

# **4--TETHERING FROM AN ANDROID CELL PHONE VIA A USB CABLE TO A "WINDOWS.." COMPUTER**

by Francis Chao

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Web location for this  
presentation:

<http://aztcs.apcug.org>

Click on

"Meeting Notes"

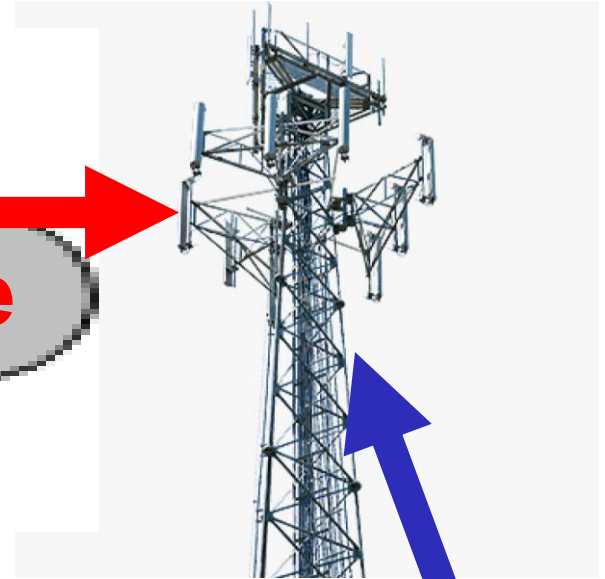
# SUMMARY

You can use your Android cell phone and a "cell phone to USB" cable to provide an Internet connection for a "Windows.." computer.

# TOPICS

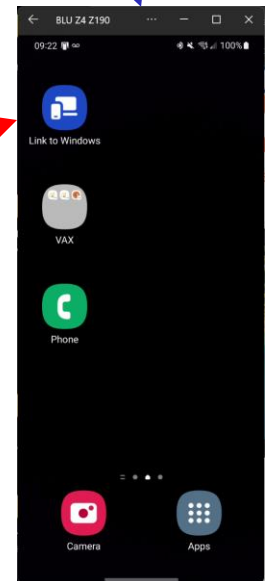
- Advantage of using USB tethering from a Android cell phone
- Big Steps (for computer experts)
- Small Steps (for the rest of us)
- Additional Advice

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



**Option 3:**

**Cell phone is tethered with a  
"cell phone to USB" cable  
so that a  
client computer, tablet, or  
another cell phone 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 USB TETHERING FROM A CELL PHONE

- Of the four configurations for tethering from a cell phone, only **OPTION 2: tethering a USB cable** avoids the radio-frequency collisions and interference that are sometimes encountered with Wi-Fi and Bluetooth communications.

# OPTION 2 BIG STEPS

("Option 2:" = tethering using a  
"cell phone to USB" cable)

- **BIG STEP 100:**  
Connect the cell phone to the client device using a "cell phone to USB" cable
- **BIG STEP 200:**  
Activate "USB tether" in the "Settings" app of the cell phone



# OPTION 2 BIG STEPS (continued)

- **BIG STEP 300:**  
In "Network Connections" or "Settings" of the client device, enable the virtual Ethernet device that the Android phone provides for the client device

**BIG STEP 100 (Connect the cell phone to the client device using a "cell phone to USB" cable)**

**SMALL STEP 101:**

Physically connect the "cell phone to USB" cable between the Internet-providing cell phone and the client computer, tablet, or the other cell phone:

BIG STEP 100 (Connect the cell phone to the client device using a "cell phone to USB" cable)

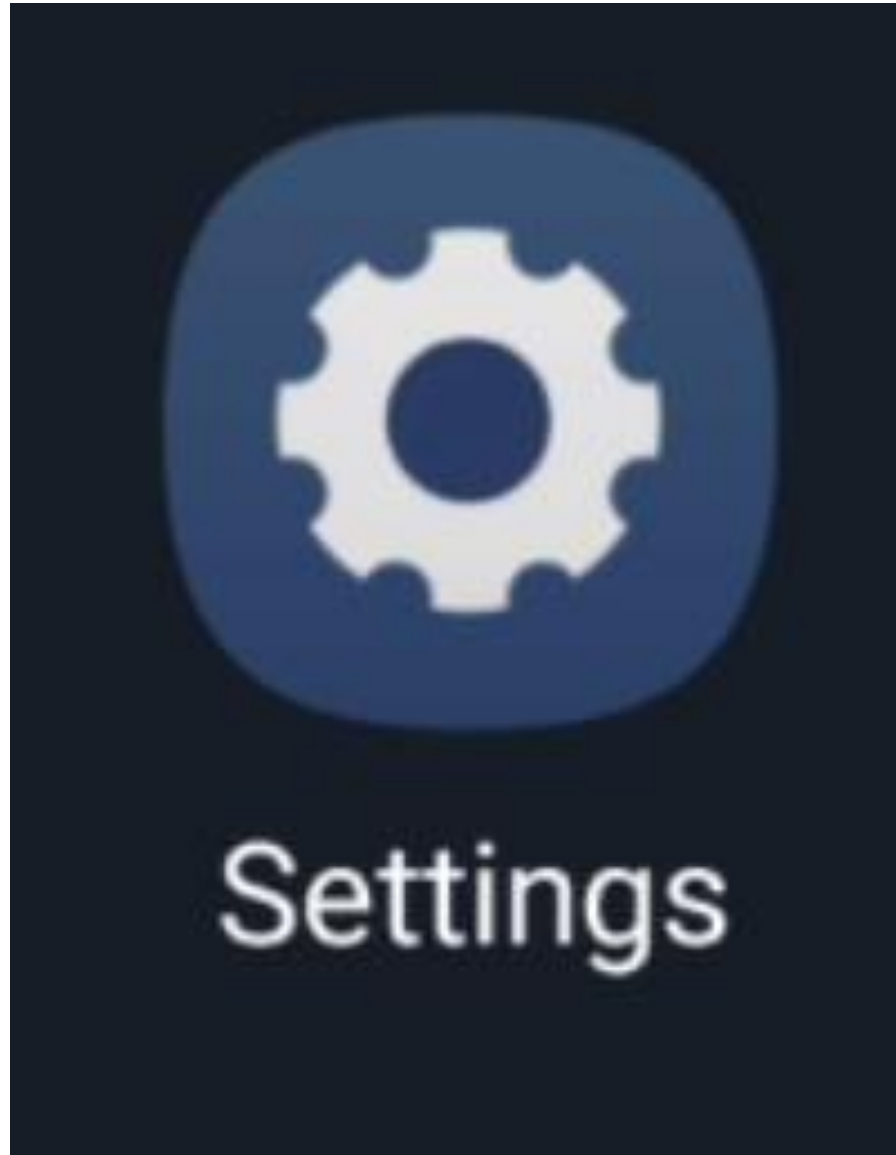
SMALL STEP 101 (continued):

- microUSB plug to USB A plug cable for older Android cell phones
- USB-C plug to USB-C plug cable or  
USB-C plug to USB A plug for the newer Android cell phones

**BIG STEP 200** (Activate "USB tether" in the "Settings" app of the Android cell phone)

**SMALL STEP 201:**

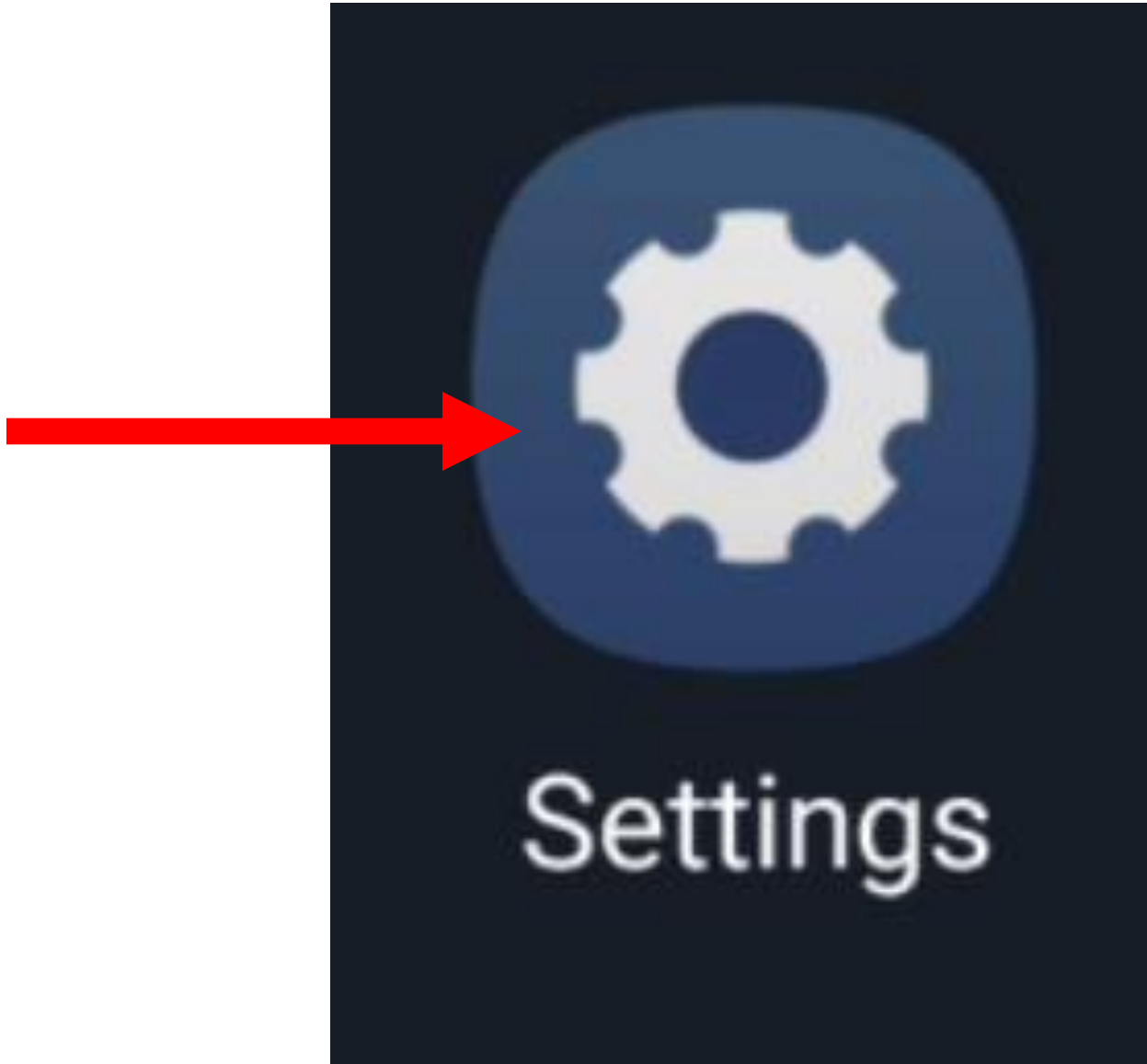
Locate the "Settings" icon in the Android cell phone:



BIG STEP 200 (Activate "USB tether" in the  
"Settings" app of the Android cell phone)  
(continued)

SMALL STEP 202:

Tap on the "Settings" icon:



BIG STEP 200 (Activate "USB tether" in the  
"Settings" app of the Android cell phone)  
(continued)

SMALL STEP 203:  
Tap on "Connections":



