Internet connect for), go to either
"Network Connections"
or
"Settings"

BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device)

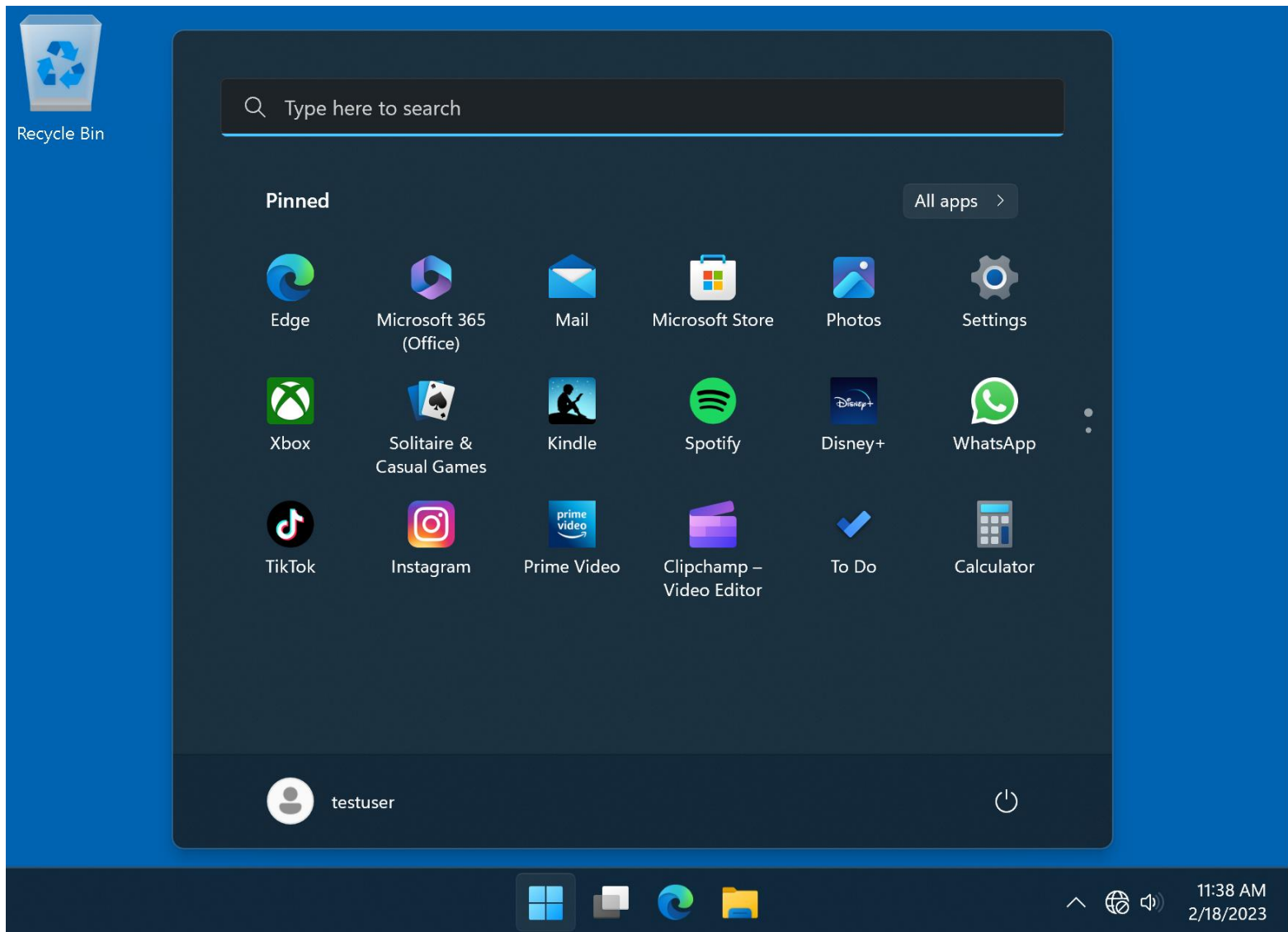
- SMALL STEP 202:
From a Windows.. computer, use the left mouse button to click on the "Start" button:

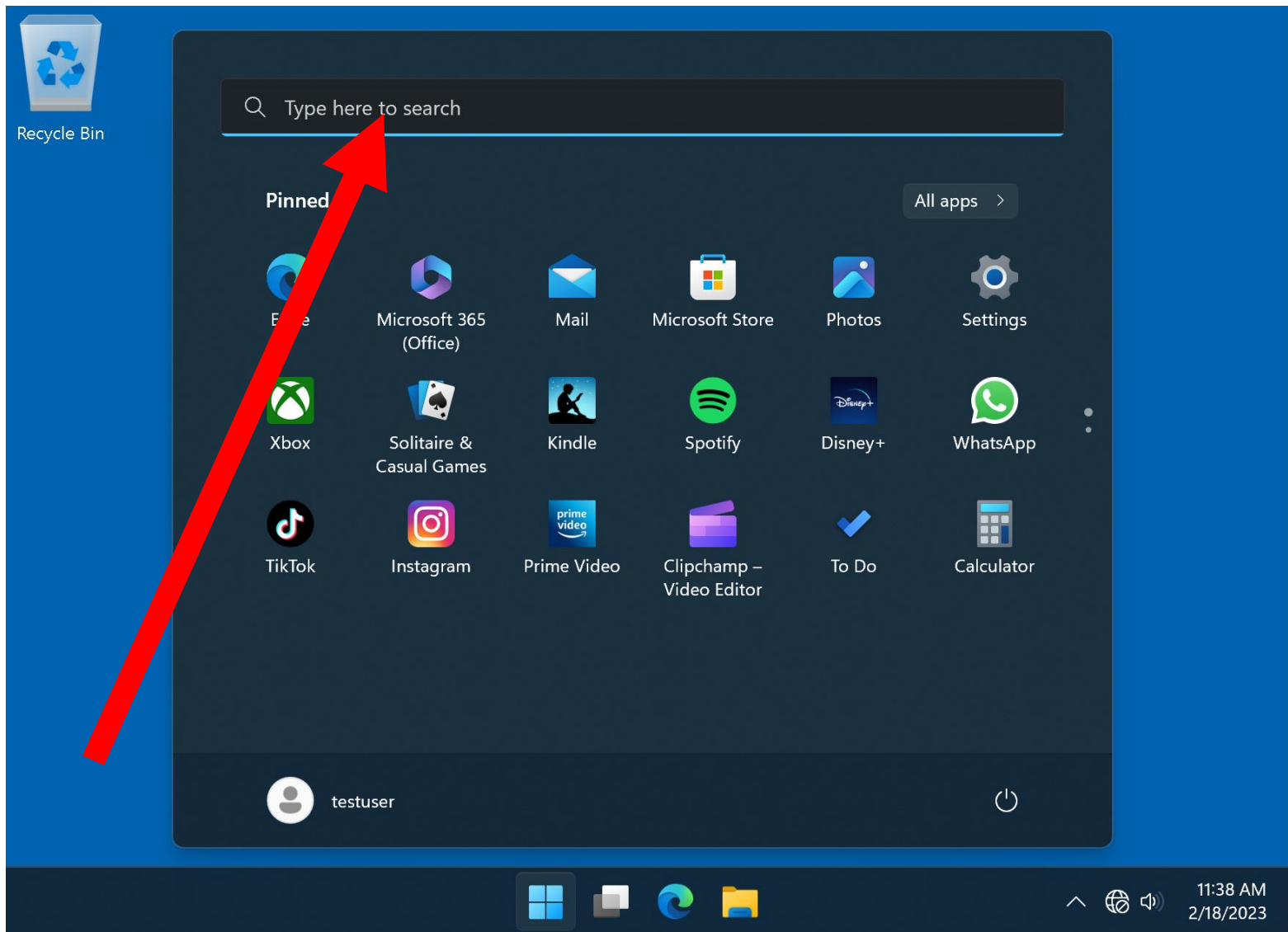




BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device)