11:41

5G UC 100%

# Settings



FRANCIS CHAO

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## Connections

Wi-Fi • Bluetooth • Airplane mode



## Connected devices

Quick Share • Android Auto



## Modes and Routines

Modes • Routines



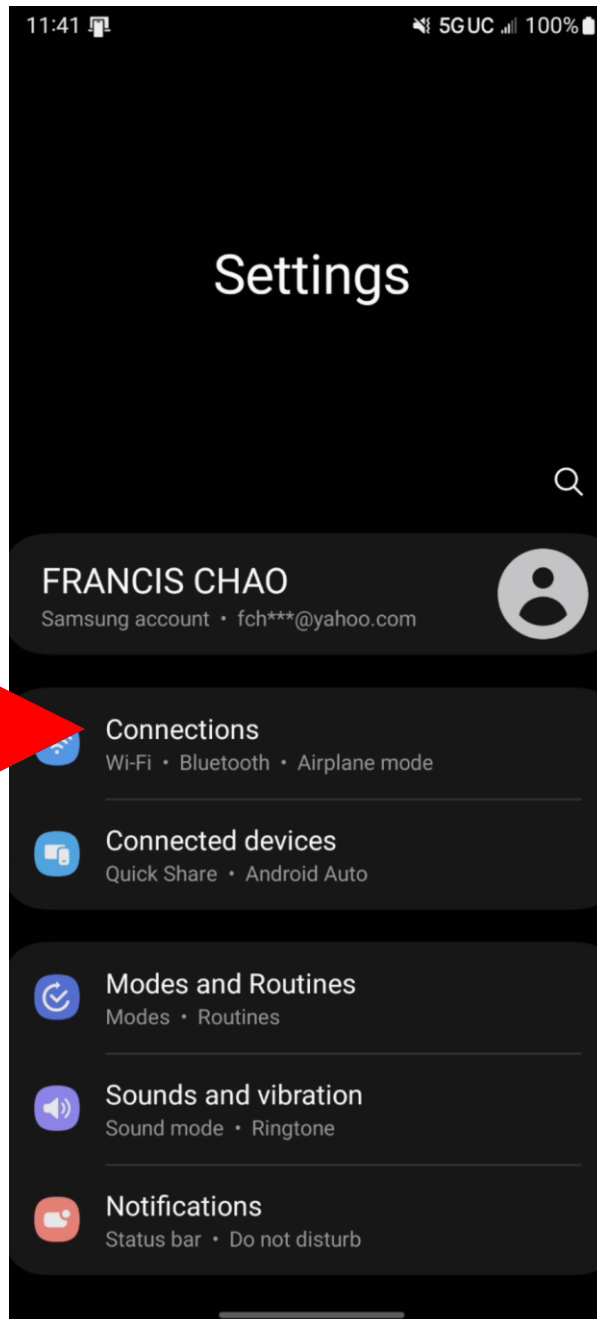
## Sounds and vibration

Sound mode • Ringtone



## Notifications

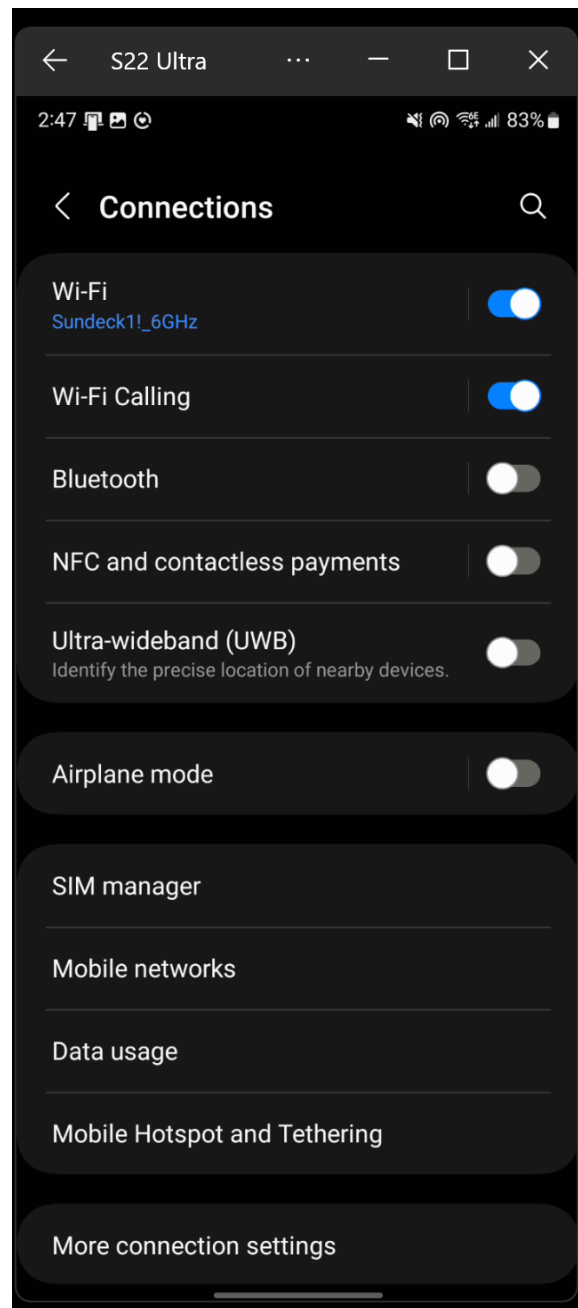
Status bar • Do not disturb

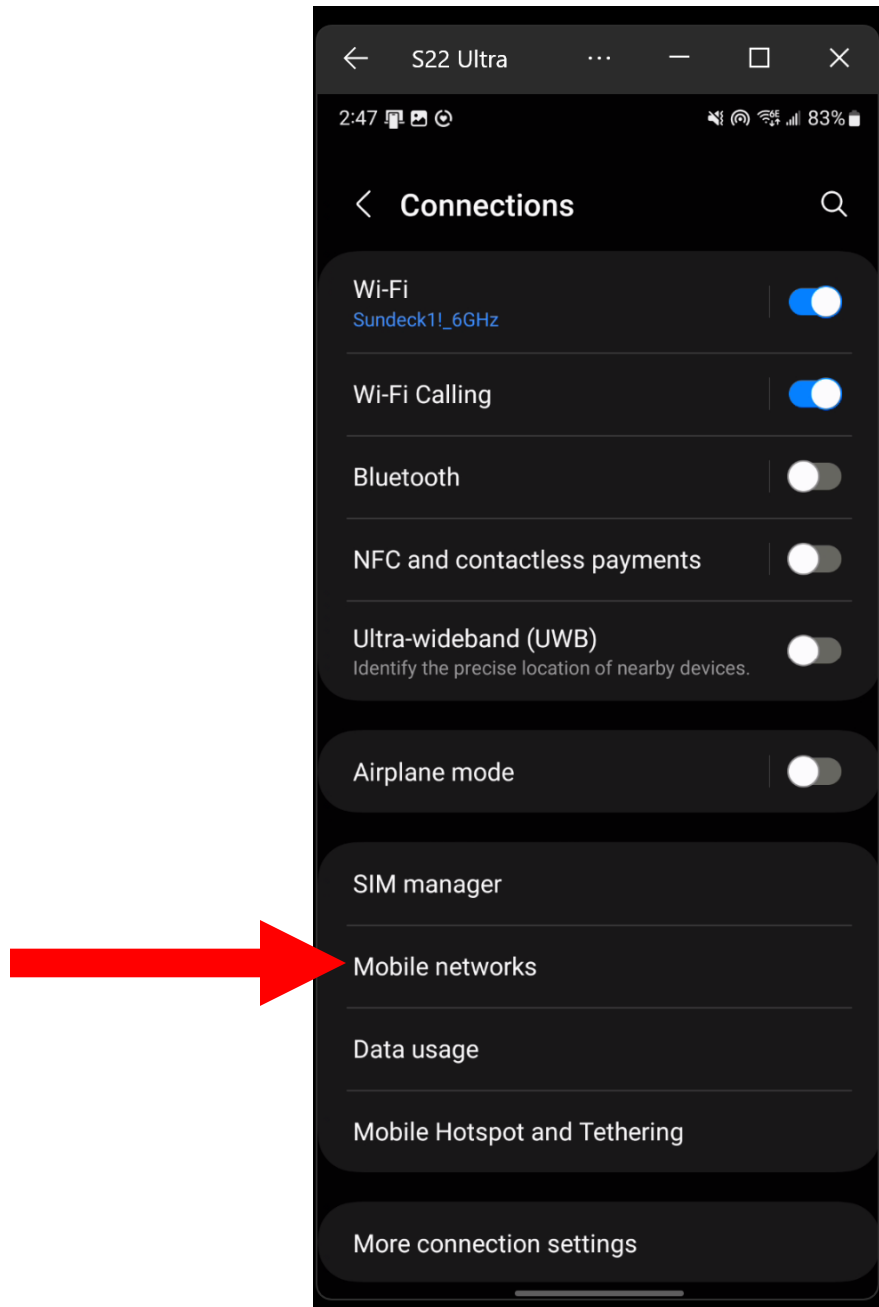


BIG STEP 200 (Activate "USB tether" in the  
"Settings" app of the Android cell phone)  
(continued)

SMALL STEP 204:

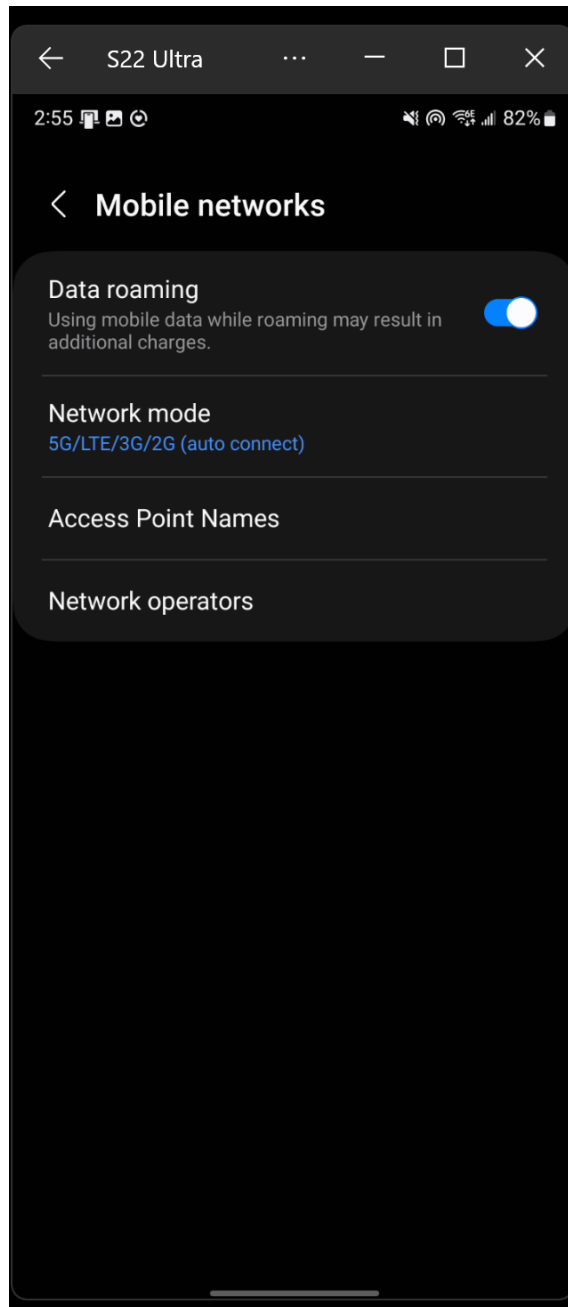
Tap on "Mobile networks":

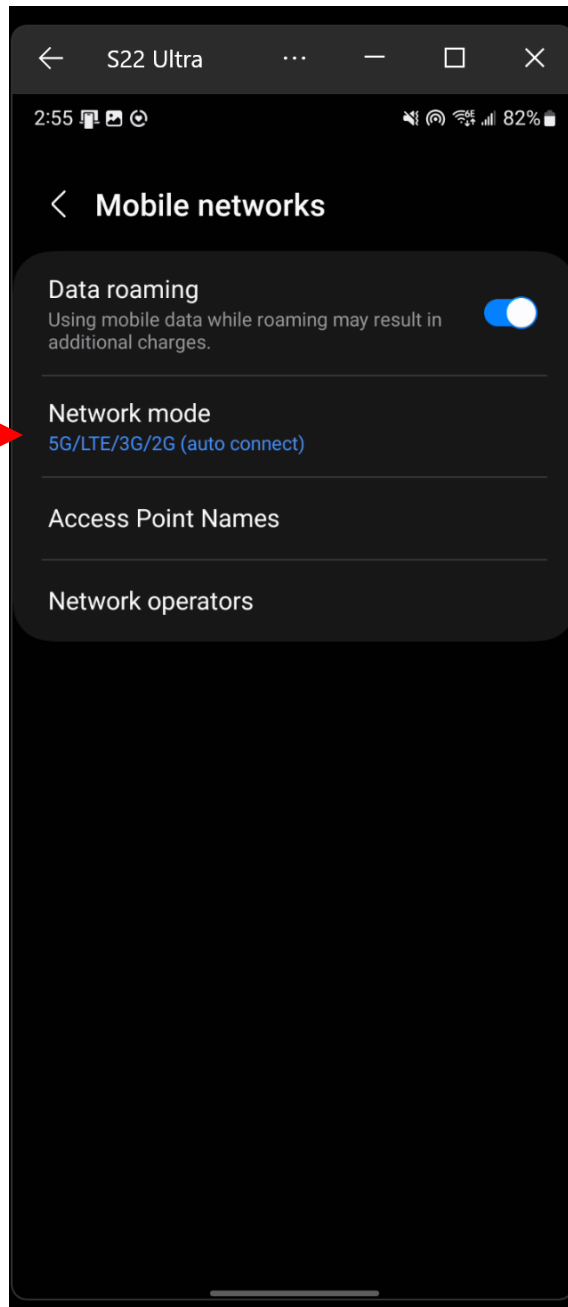




BIG STEP 200 (Activate "USB tether" in the  
"Settings" app of the Android cell phone)  
(continued)

SMALL STEP 205:  
Tap on "Network mode".