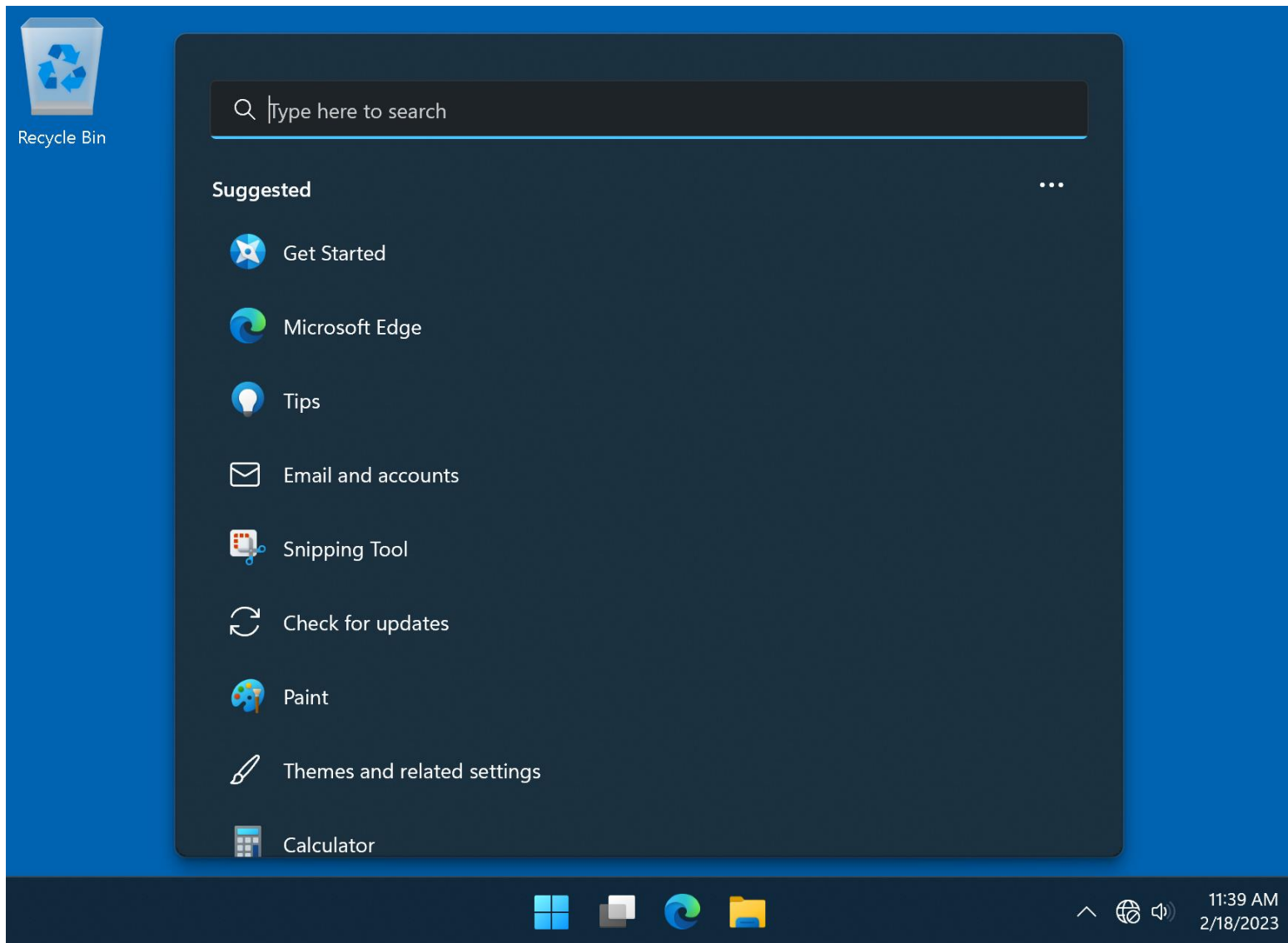
- SMALL STEP 203:
Click on the "Search" field:





BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device)

- SMALL STEP 204:
A pop-up window will be displayed:



BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device)

- SMALL STEP 205:
Type in
network connections
into the search box of the pop-up
window:



Recycle Bin

Q network connections



Best match



View **network connections**

Control panel



11:42 AM
2/18/2023

BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device)

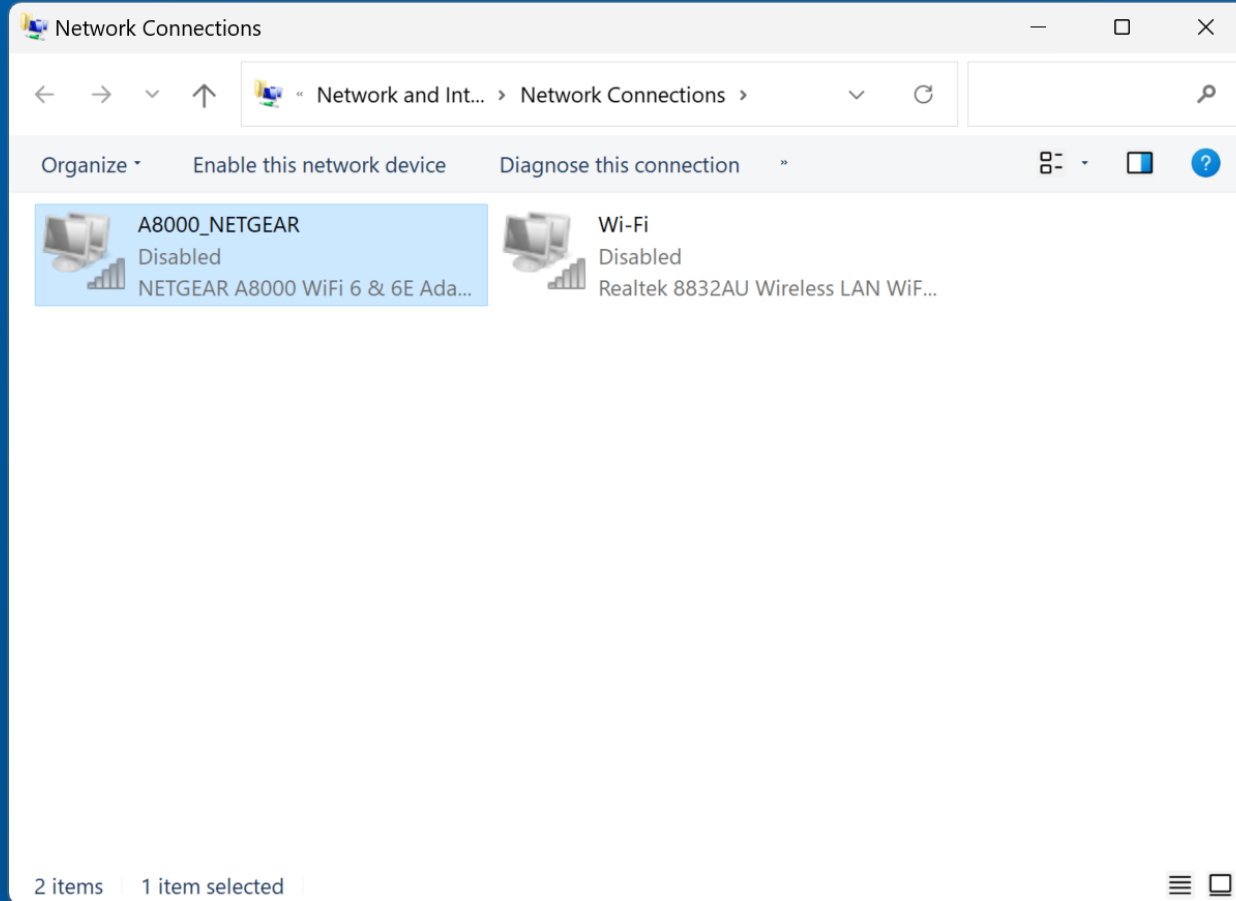
- SMALL STEP 206:
Press the Enter key of the computer's keyboard.

BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device)

- SMALL STEP 207:
A "Network Connections" window will be displayed.



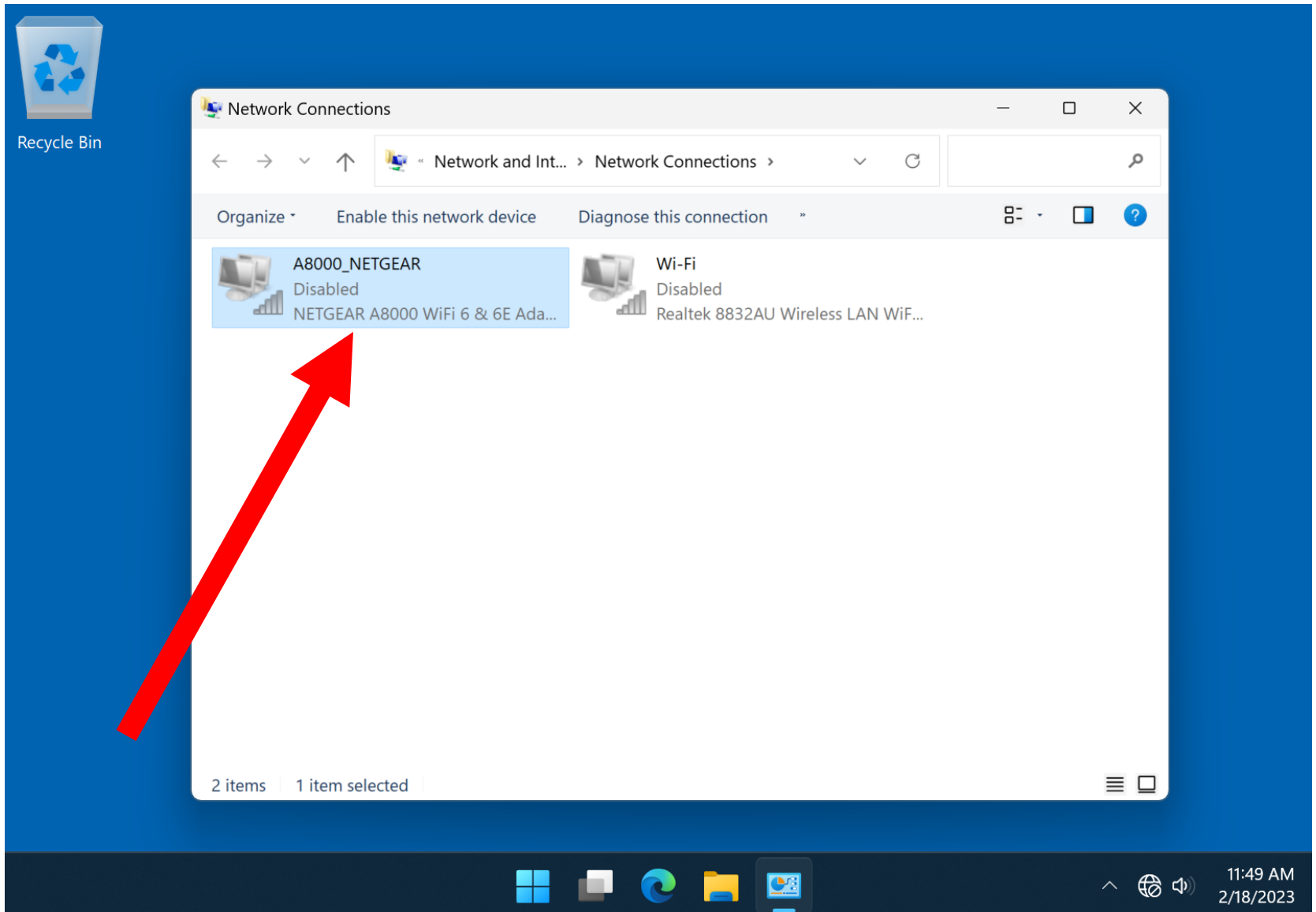
Recycle Bin

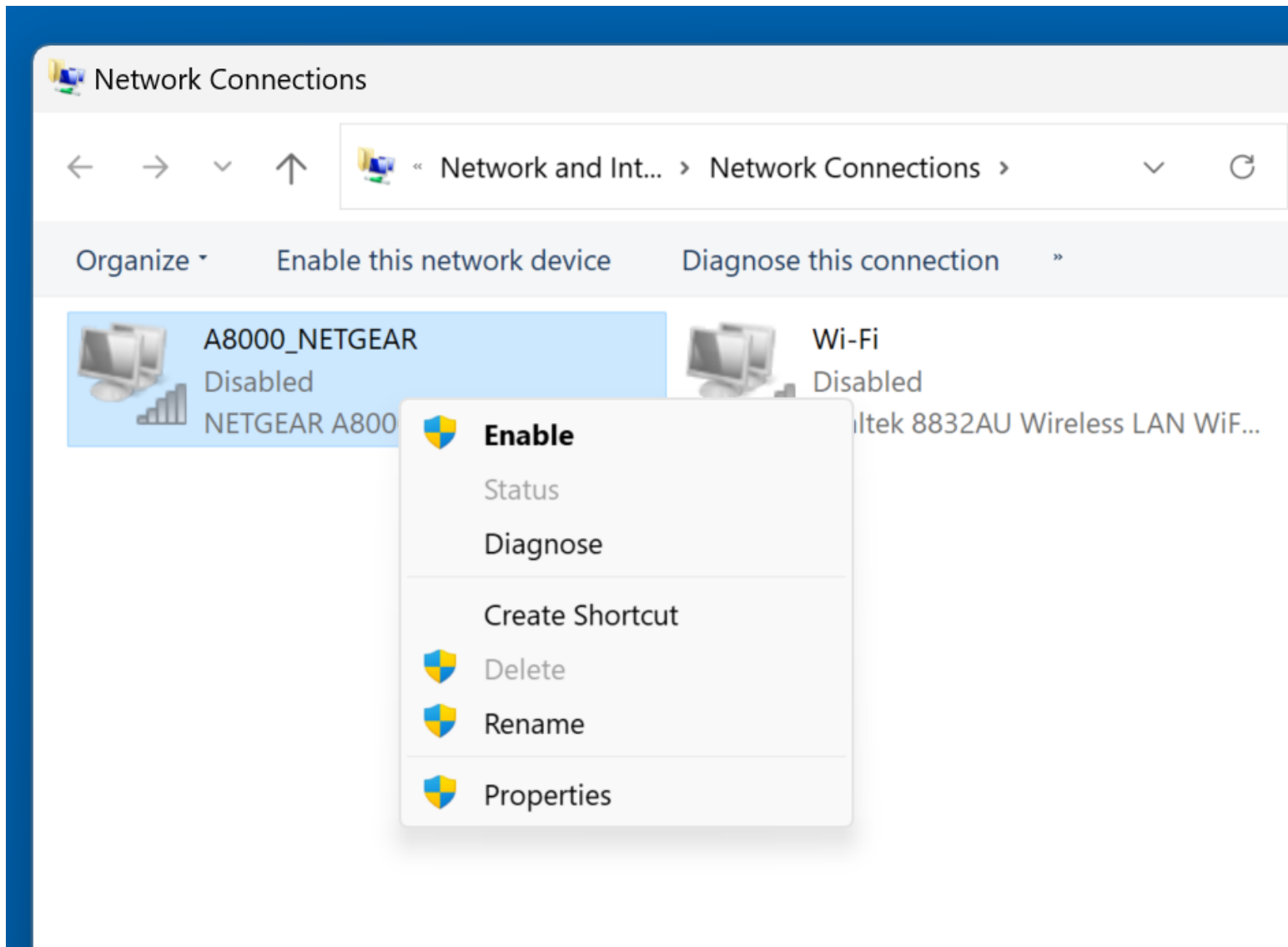


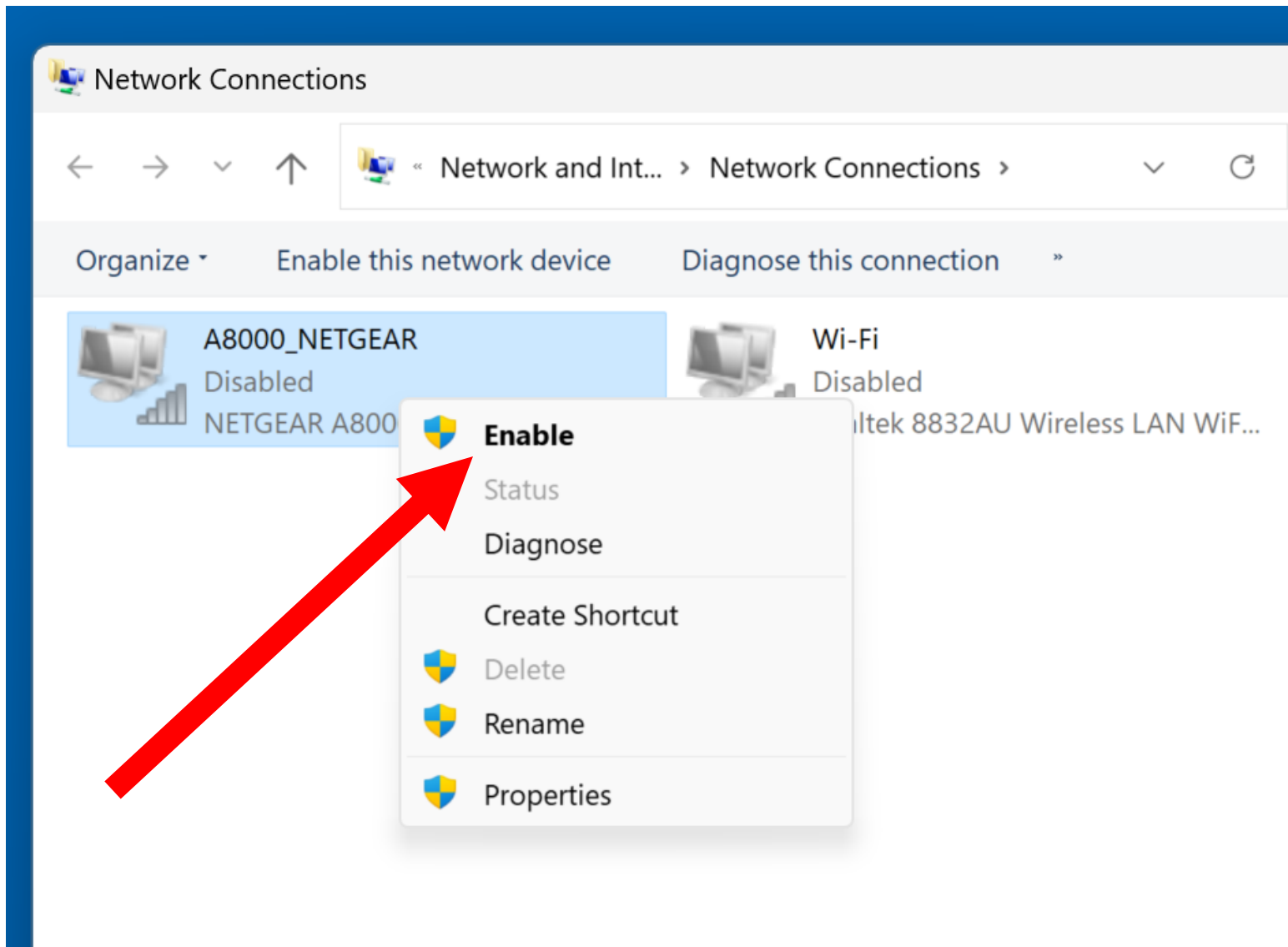
11:49 AM
2/18/2023

BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device) (continued)

- **SMALL STEP 208:**
If no "Wi-Fi adapter" is "enabled" (=all Wi-Fi adapters are disabled), pick one and enable it by using the right mouse button to click on it:







BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device) (continued)