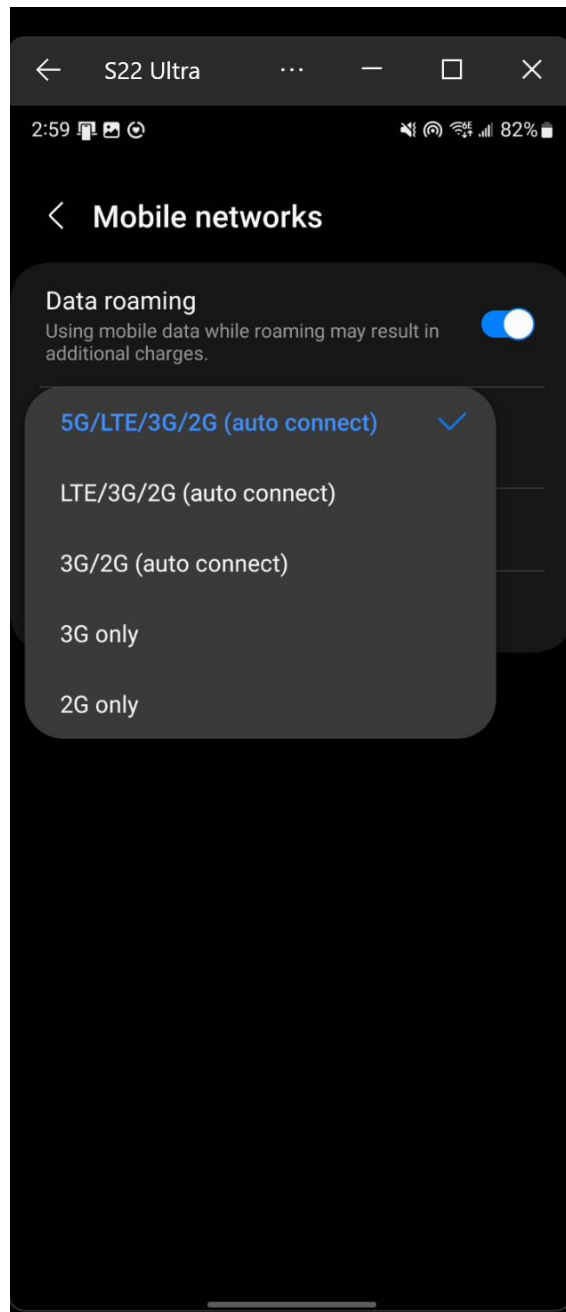


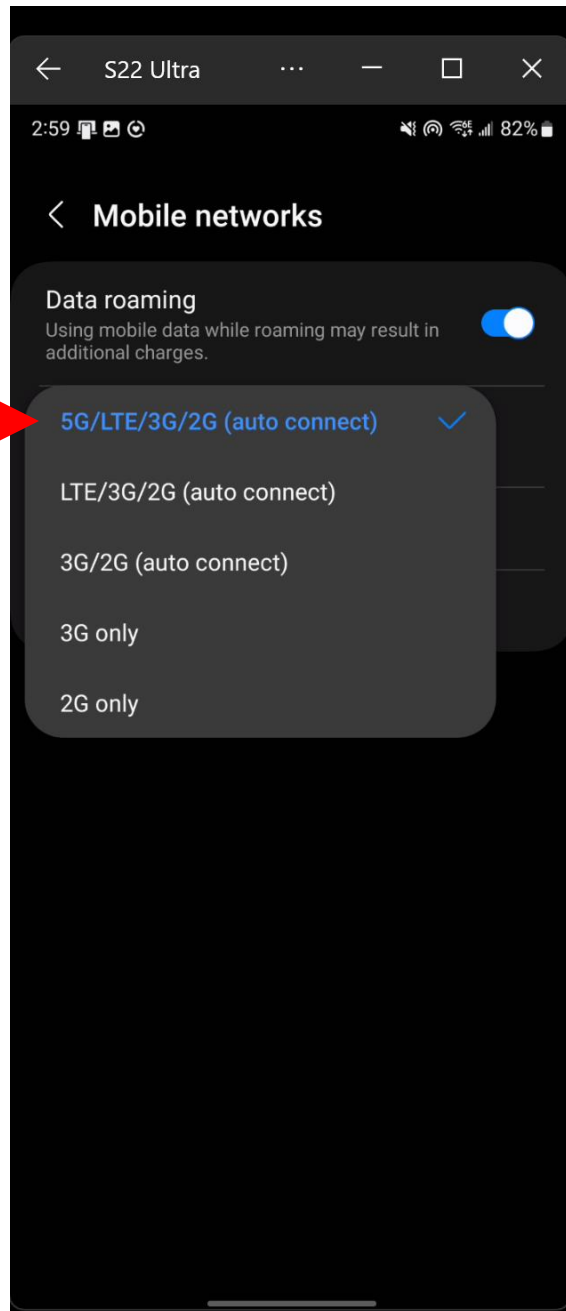


**BIG STEP 200** (Activate "USB tether" in the  
"Settings" app of the Android cell phone)  
(continued)

**SMALL STEP 206:**

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

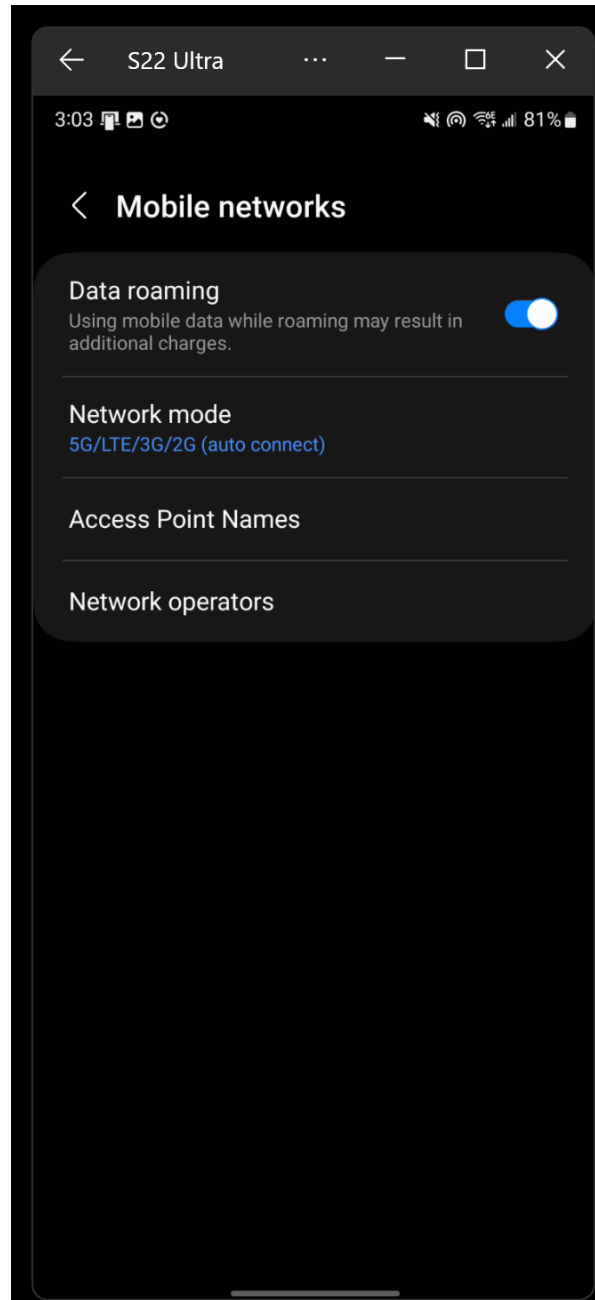


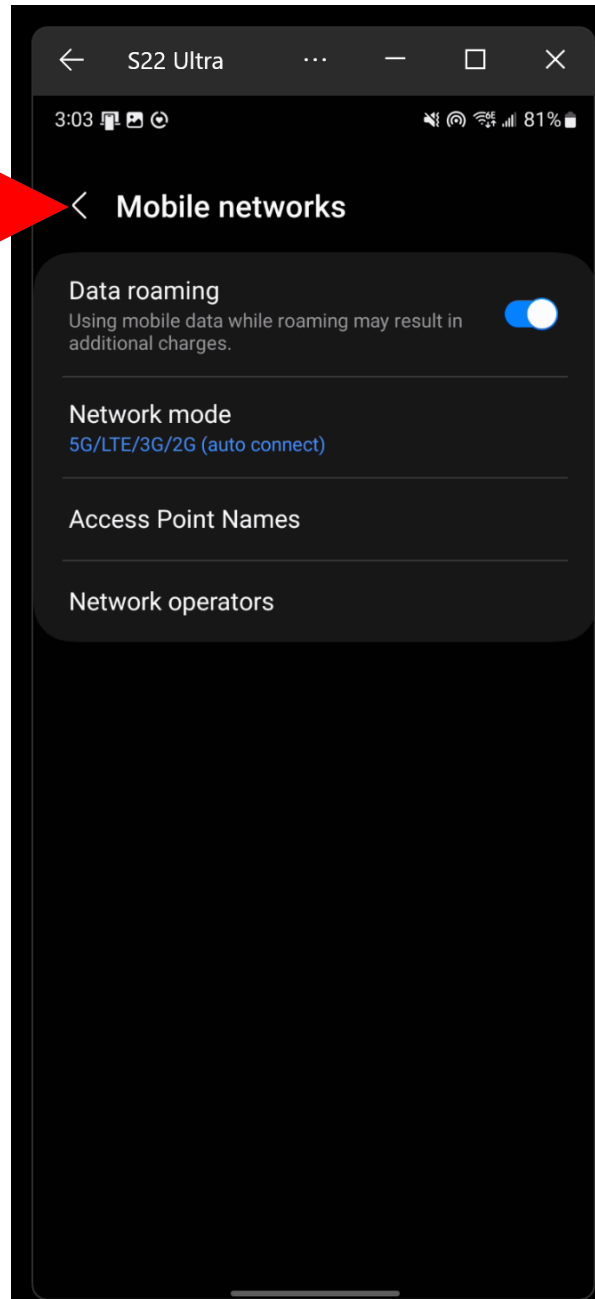


**BIG STEP 200 (Activate "USB tether" in the  
"Settings" app of the Android cell phone)  
(continued)**

**SMALL STEP 207:**

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

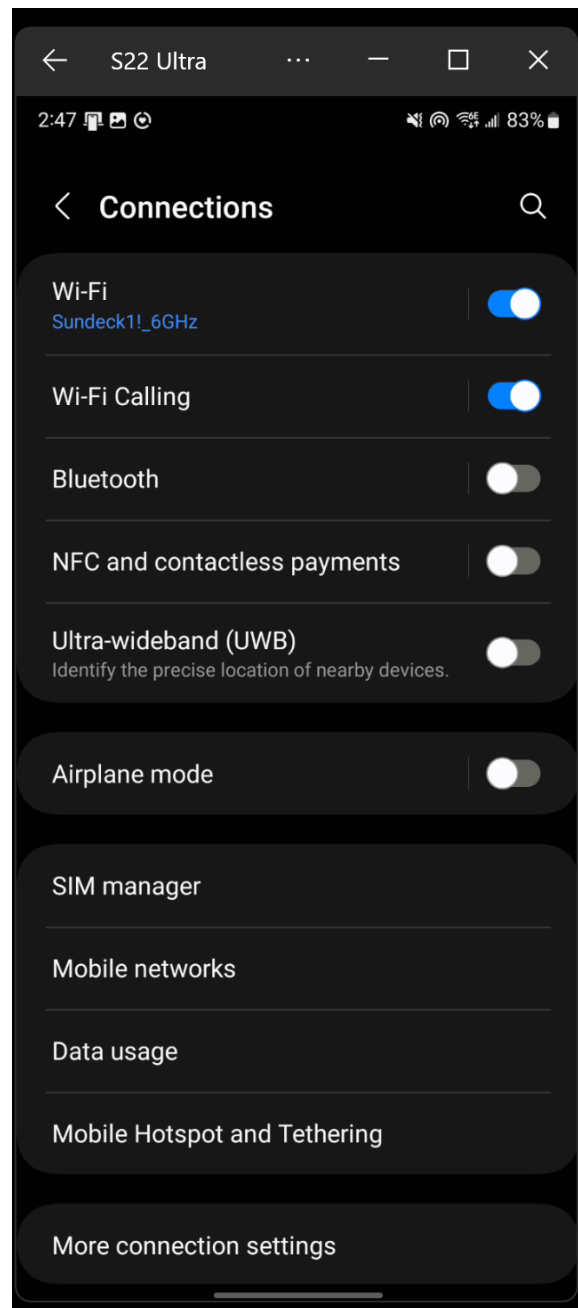




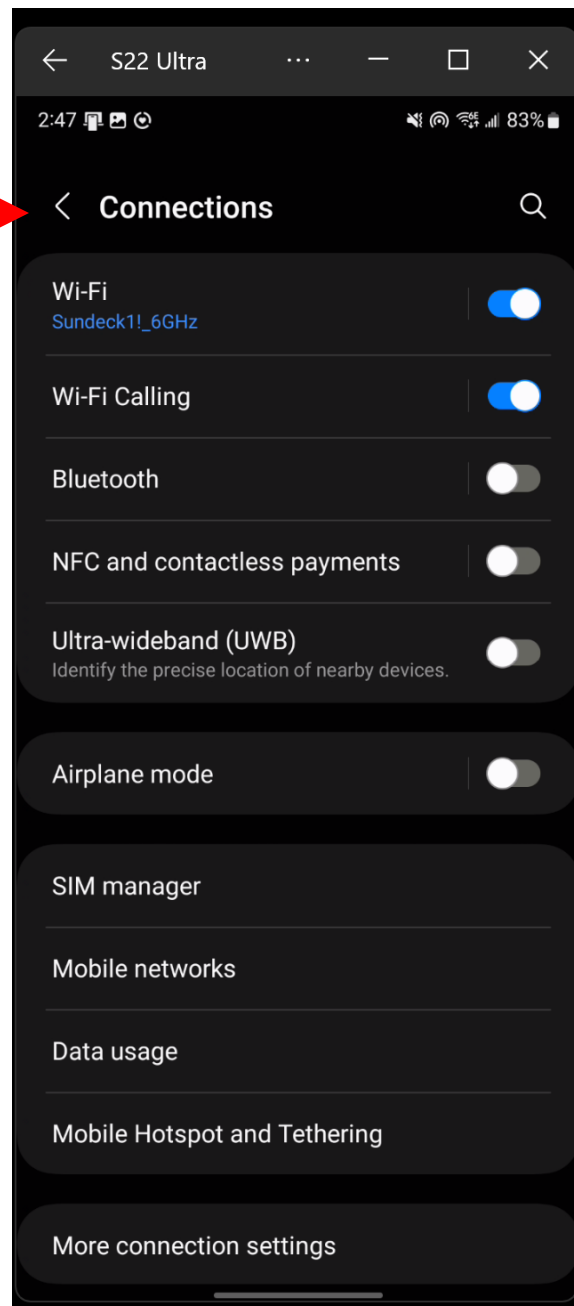
BIG STEP 200 (Activate "USB tether" in the  
"Settings" app of the Android cell phone)  
(continued)

SMALL STEP 208:

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





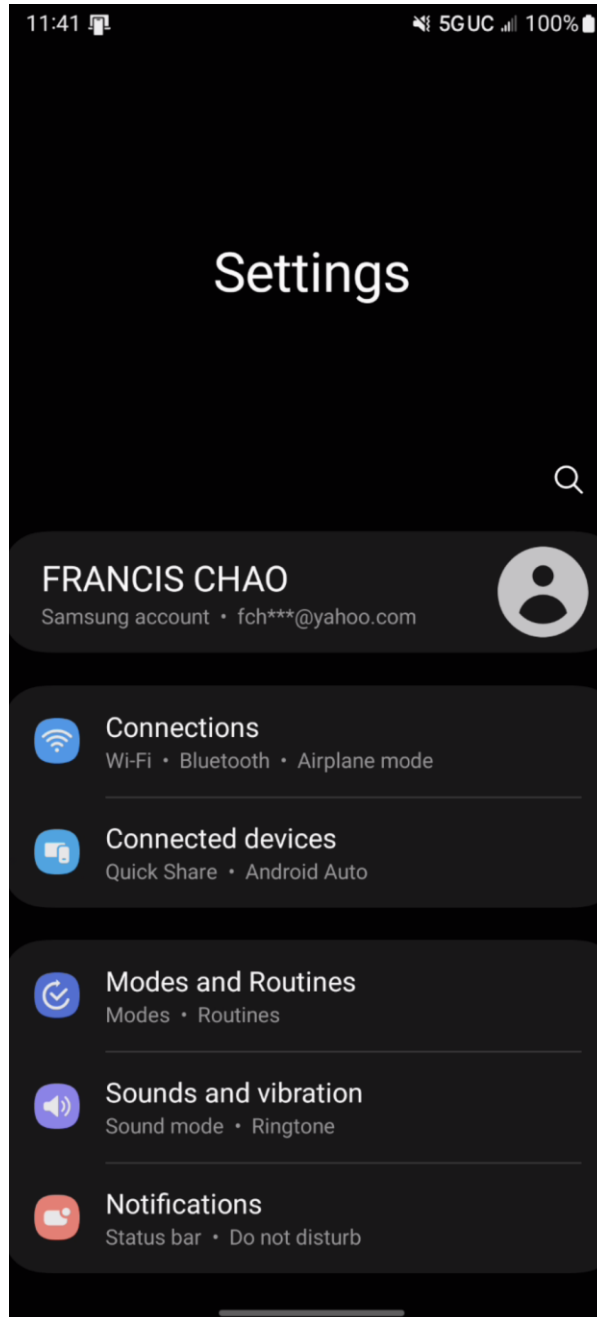


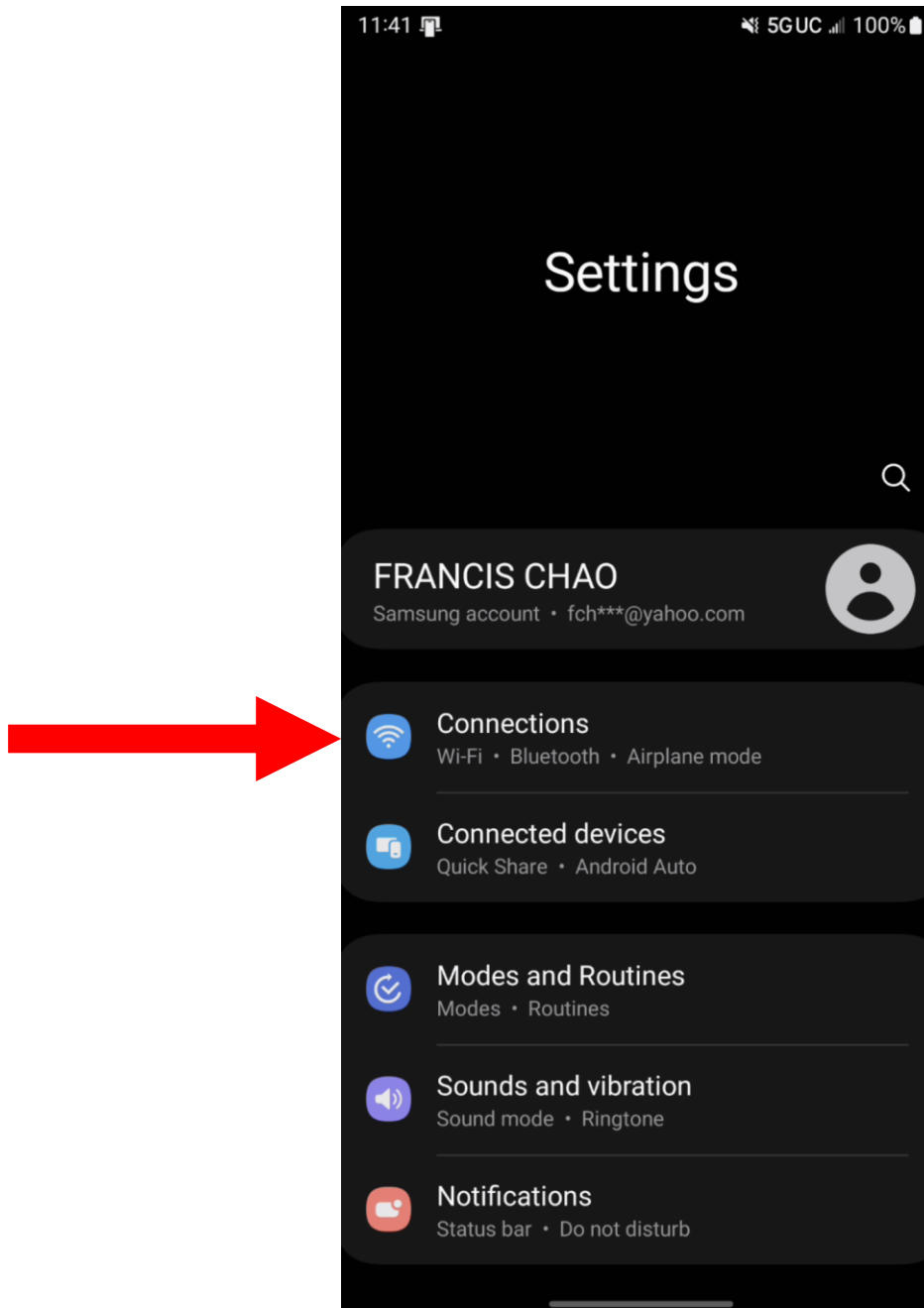
BIG STEP 200 (Activate "USB tether" in the  
"Settings" app of the Android cell phone)  
(continued)

SMALL STEP 209:

You should now be back at the top-  
most level of the "Settings" app in the  
Android cell phone.

Tap on "Connections":

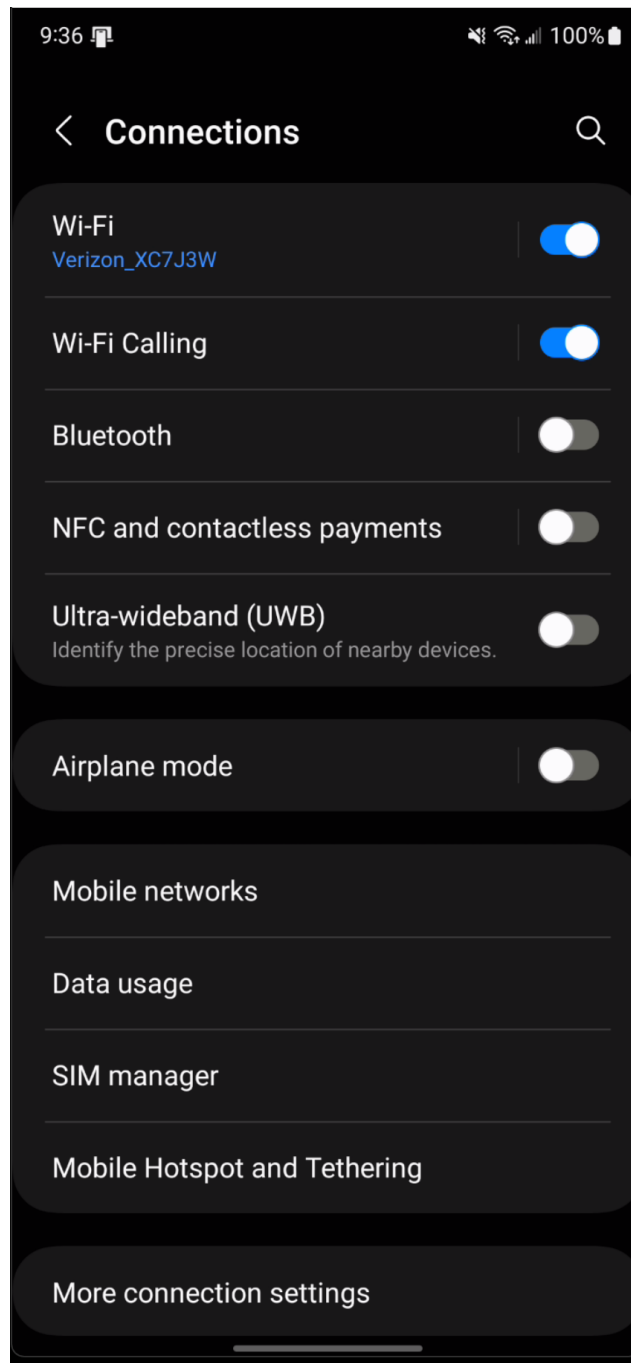


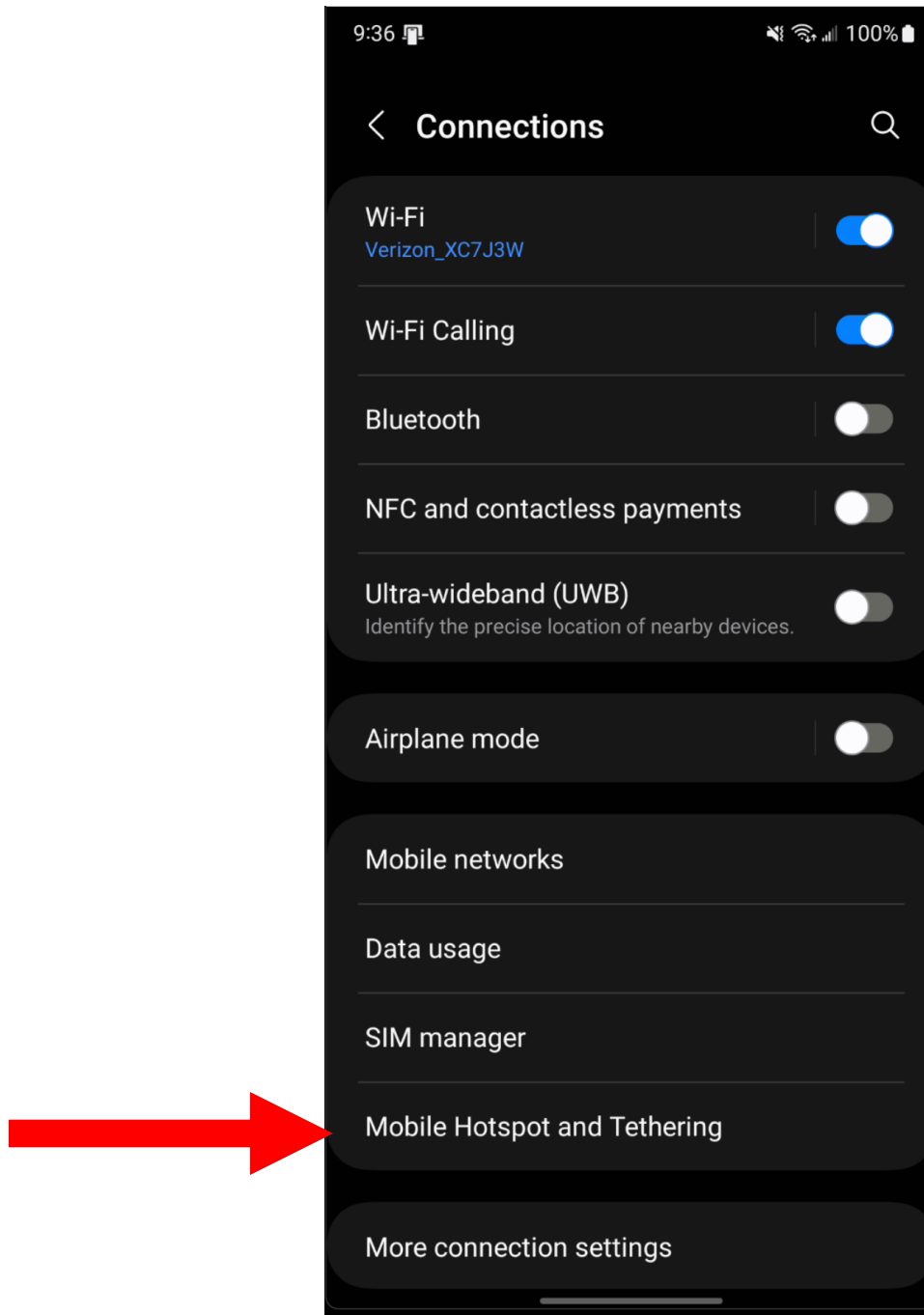


BIG STEP 200 (Activate "USB tether" in the "Settings" app of the cell phone) (continued)

SMALL STEP 210:

Tap on "Mobile Hotspot and Tethering":





BIG STEP 200 (Activate "USB tether" in the "Settings" app of the cell phone) (continued)

SMALL STEP 211:

Tap on "USB tethering" to enable it.