- SMALL STEP 208 (continued):
After you enable a Wi-Fi adapter, it will show that it is now "Not connected":

Network Connections



« Network and Intern... > Network Connections



Organize ▾

Connect To

Disable this network device

Diagnose this connection



A8000_NETGEAR

Not connected

NETGEAR A8000 WiFi 6 & 6E Ada...



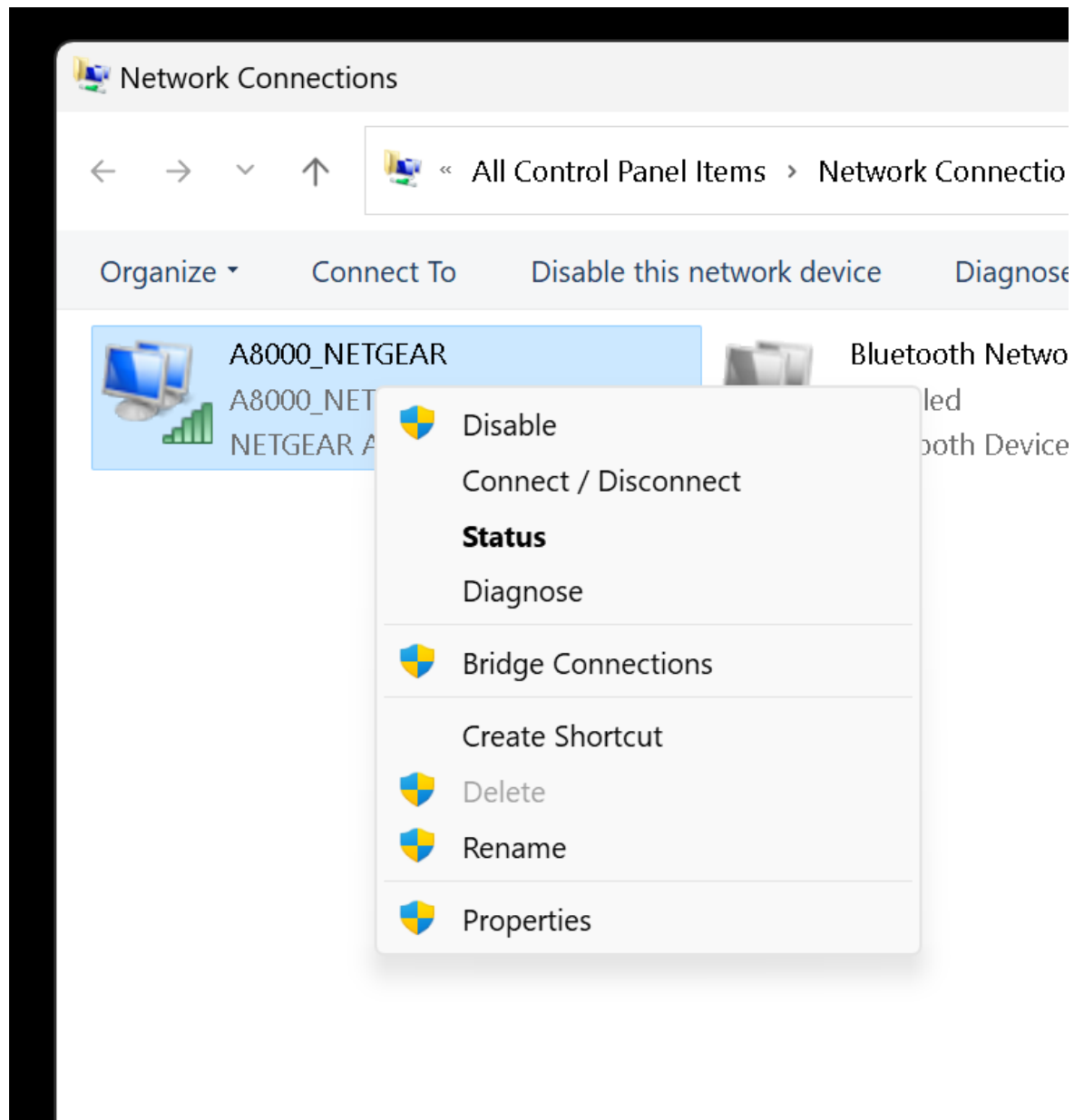
Wi-Fi

Disabled

Realtek 8832AU Wireless LAN WiF...

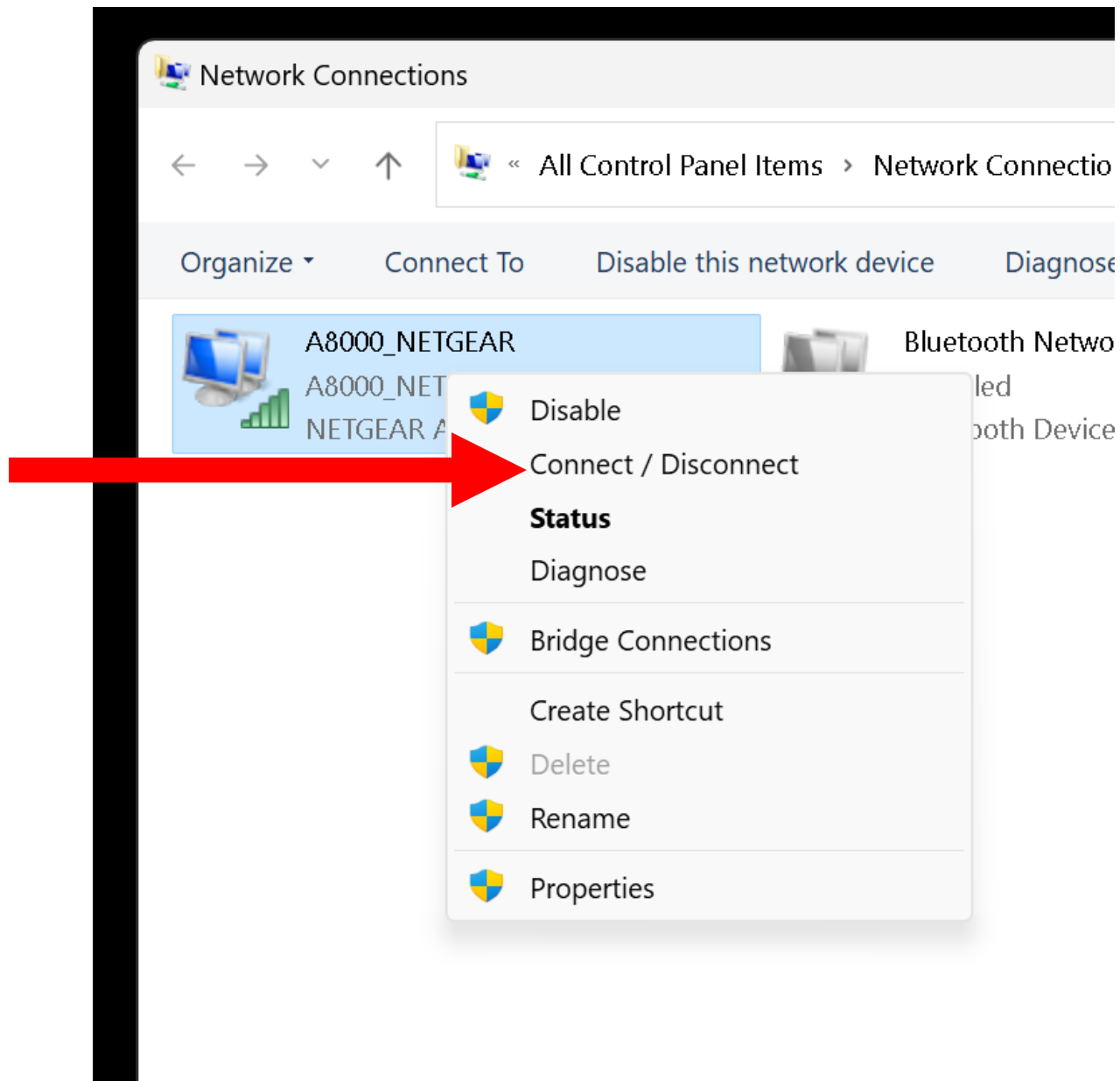
BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device) (continued)


- **SMALL STEP 209:**
Use the enabled Wi-Fi adapter to connect to the "Wireless Access Point" that is emanating from the Android cell phone as follows:
Use the right mouse button to click on the enabled Wi-Fi adapter:



BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device) (continued)

- **SMALL STEP 210:**
Use the left mouse button to click on "Connect / disconnect":

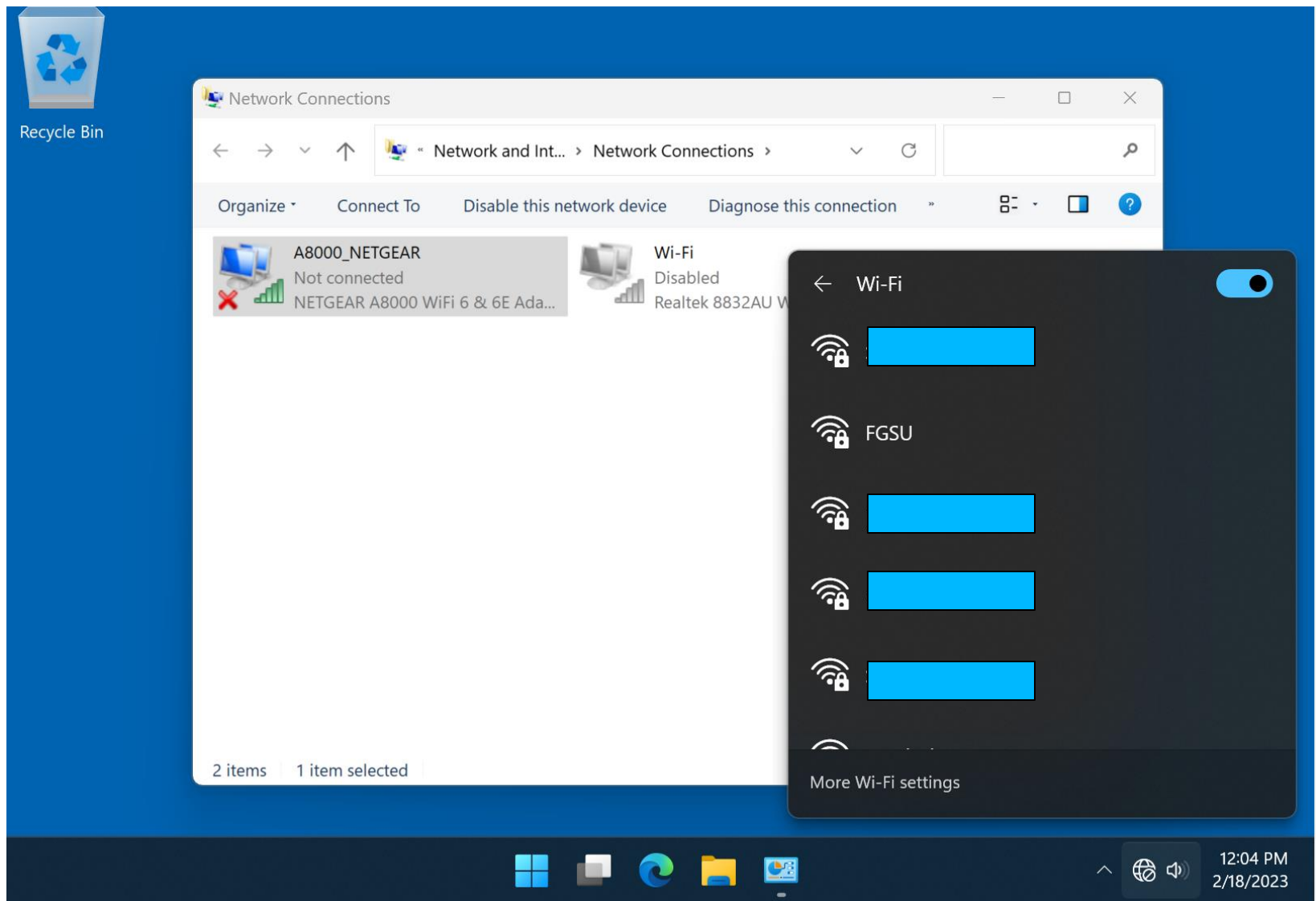




Connect / Disconnect

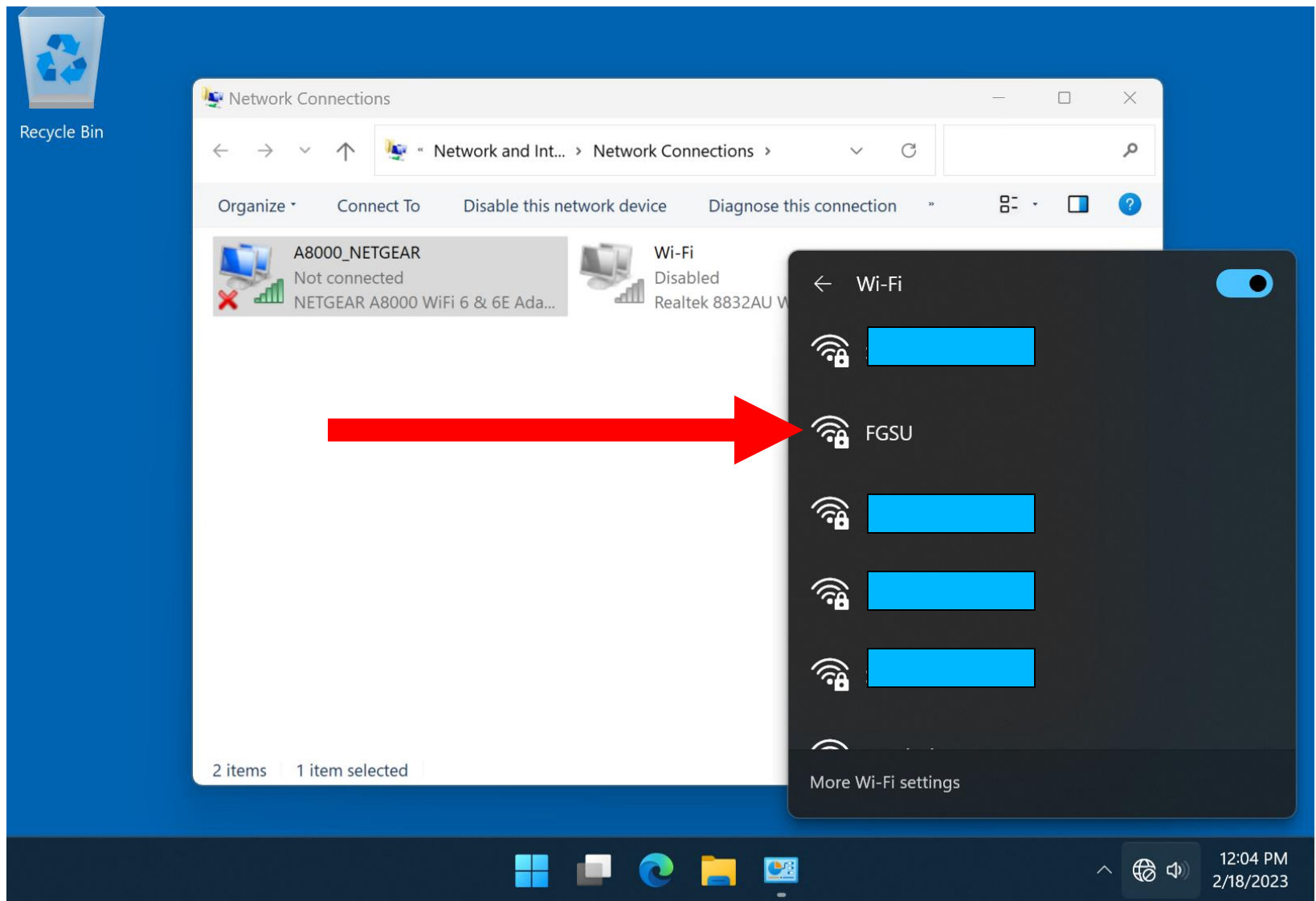
BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device) (continued)