If "USB tethering" is already enabled, tap on it to disable it, and then tap on it to re-enable it.



9:49

100%

## < 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



## < 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



### View USB tethering help

Tap OK to learn more about using USB tethering.

☐ Do not show again

Cancel

OK

## Help & feedback

### USB tethering

Use USB tethering to share your device's mobile network connection with a single computer via a USB cable. To turn on USB tethering, you must have the Smartphone Mobile Hotspot service added to your payment plan.

To tether your device, connect it to a computer via a USB cable. Then, on your mobile device go to Settings > Connections > Mobile Hotspot and Tethering, and select USB tethering.

USB tethering works with Windows and Linux.

For more information, including how to use USB tethering with other operating systems, go to <http://www.android.com/tether>.

For Windows XP, you may have to install a USB driver on your computer before you can tether your device. To install the drivers, go to <http://www.samsung.com/support/>.

When you connect your device to a computer via a USB cable, you can either share your mobile network connection by tethering or you can share files. You cannot do both. Do not enable USB tethering if you want to access your device's SD card using your computer.

### Mobile Hotspot

Turn your device into a Mobile Hotspot so you can share your mobile data connection with other devices.

To turn on Mobile Hotspot, you must have the Smartphone Mobile Hotspot service added to your payment plan.

To turn on Smartphone Mobile Hotspot, go to Settings > Connections > Mobile Hotspot and Tethering, and select Mobile Hotspot.

To configure Smartphone Mobile Hotspot, tap

OK

## < Mobile Hotspot and Tethering

Mobile Hotspot



Bluetooth tethering

Share your phone's internet connection using Bluetooth.



USB tethering

Tethered



Ethernet tethering

No USB Ethernet adapter connected



BIG STEP 200 (Activate "USB tether" in the "Settings" app of the cell phone) (continued)

SMALL STEP 212:

Swipe up from the bottom of the screen to close "Settings"

BIG STEP 200 (Activate "USB tether" in the "Settings" app of the cell phone) (continued)

SMALL STEP 213:

Using the Android cell phone, swipe down from the top of the screen to the middle of the screen:

BIG STEP 200 (Activate "USB tether" in the "Settings" app of the cell phone) (continued)

SMALL STEP 214:

A "Notifications Panel" will be displayed.

9:06

100%

Sat, Feb 18



Device control

Media output



Connected to your PC 9:05 PM  
Connected to Phone Link app on CP4.



USB for file transfer



Notification settings

Clear

T-Mobile Wi-Fi Calling



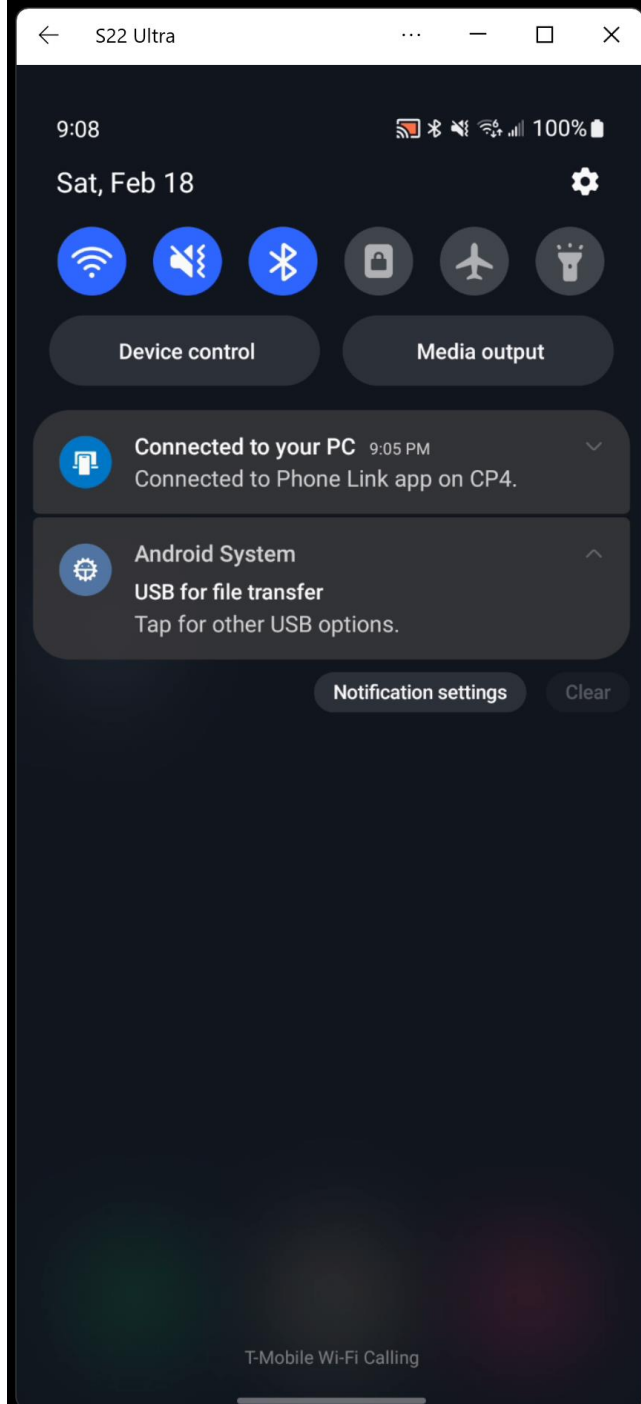


USB for file transfer



Notification settings

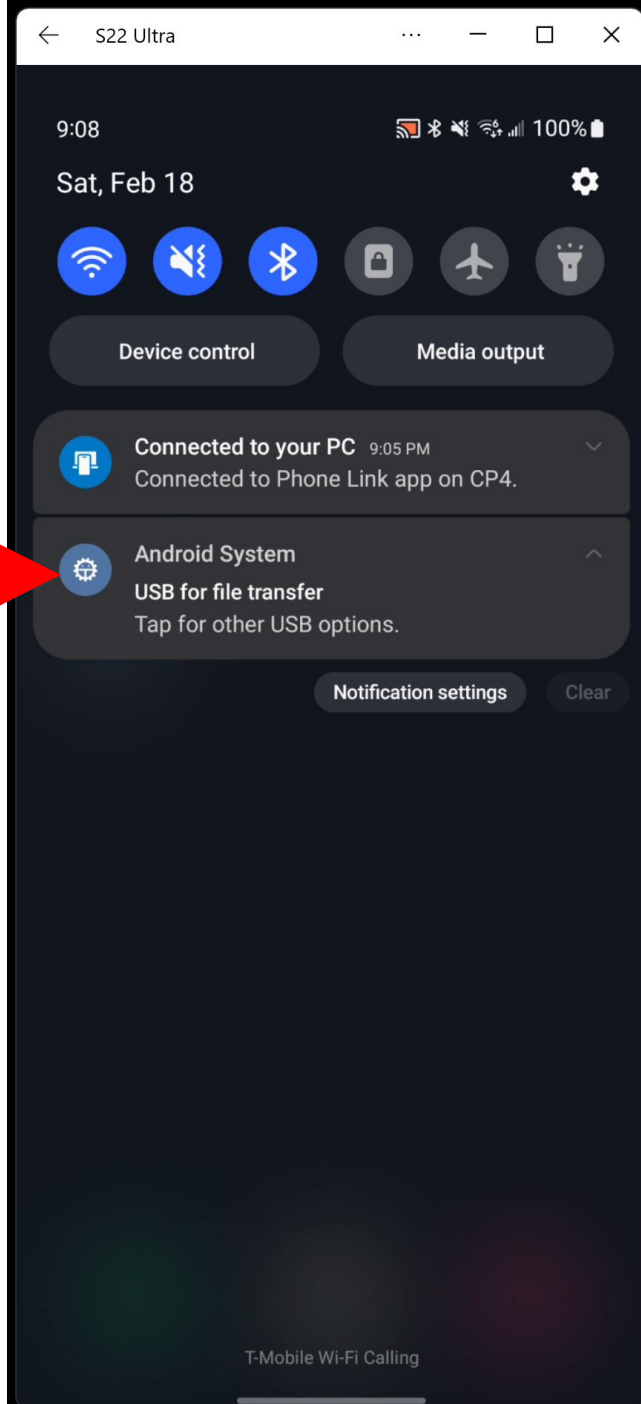
Clear



BIG STEP 200 (Activate "USB tether" in the "Settings" app of the cell phone) (continued)

SMALL STEP 215:

Tap twice on "USB for File Transfer"



## < USB settings

USB controlled by

☐ Connected device

☒ This device

Use USB for

☒ Transferring files / Android Auto

☐ USB tethering

☐ MIDI

☐ Transferring images

☐ Charging phone only

File transfer options

**Transcode exported video**

Convert HEVC videos to AVC format so you can play them on your computer and other devices.



BIG STEP 200 (Activate "USB tether" in the "Settings" app of the cell phone) (continued)

SMALL STEP 216:  
Select "USB tethering"

## < USB settings

USB controlled by

☐ Connected device

☒ This device

Use USB for

☐ Transferring files / Android Auto

☒ USB tethering

☐ MIDI

☐ Transferring images

☐ Charging phone only

File transfer options

Transcode exported video

Convert HEVC videos to AVC format so you can play them on your computer and other devices.



BIG STEP 200 (Activate "USB tether" in the "Settings" app of the cell phone) (continued)

SMALL STEP 217:

Tap on "USB settings":



## < USB settings

USB controlled by

☐ Connected device

☒ This device

Use USB for

☐ Transferring files / Android Auto

☒ USB tethering

☐ MIDI

☐ Transferring images

☐ Charging phone only

File transfer options

Transcode exported video

Convert HEVC videos to AVC format so you can play them on your computer and other devices.



BIG STEP 200 (Activate "USB tether" in the "Settings" app of the cell phone) (continued)

SMALL STEP 218:

Swipe up from the bottom of the screen to close the "Notifications Panel" if it did not close when you tapped on "USB settings".

## BIG STEP 300 (Activate the tethered Internet connection from the client device)

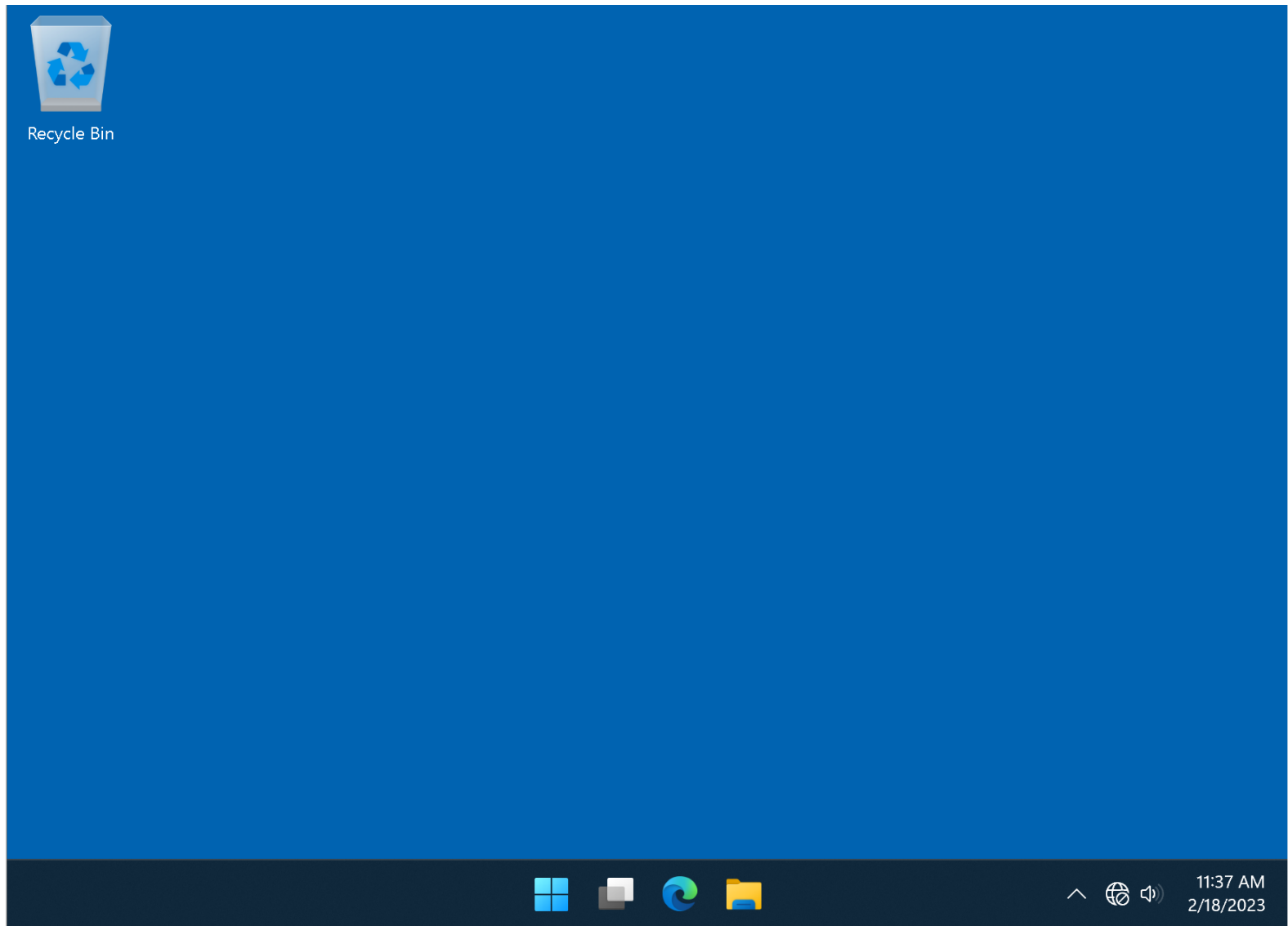
- **SMALL STEP 301:**  
Inside the client device (the device that you are providing Internet access for), the Android cell phone will appear as a virtual "Ethernet" adapter that can provide the client device with Internet access, if you "Enable" the virtual "Ethernet" adapter.

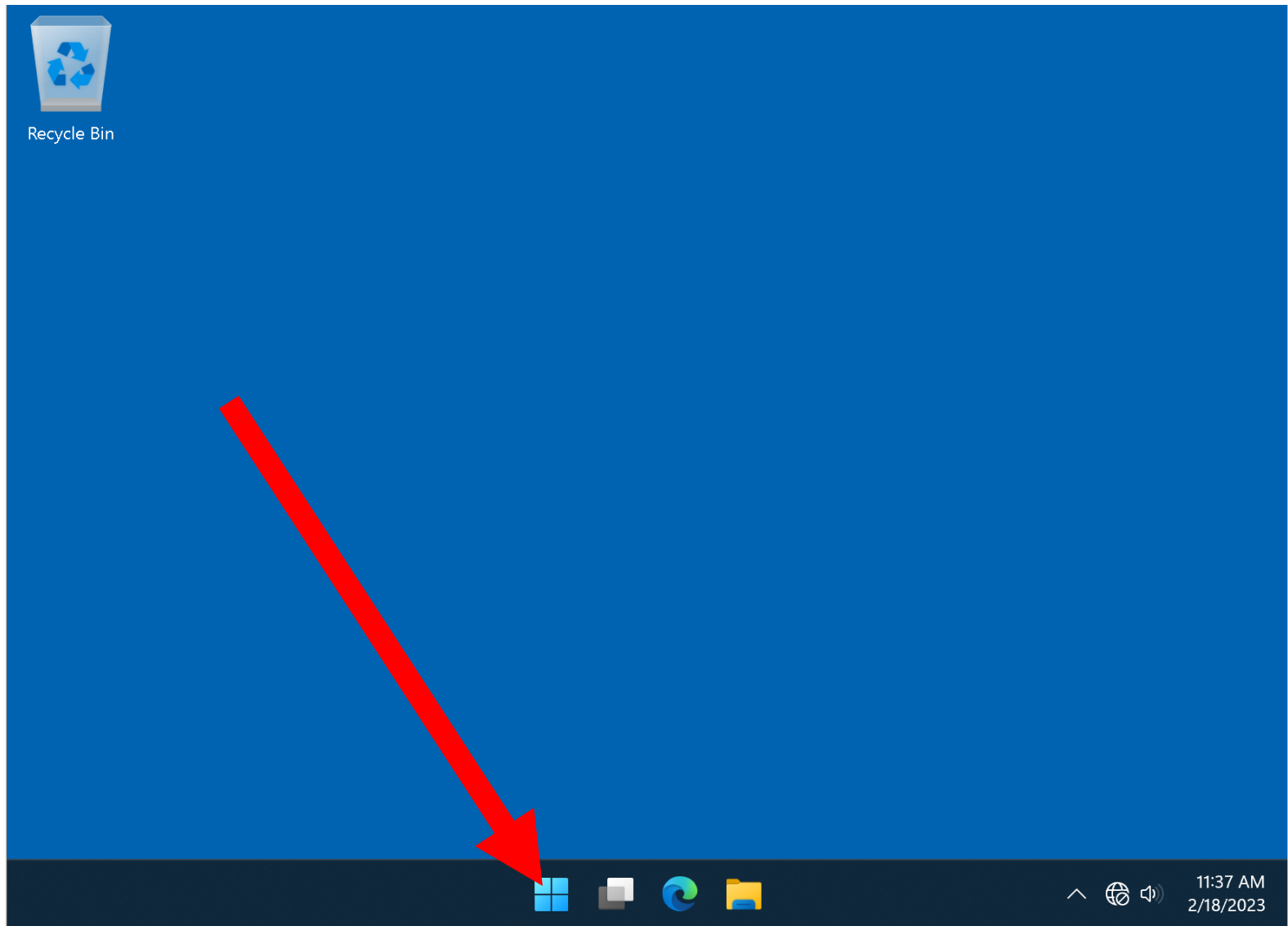
## BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 301 (continued):**  
From the client computer, tablet, or cell phone, go to either "Network Connections" or "Settings"

# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 302:**  
From a Windows.. computer, use the left mouse button to click on the "Start" button:

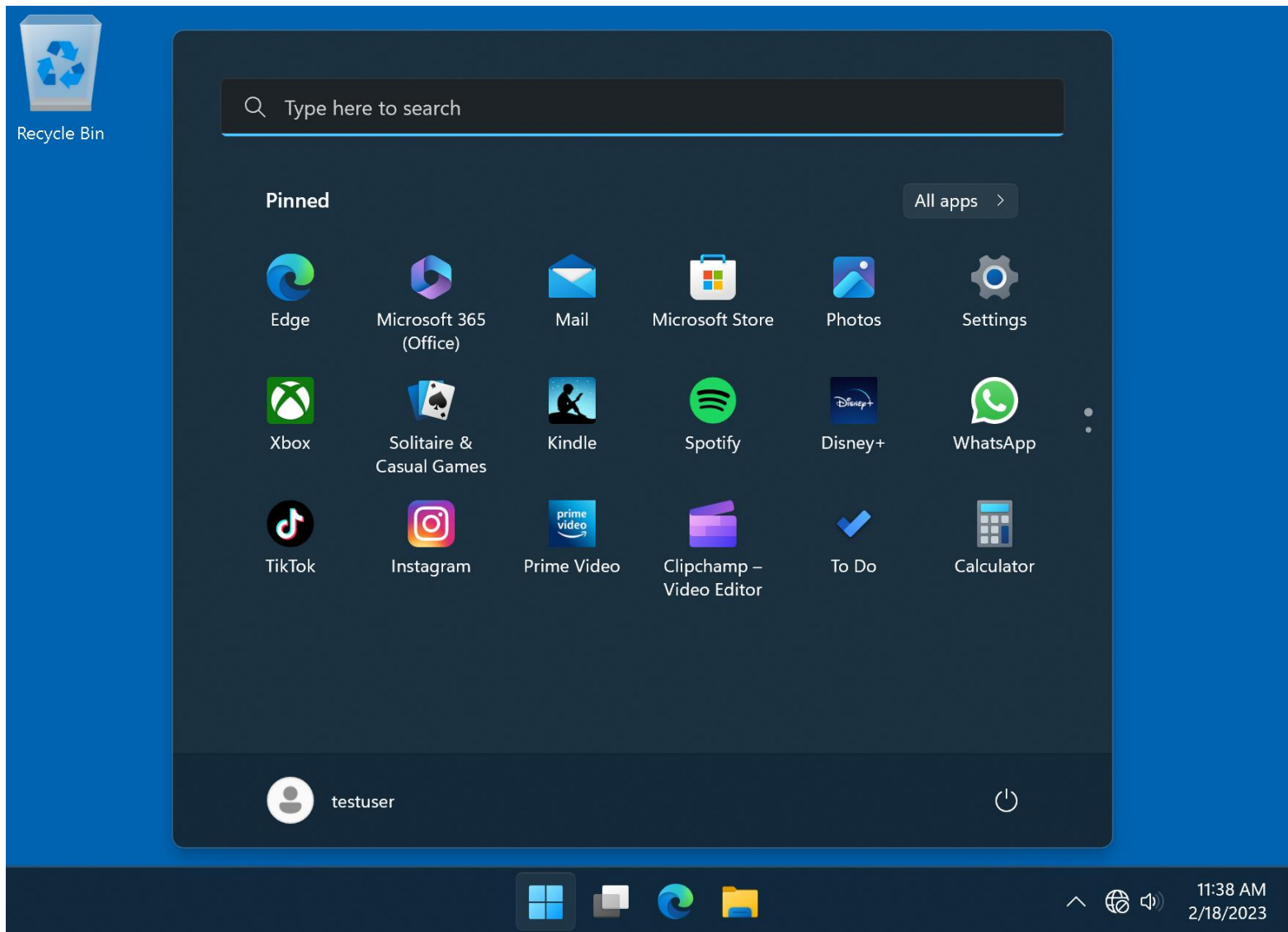


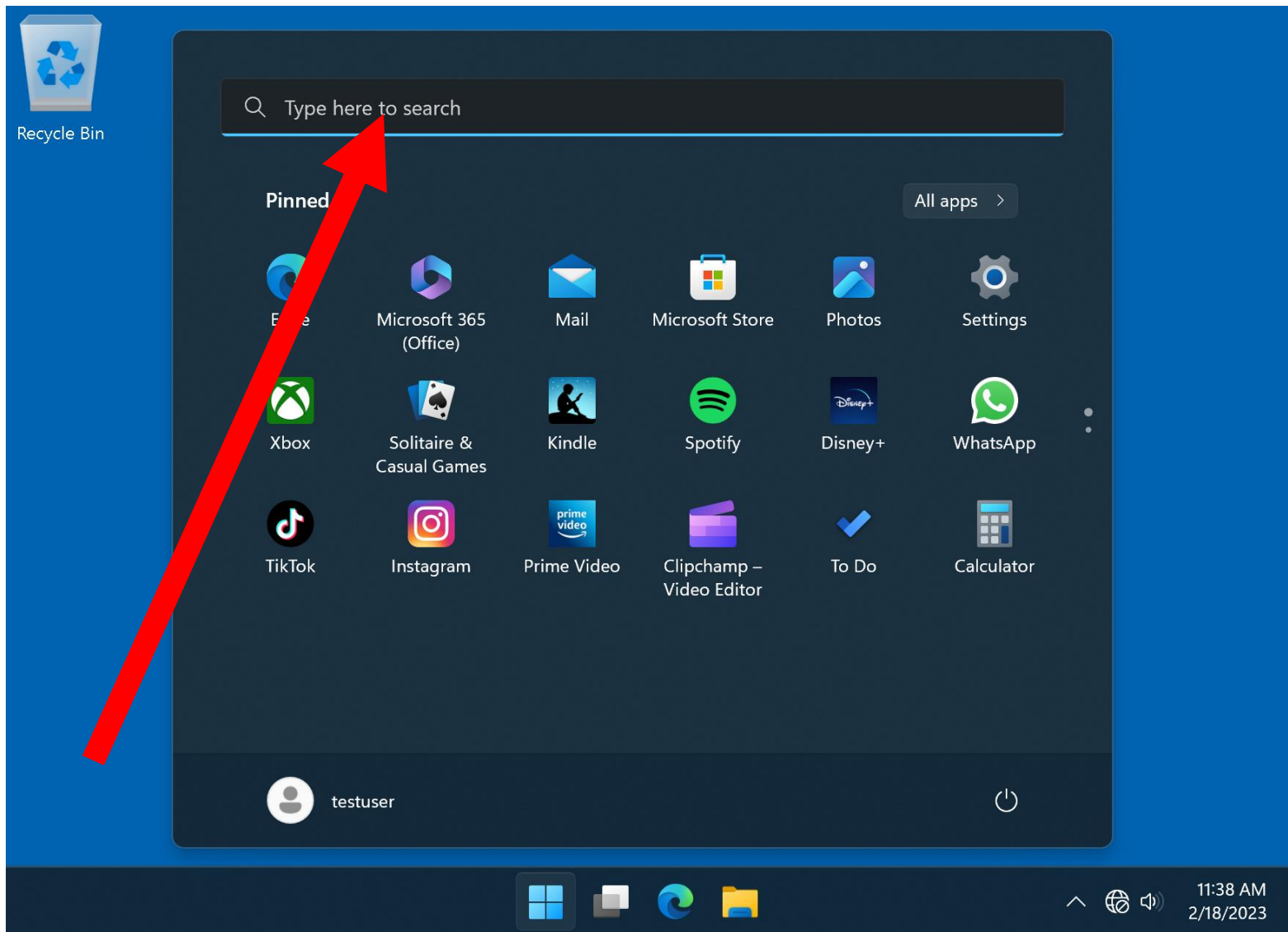


# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 303:**  
Click on the "Search" field:







# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 304:**  
A pop-up window will be displayed:



Recycle Bin

🔍 Type here to search

Suggested



Get Started



Microsoft Edge



Tips



Email and accounts



Snipping Tool



Check for updates



Paint



Themes and related settings



Calculator



11:39 AM  
2/18/2023

# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 305:**  
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 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 306:**  
Press the Enter key of the computer's keyboard.

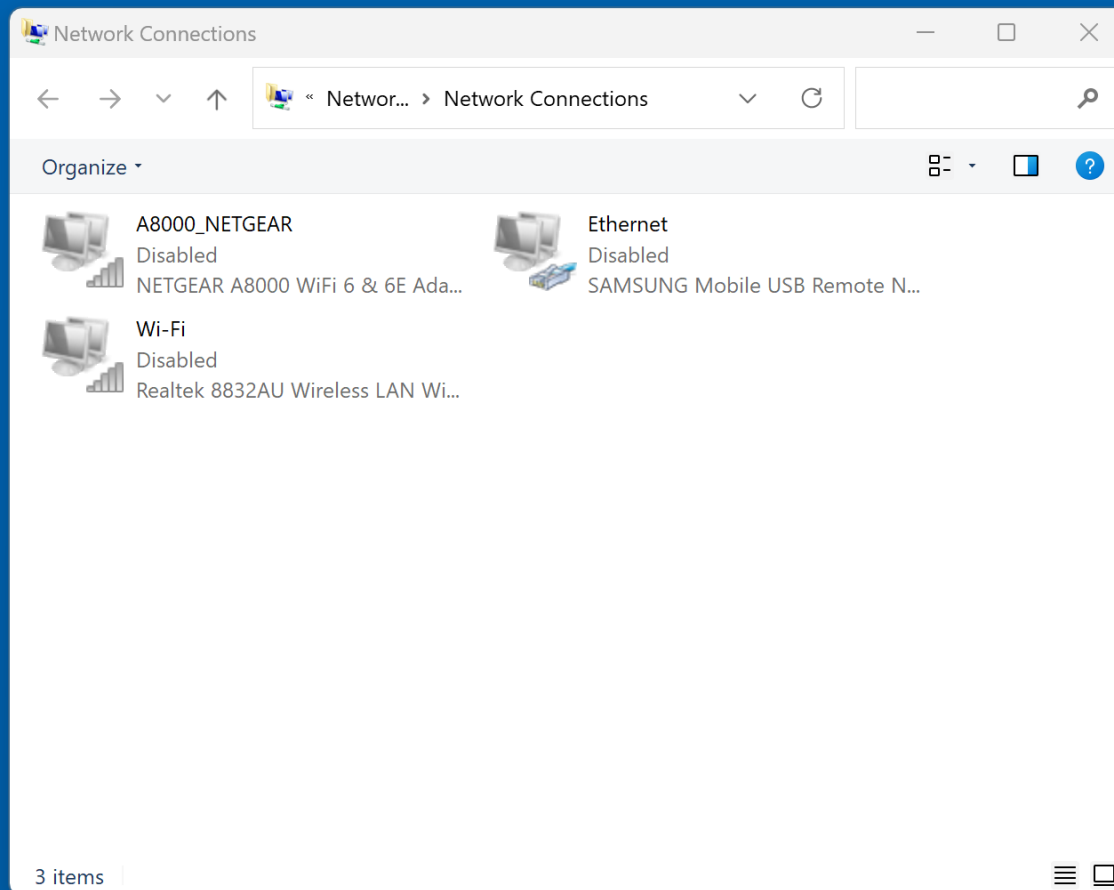
# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 307:**  
A "Network Connections" window will be displayed.