- **SMALL STEP 211:**
A list of one or more Wi-Fi "Wireless Access Points" will pop up in the lower-right area of the Windows "Desktop":



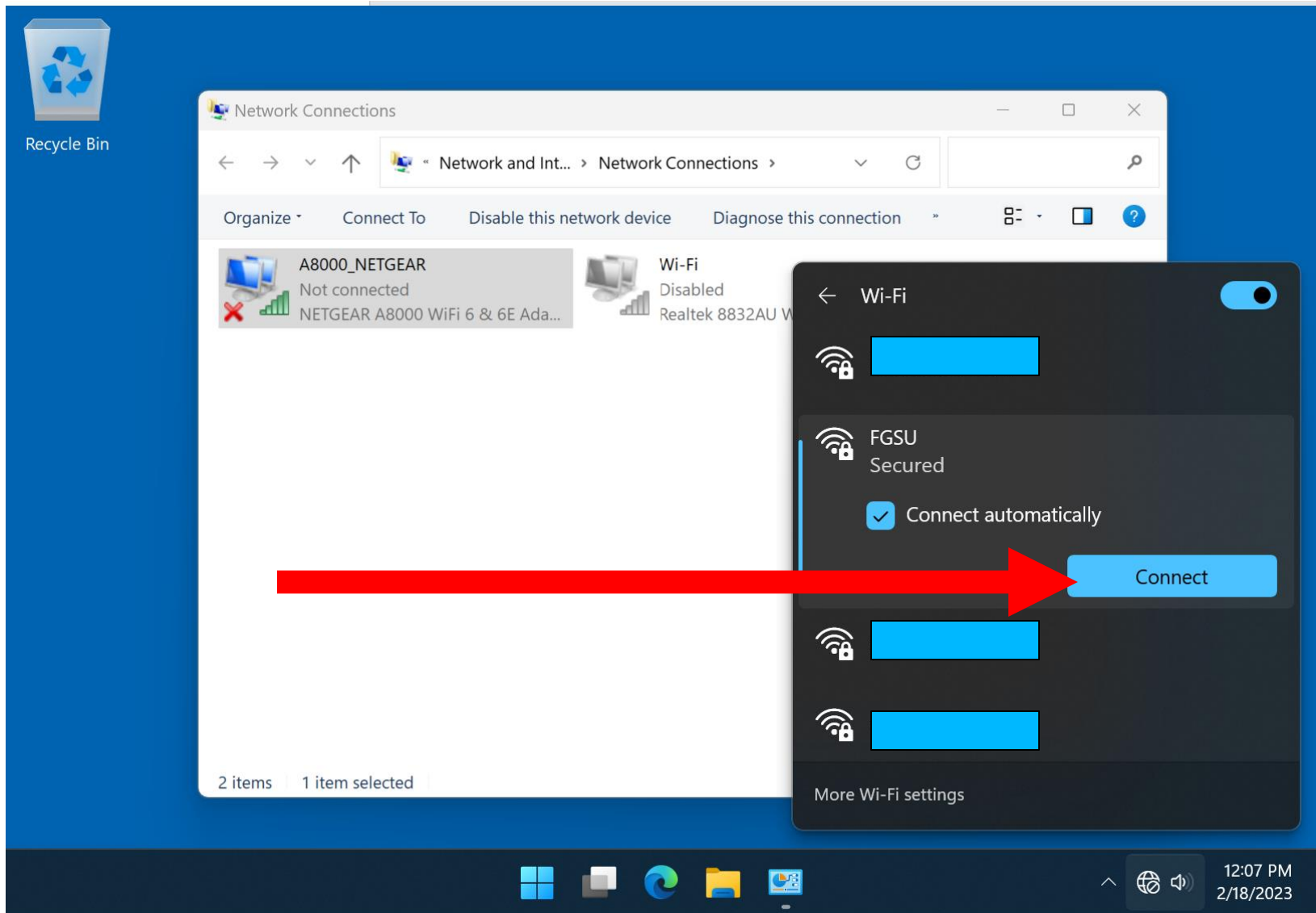
BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device) (continued)

- **SMALL STEP 212:**
Use the left mouse button to click on the "Wireless Access Point" that corresponds to the one that is emanating from your Android cell phone:



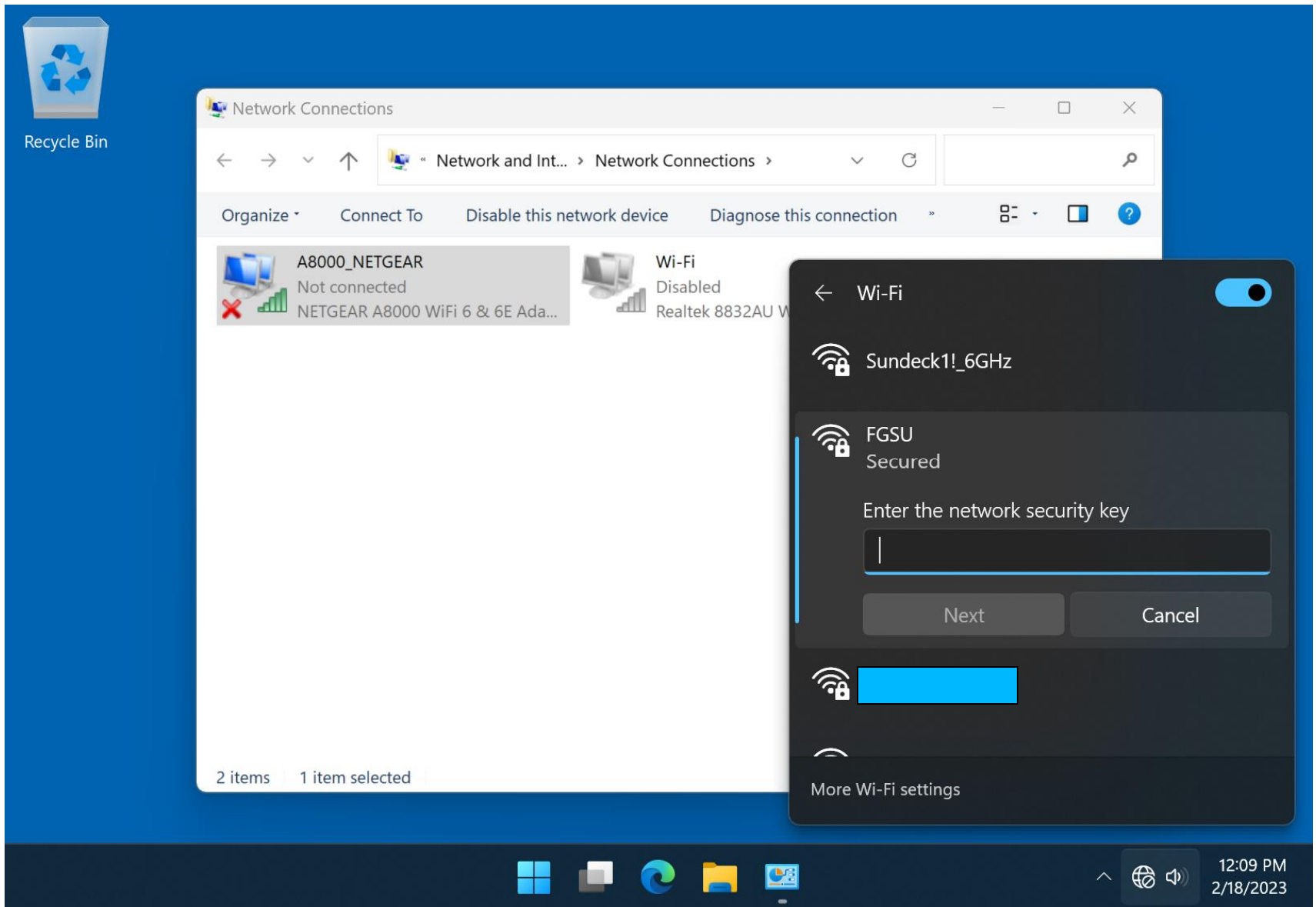
BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device) (continued)

- **SMALL STEP 213:**
Use the left mouse button to click on the "Connect" button:



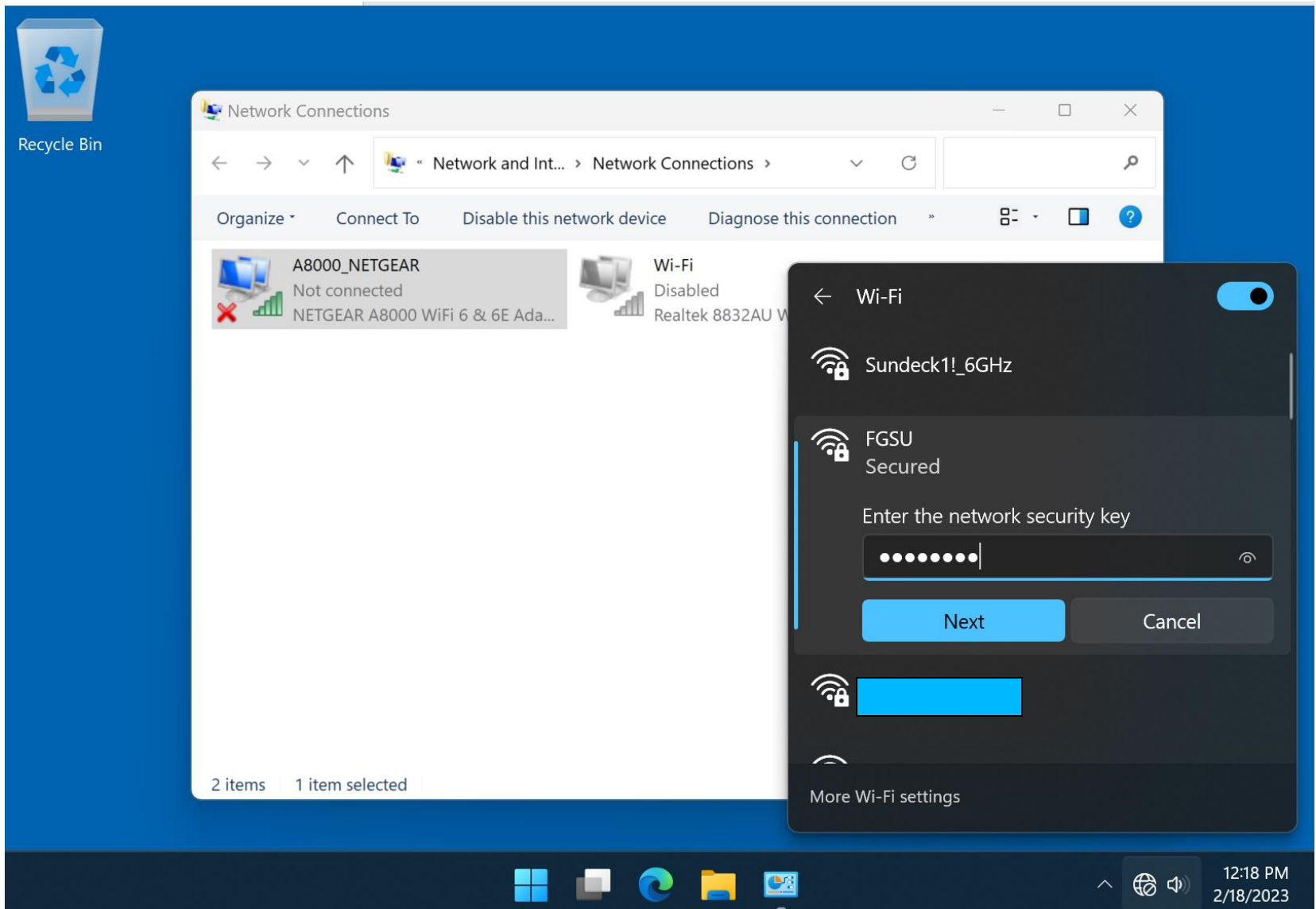
BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device) (continued)

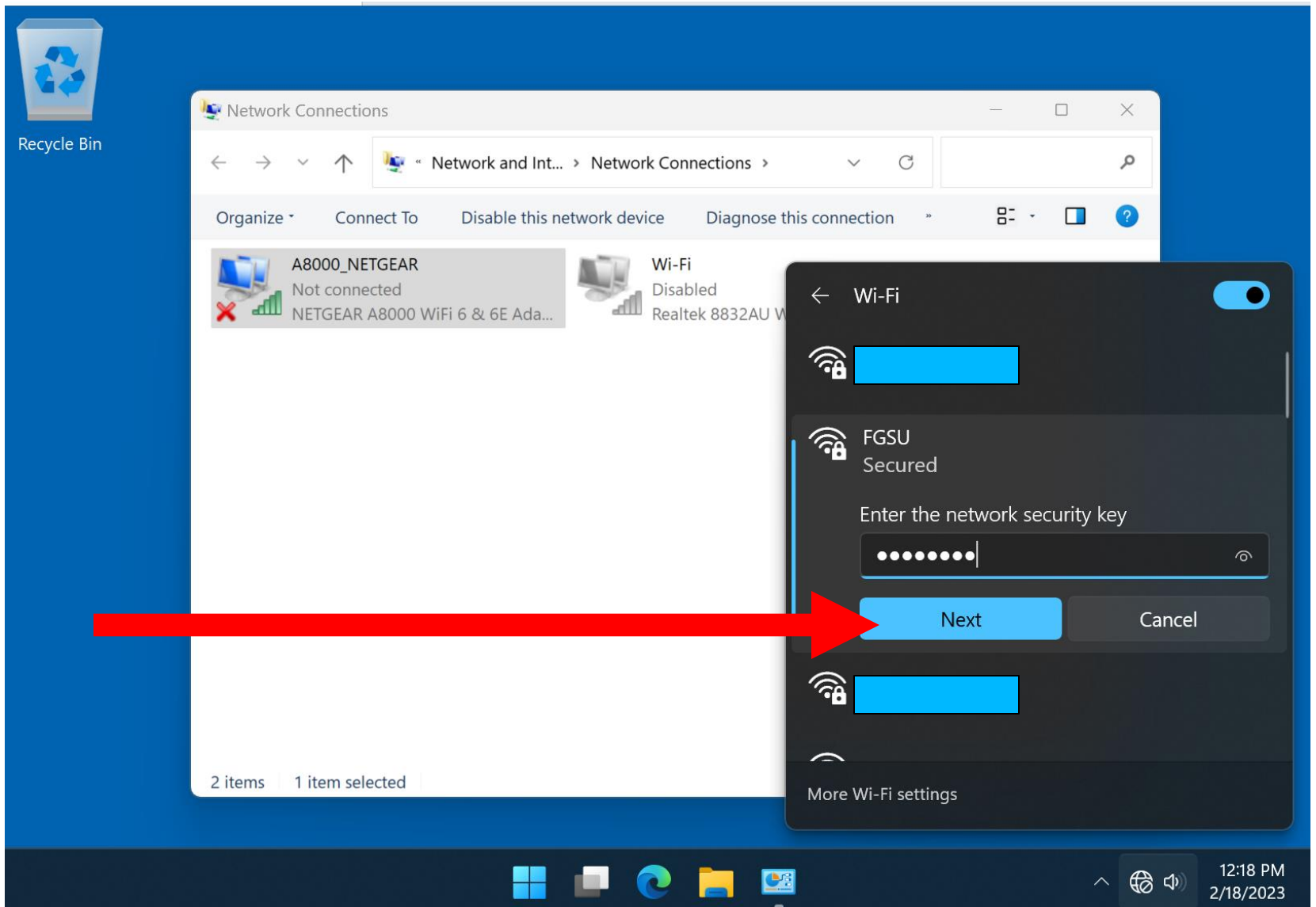
- **SMALL STEP 214:**
Type in the password that you wrote down in SMALL STEP 110:

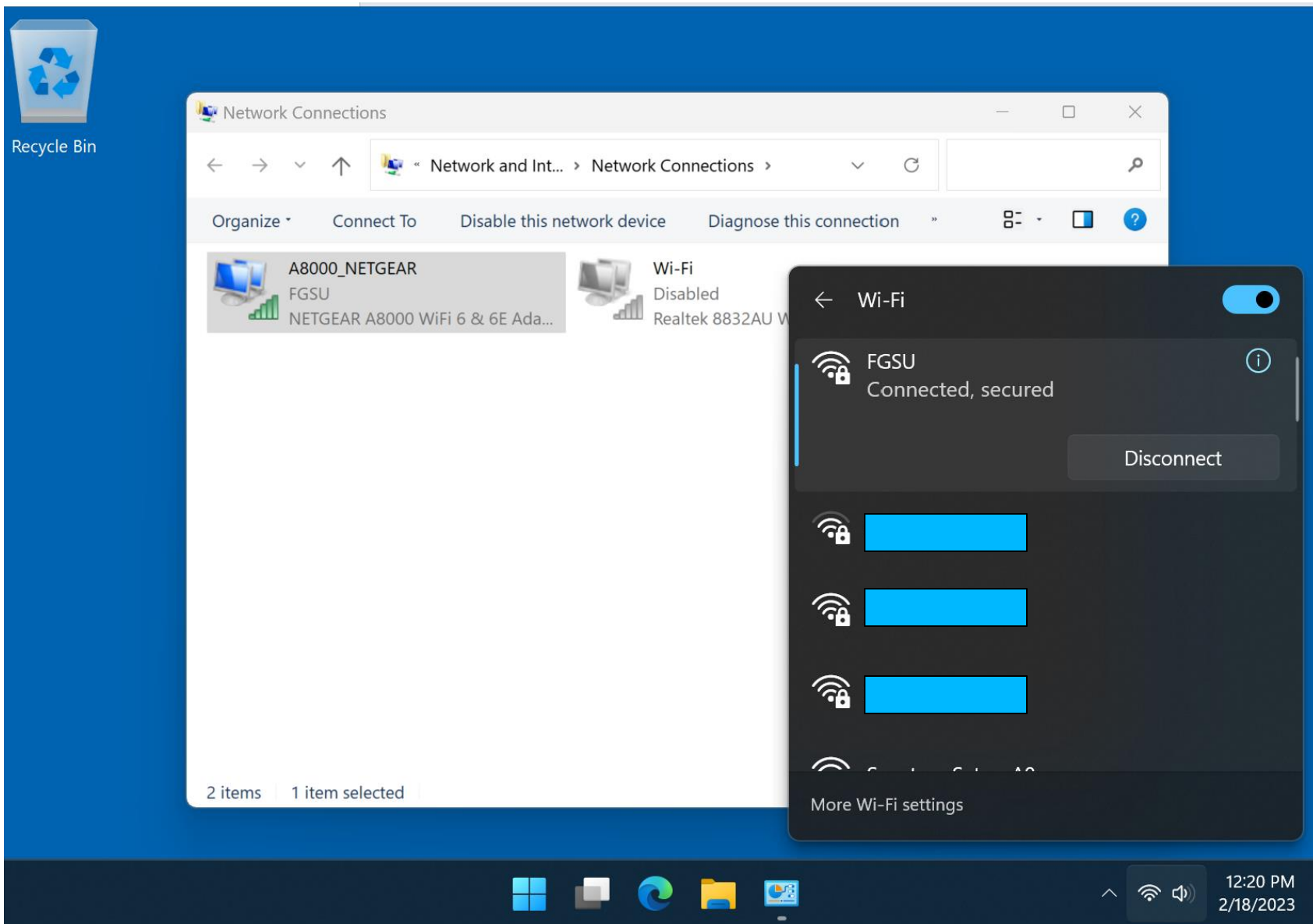


BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device) (continued)

- **SMALL STEP 215:**
Use the left mouse button to click on the "Next" button:





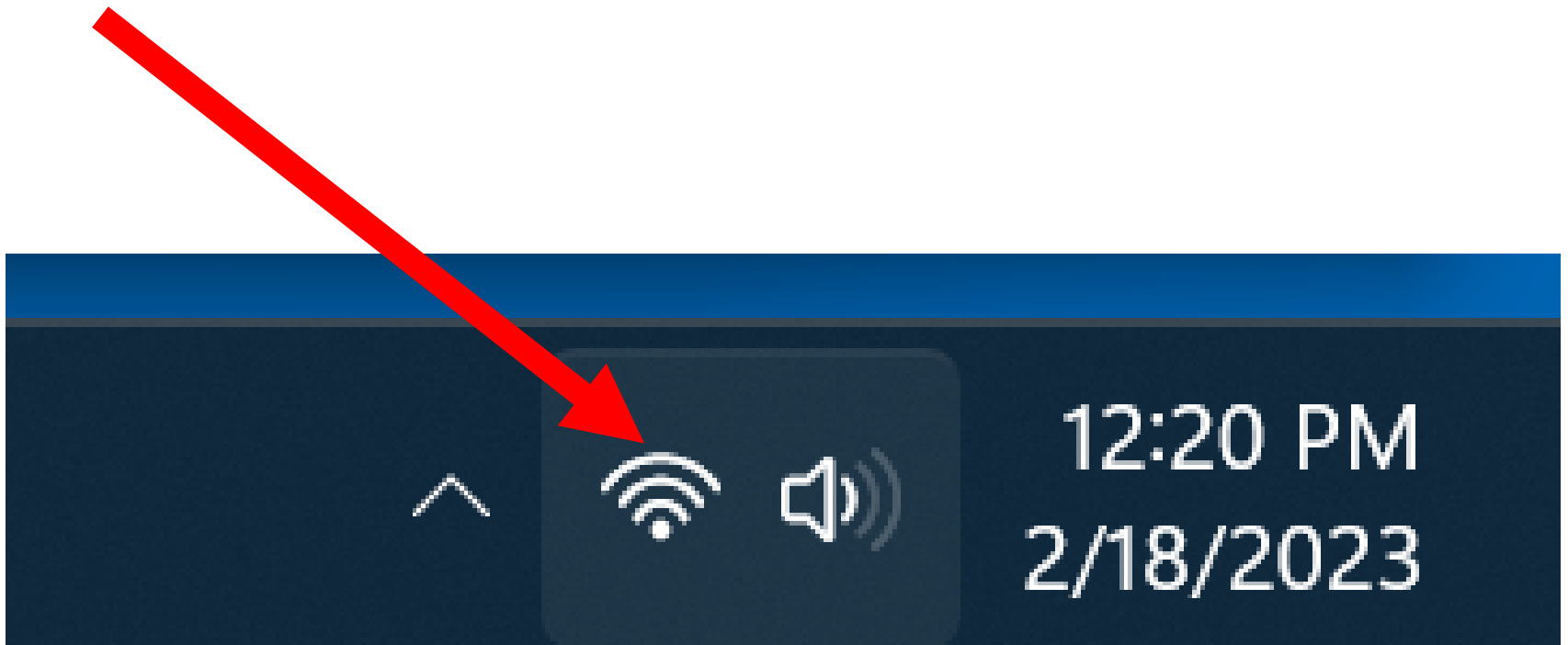


BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device) (continued)

- **SMALL STEP 215 (continued):**
Note that the "Notification Area" in the lower-right corner of the Windows.. "Desktop" now shows that a Wi-Fi "Wireless Access Point" is connected to the Windows.. computer



12:20 PM
2/18/2023



BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device) (continued)

- **SMALL STEP 216:**
Click on unused space in the Windows "Desktop" to close the list of "Wireless Access Points":

BIG STEP 200 (Connect to the Wi-Fi Hotspot from the Client Device) (continued)

- **SMALL STEP 217:**
Close the "Network Connections" window by clicking on the "x" button in the upper-right corner of the "Network Connections" window.