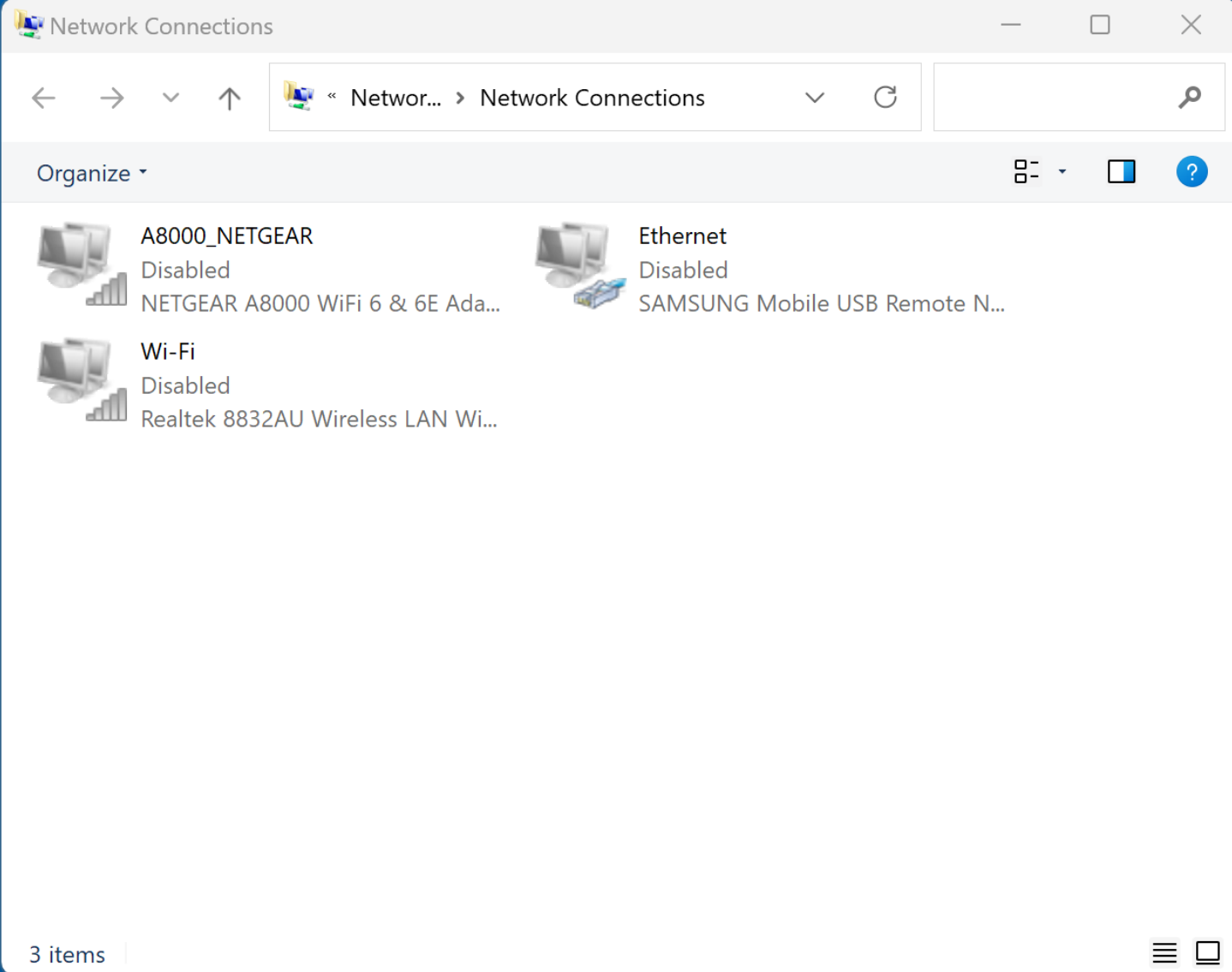
Recycle Bin

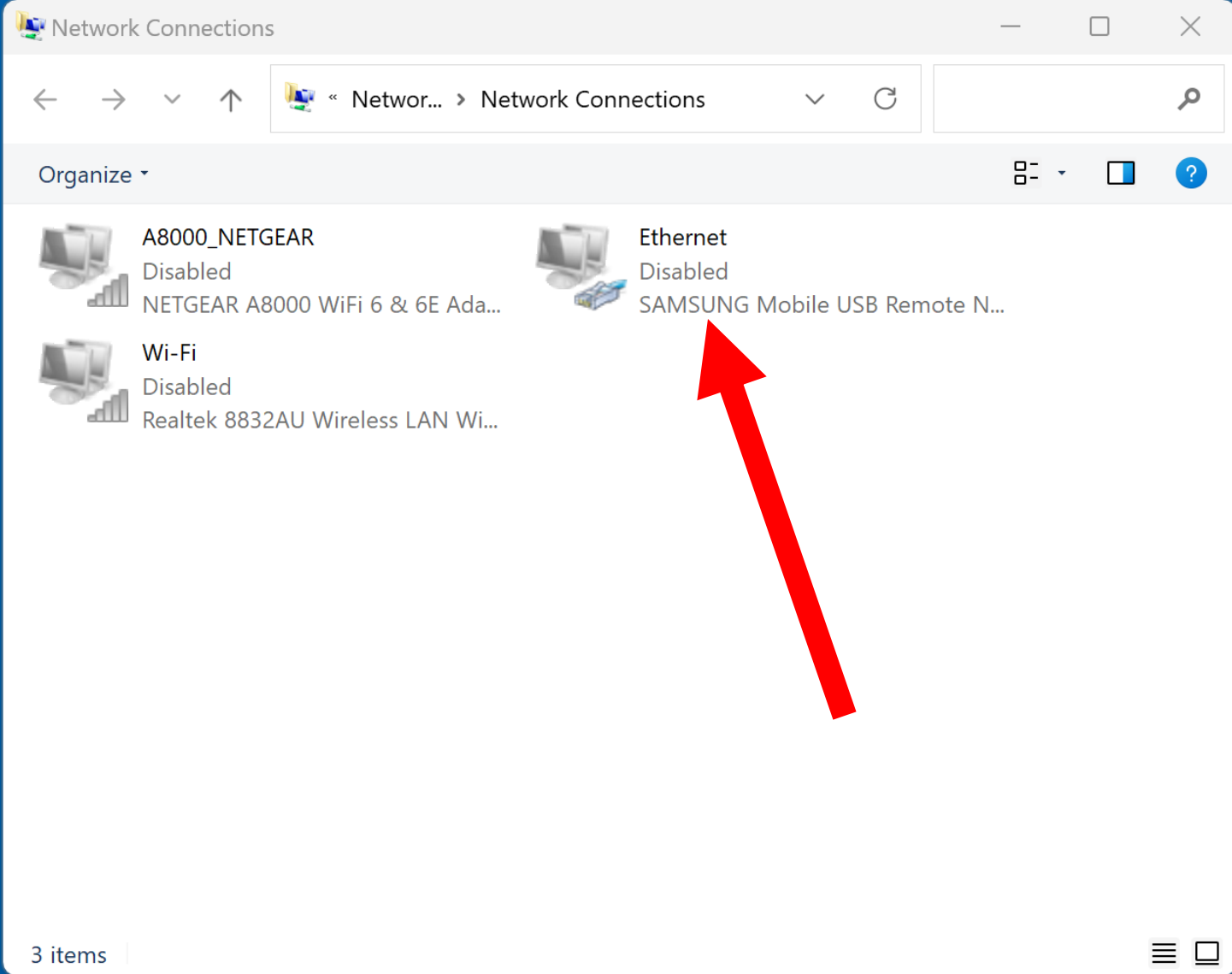


5:15 PM  
2/18/2023

## BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 308:**  
Locate the (virtual) Ethernet adapter that is named after the brand name of the Android cell phone:







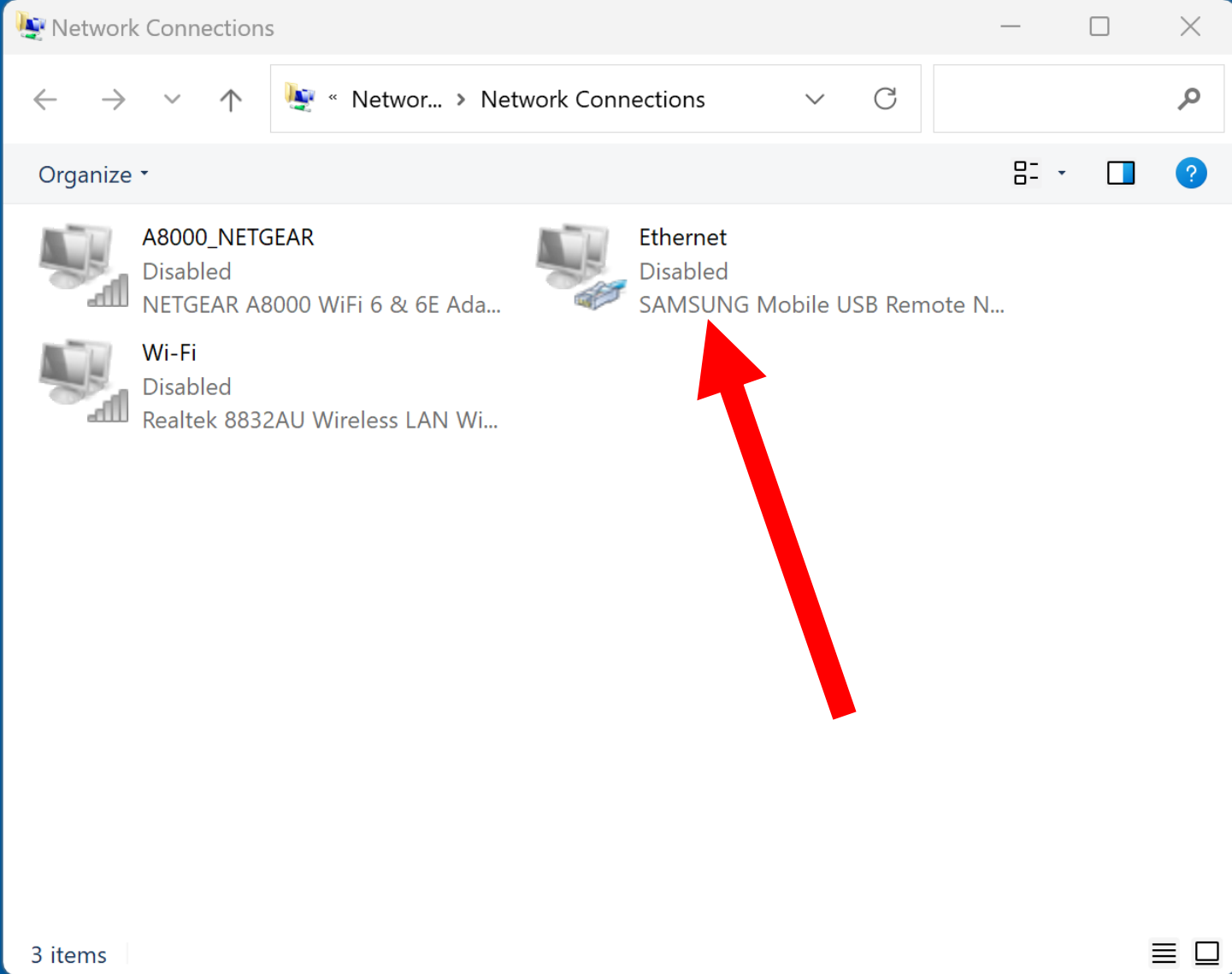
Ethernet

Disabled

SAMSUNG Mobile USB Remote N...

## BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 309:**  
Use the right mouse button to click on the (virtual) Ethernet adapter that is named after the brand name of the Android cell phone:



# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 310:**  
A pop-up utility menu will be displayed:





**Enable**

Status

Diagnose

Create Shortcut



Delete



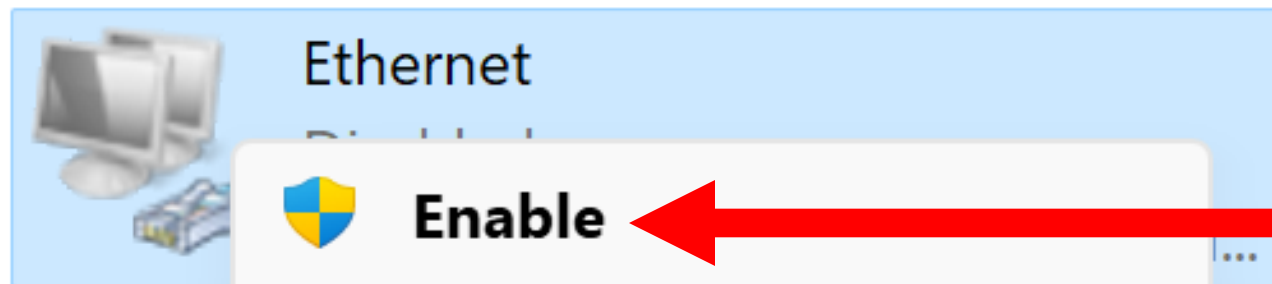
Rename



Properties

# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 312:**  
Use the left mouse button to click on "Enable":



**Enable**

Status

Diagnose

Create Shortcut



Delete



Rename



Properties

## BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 313:**  
The virtual Ethernet adapter that is named with the manufacturer of the Android cell phone will no longer be displayed as "Disabled":


Network Connectio... >

⌵ ↺

vice Diagnose this connection »

☰ ▾

Ada...



Ethernet

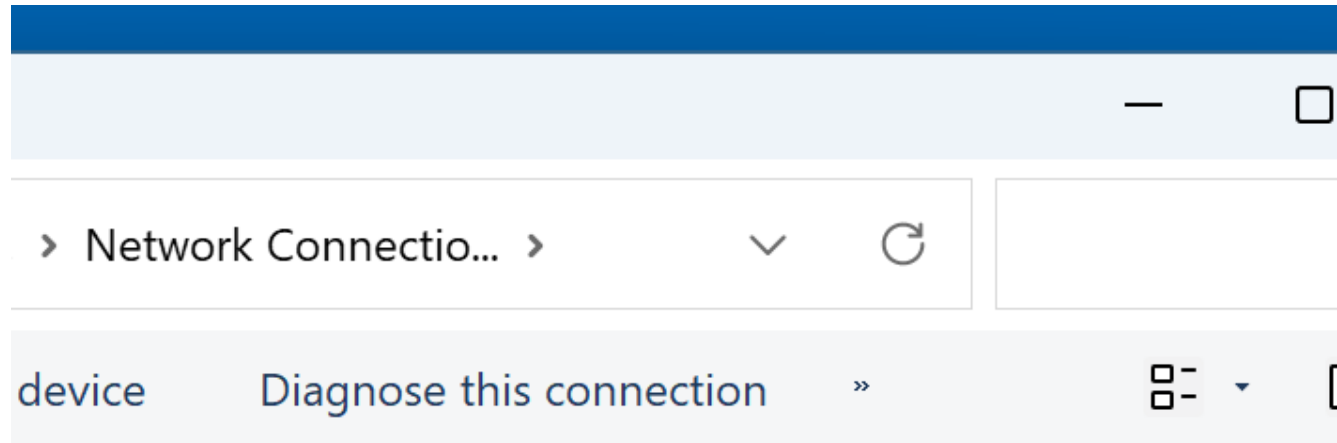
Network 49

SAMSUNG Mobile USB Remote N...

Wi...

## BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

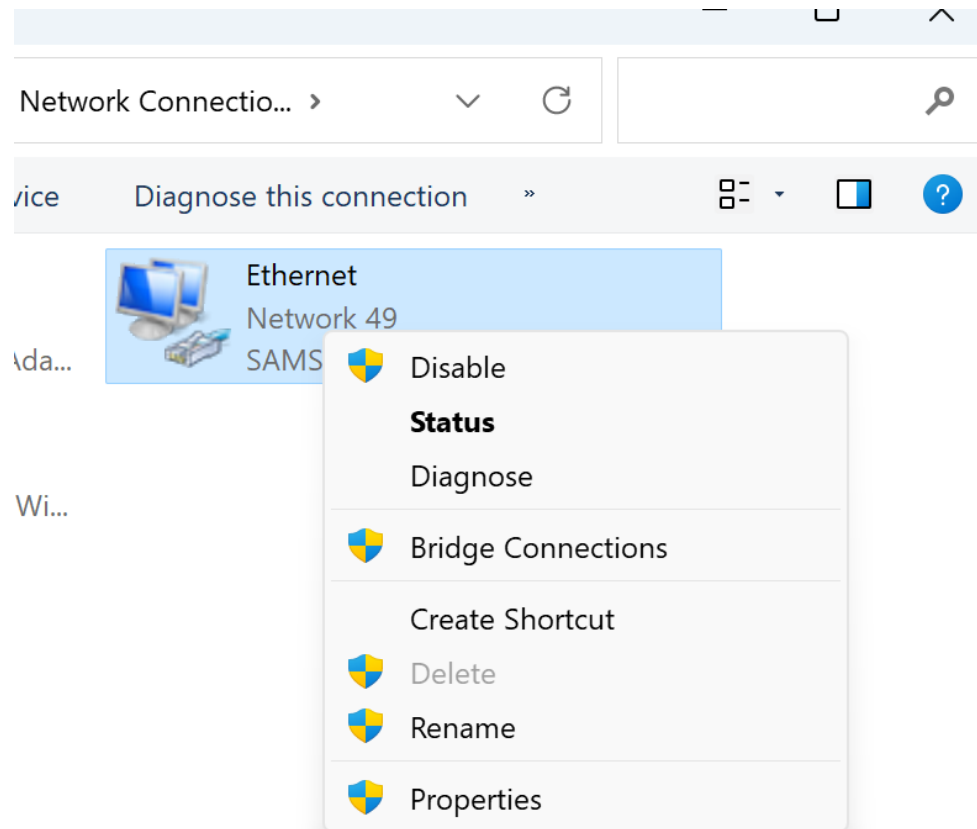
- **SMALL STEP 314:**  
Use the right mouse button to click on the (virtual) Ethernet adapter that is named after the brand name of the Android cell phone:



# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

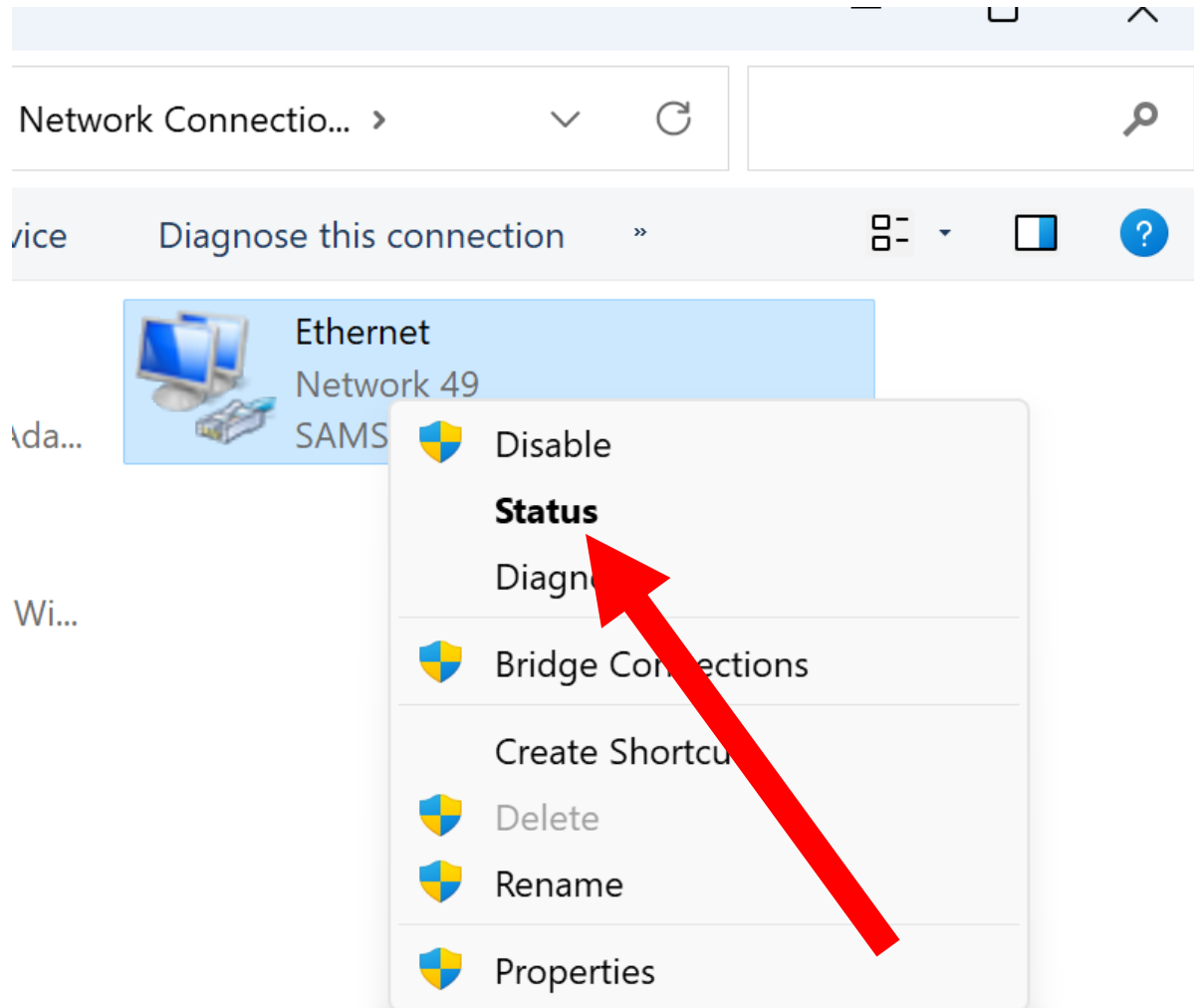
- **SMALL STEP 315:**  
A pop-up utility menu will be displayed:





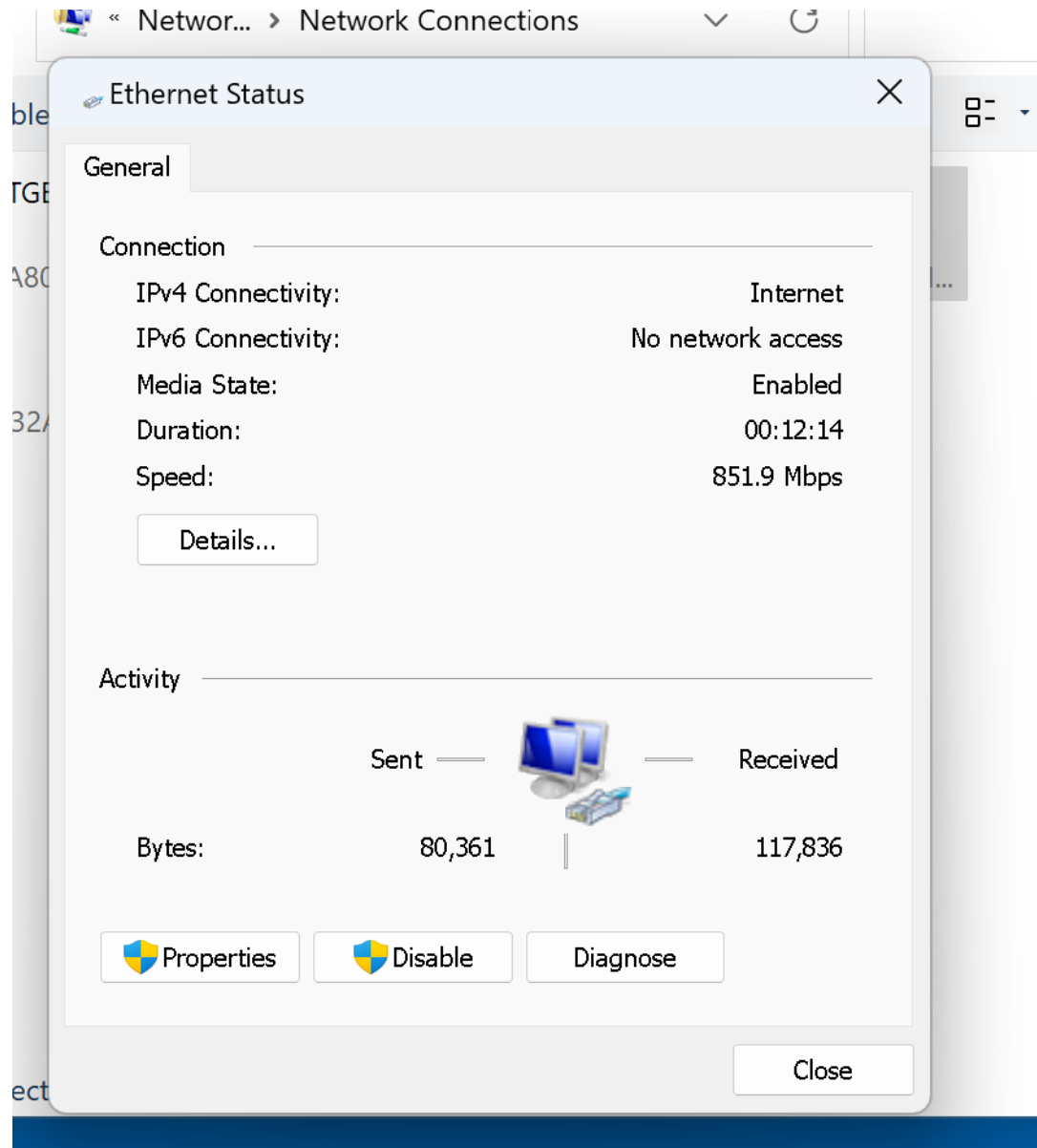
# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

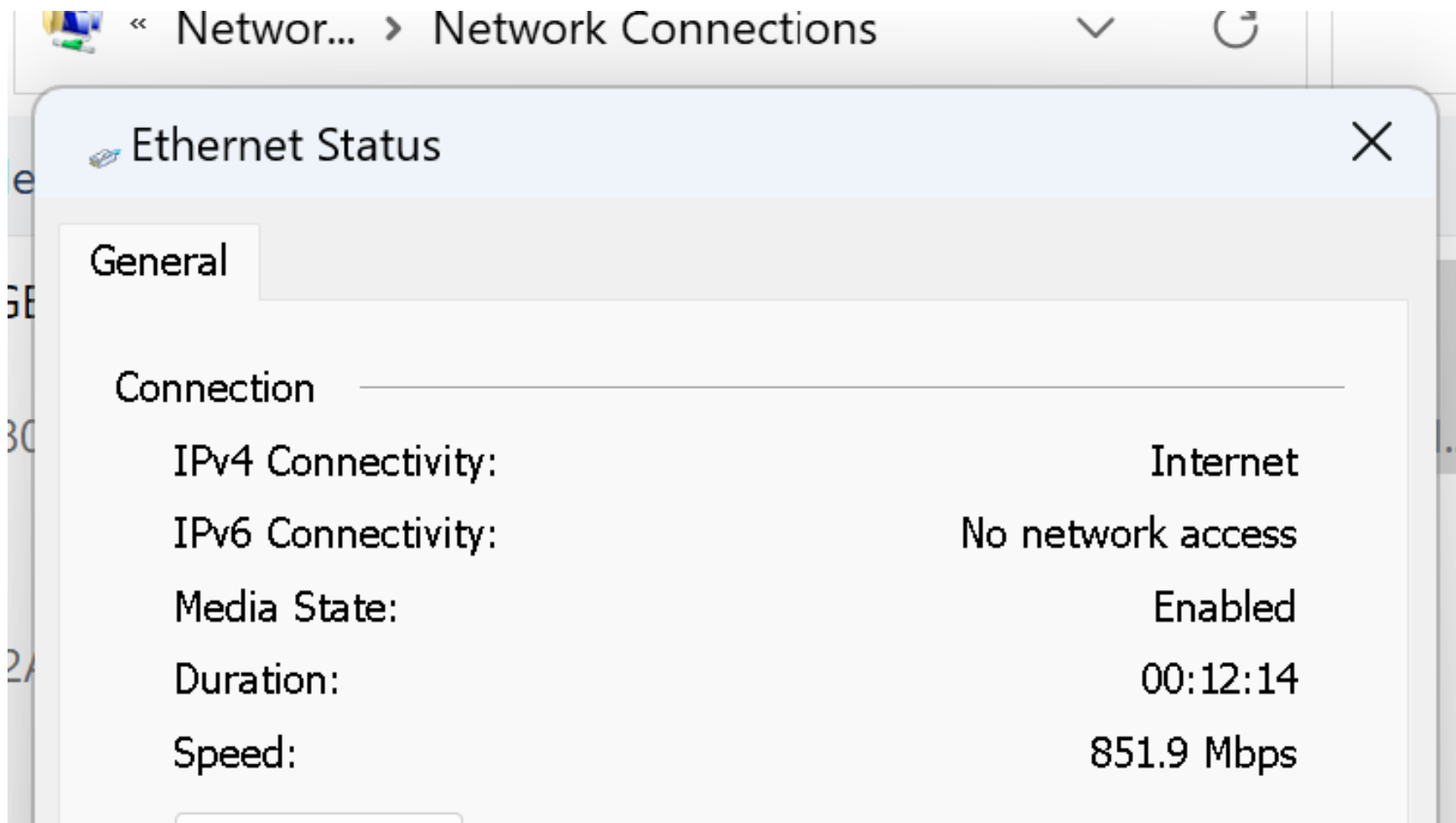
- **SMALL STEP 316:**  
Use the left mouse button to click on "Status" in the pop-up utility menu:



# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

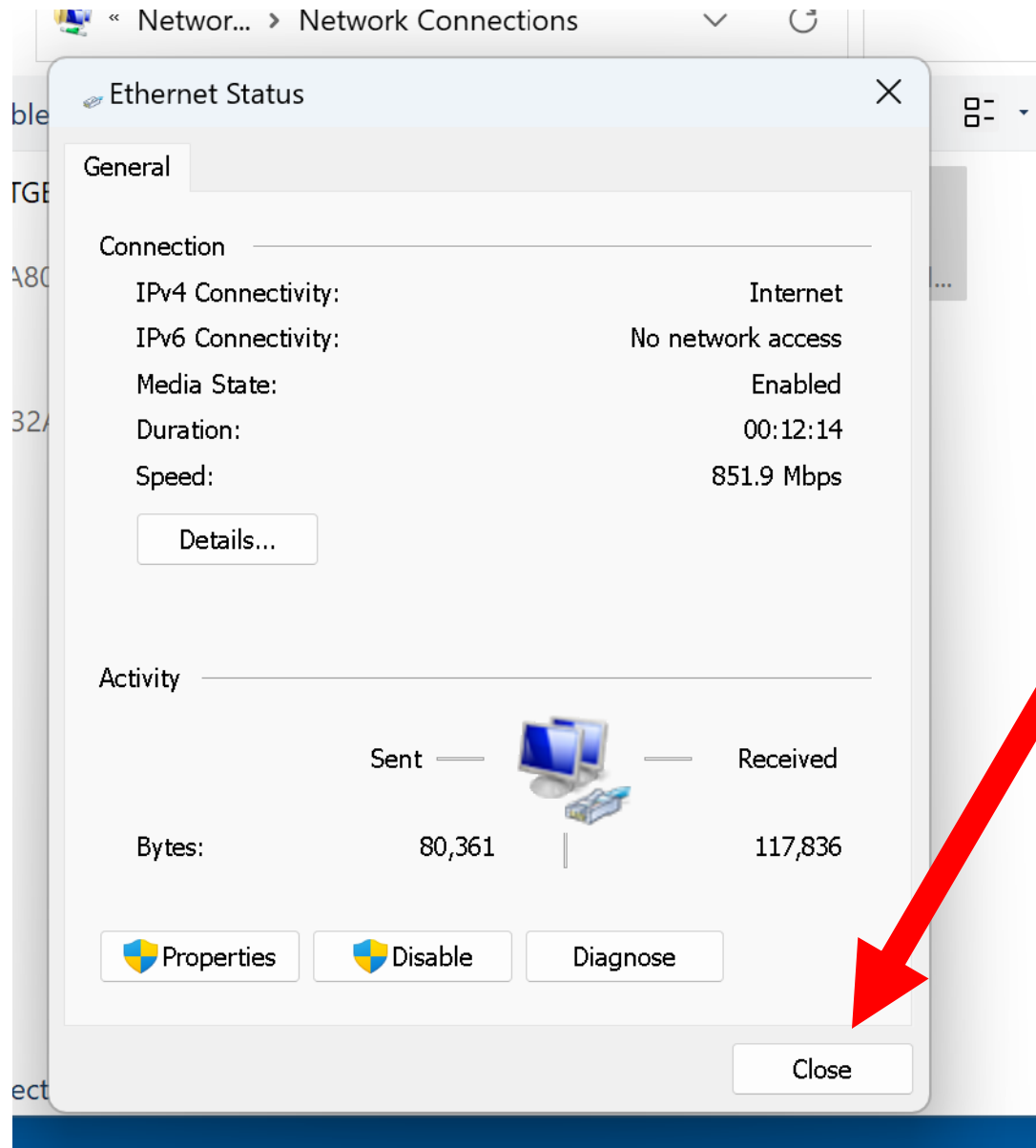
- **SMALL STEP 317:**  
An "Ethernet Status" box will be displayed





# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 318:**  
Click on the "Close" button of the "Ethernet Status" box:






Network Connectio... >

⌵ ↺

vice Diagnose this connection »

☰ ▾

Ada...



Ethernet

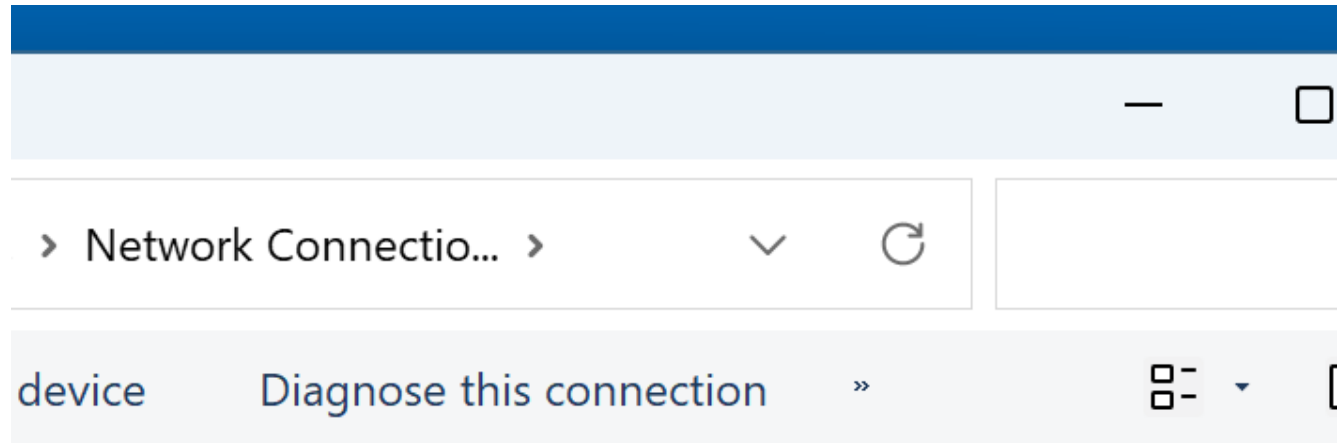
Network 49

SAMSUNG Mobile USB Remote N...

Wi...

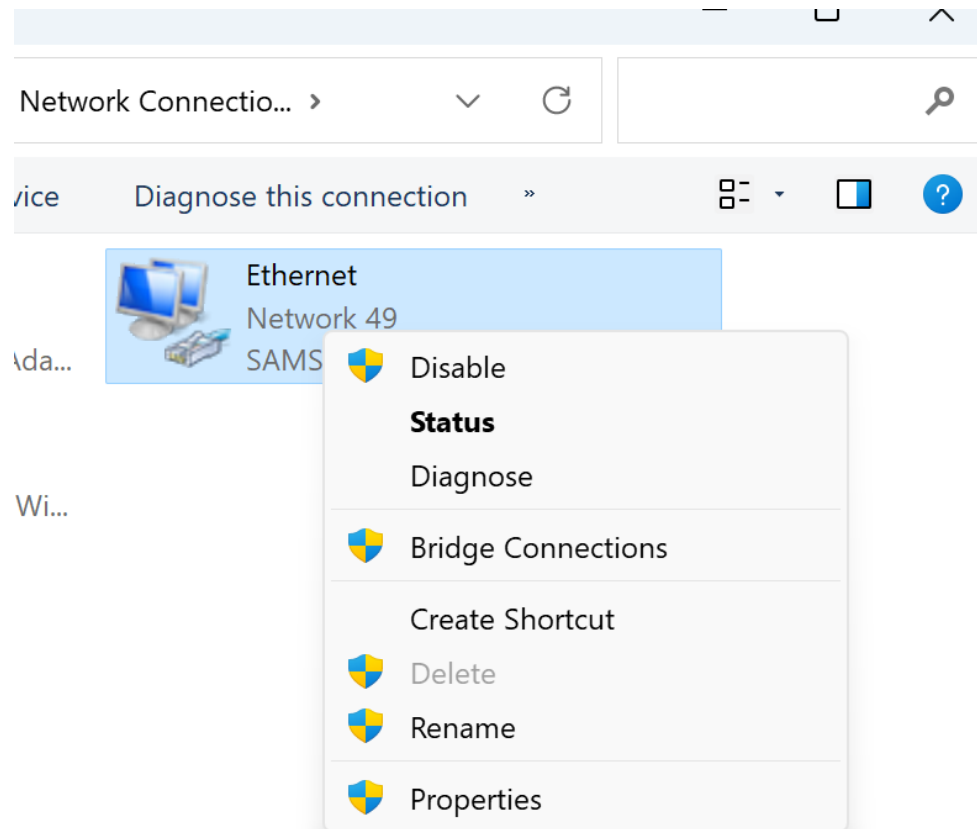
## BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 319:**  
Use the right mouse button to click on the (virtual) Ethernet adapter that is named after the brand name of the Android cell phone:



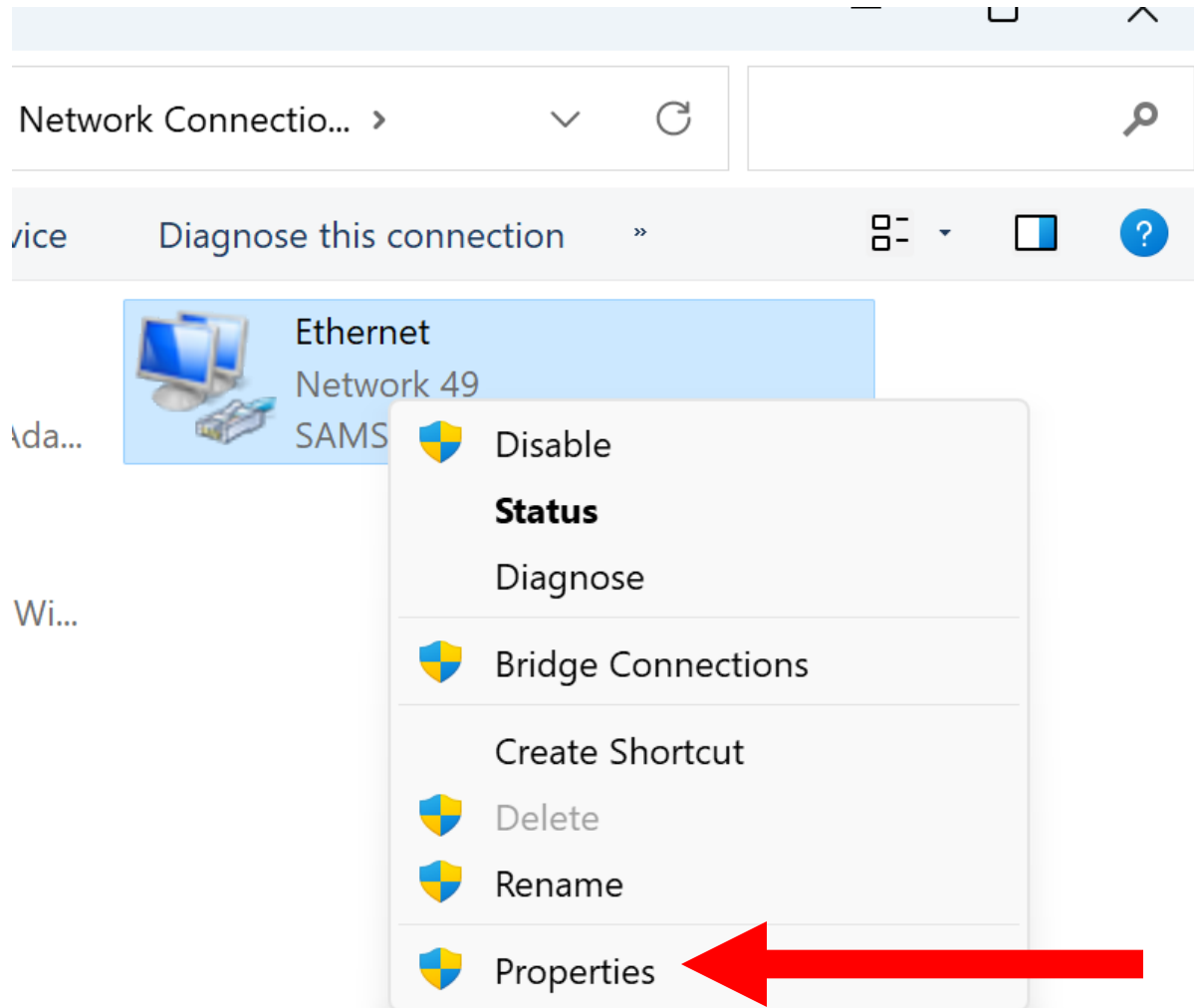
# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 320:**  
A pop-up utility menu will be displayed:



# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

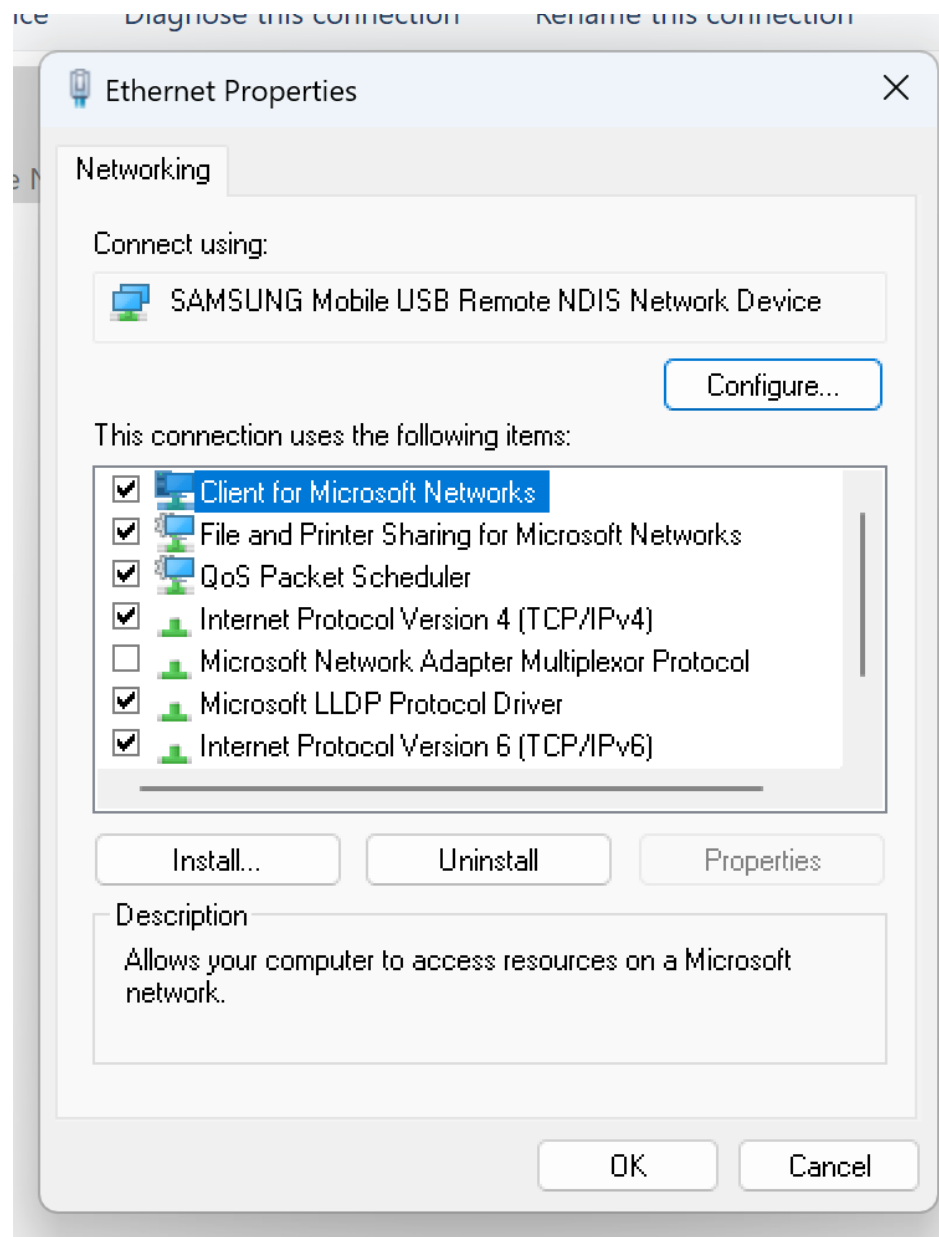
- **SMALL STEP 321:**  
Use the left mouse button to click on "Properties" in the pop-up utility menu:

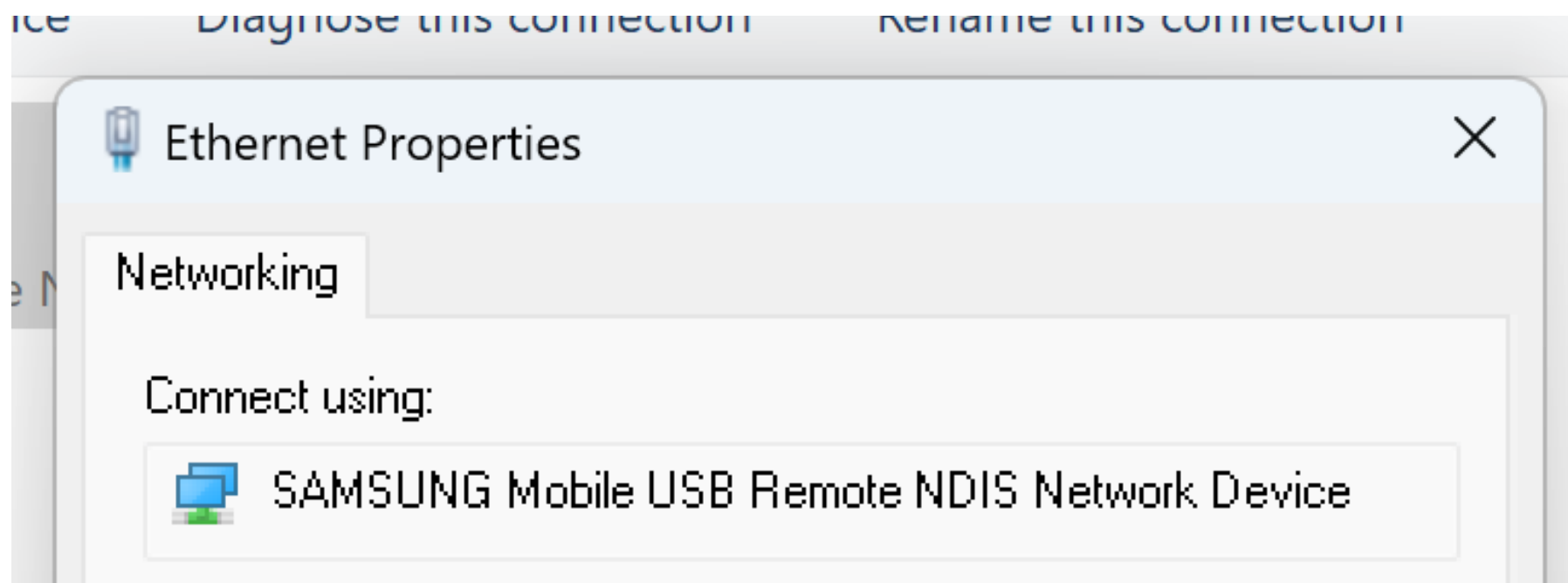


# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 322:**  
An "Ethernet Properties" box will be displayed:

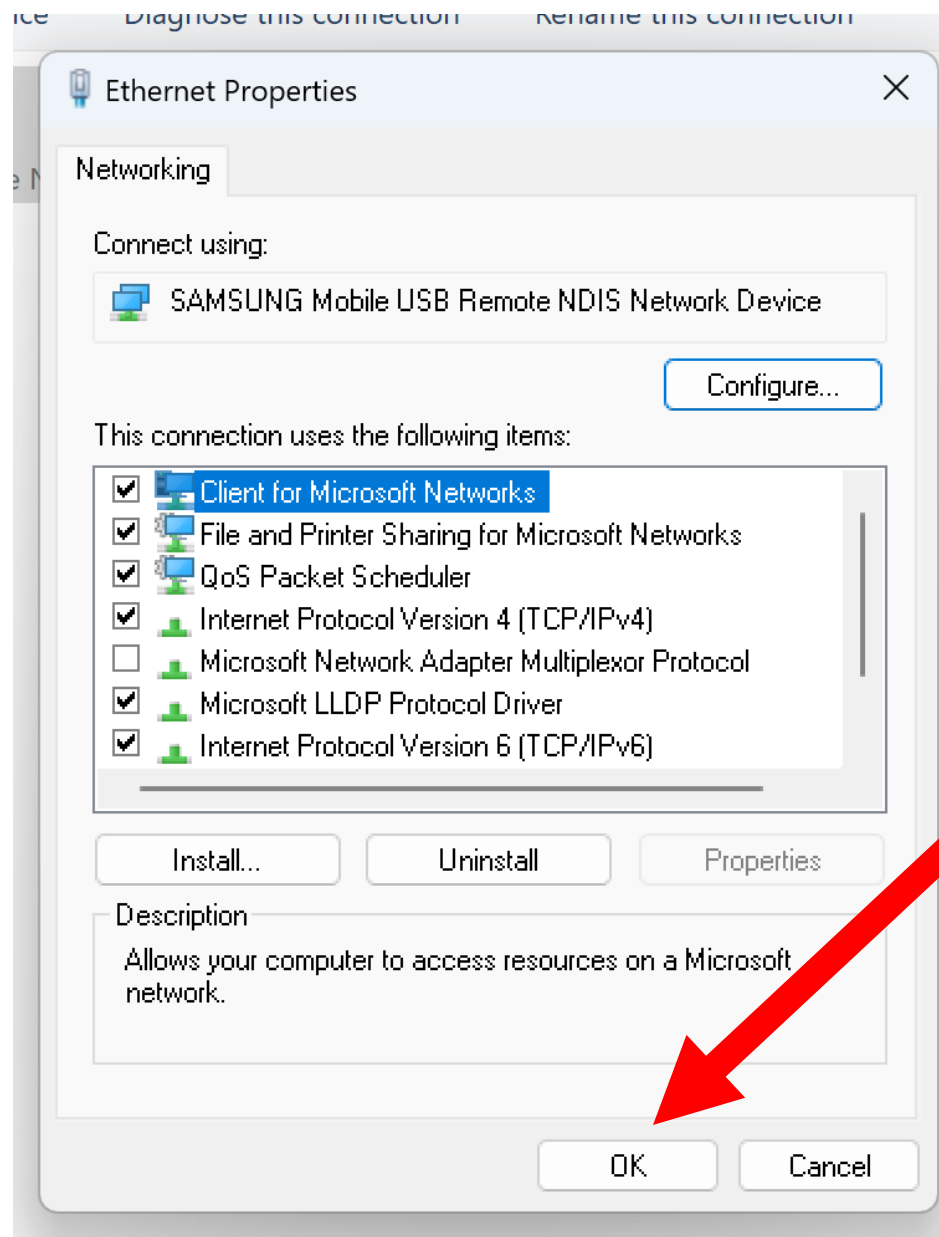






# BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 323:**  
Use the left mouse button to click on the "Okay" button of the Ethernet Properties" box:

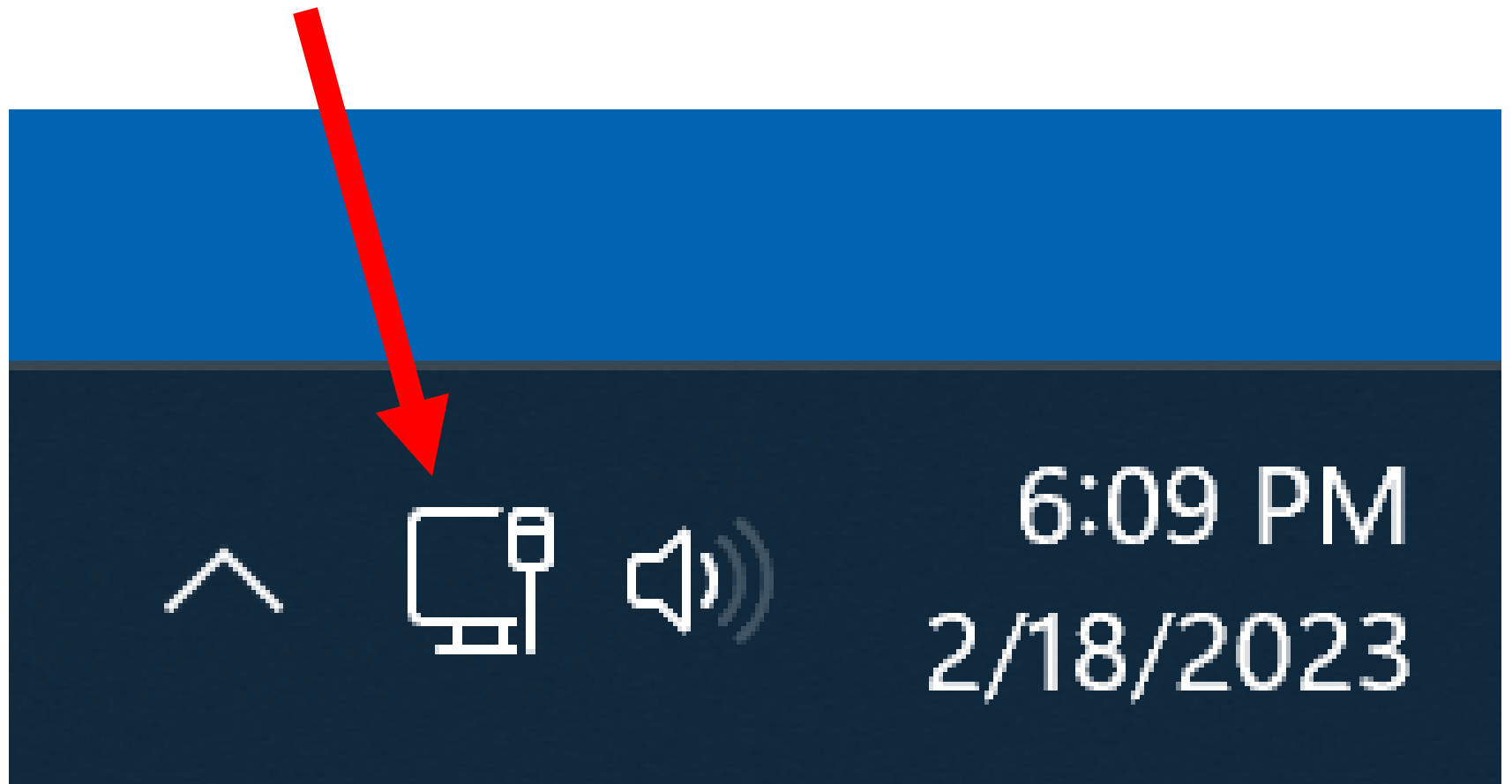


## BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 324:**  
Note that the "Notification Area" in the lower-right corner of the Windows.. "Desktop" now shows that an Ethernet adapter is connected to the Windows.. computer



6:09 PM  
2/18/2023



## BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 325:**  
Click on unused space in the Windows "Desktop" to close the list of "Wireless Access Points":



## BIG STEP 300 (Activate the tethered Internet connection from the client device) (continued)

- **SMALL STEP 326:**  
Close the "Network Connections" window by clicking on the "x" button in the upper-right corner of the "Network Connections" window.

