

Tethering A Computer Through A Cell Phone

Notice: Before doing this, talk to your cell phone provider, explain what you would like to be able to do (e.g., tethering a computer through your smartphone), and ask about potential costs that may be incurred and what can be done about them. If you take this step without making some form of arrangement with your carrier to manage costs, it can become expensive.

This step is intended for situations where you have lost power and communications, meaning you're isolated. If you have a laptop and a cell phone, you can possibly reestablish an internet connection. This will at least get you some basic communications.

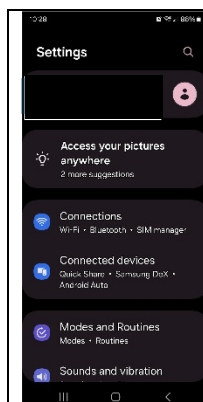
Mitigation

Contact your cell phone provider and look for data plans. This will depend on your provider, but some will offer plans with either shareable or non-shareable data. Many of these plans have unlimited data. These plans generally have a monthly cost, so you will want to take some time shopping for them.

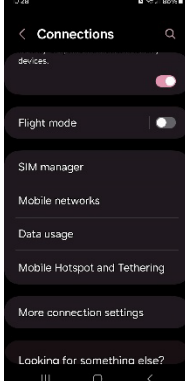
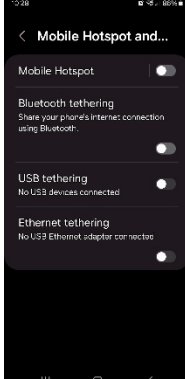
Another option may be that if your internet service is unavailable, the service provider can waive the fees and data limits to allow you to connect through your cell phone if the service is disrupted. You need to call the provider's customer service to make sure it can be done (sometimes yes, sometimes no).

Preparation

Having contacted your cell phone provider to get a decent data package, the next step is to set up the phone.



The first step is to find the settings on the phone and then look for the selection "CONNECTIONS."

	<p>You will see several selections here. You want the selection that says “MOBILE HOTSPOT AND TETHERING” or something similar.</p> <p>There are a few other useful settings here. One of the key ones is the “data usage.” Depending on what you’ve arranged, you may want to keep tabs on this to make sure you’re not using too much data.</p>
	<p>At this point, you will want to select the “MOBILE HOTSPOT.” If you need to connect via Bluetooth, USB, or an ethernet adaptor, that can be set up through here.</p>

IMPORTANT SECURITY NOTE: Unless you are completely isolated, your mobile hotspot is one of those connection points that people may try to hack. They may try to piggy-back on your service (meaning greater costs to you and potentially causing challenges depending on what they are accessing) or they may try to gain access to your phone to get access to personal data, credentials, etc.

When you set up your hotspot, follow these steps before you activate it:

1. Select the MOBILE HOTSPOT selection without turning it on. This will bring you to something that has a network name and password. **DO NOT SHARE THESE** unless you completely trust the other person.
2. Check the password to make sure it is strong enough. Often the passwords provided are either short or default passwords. These should be changed. Ideally, your password will be unique to this network and will meet the following criteria:
 - a. Combining upper case letters, lower case letters, numbers, and symbols.
 - b. ten characters or longer.
 - c. Is unique to this network and not used anywhere else.
3. While a strong password is desirable, it may be difficult to remember. In these cases, you can use a “passphrase.” This is essentially the same as a password based on a phrase or sentence.
 - a. Moderate: Iwenttothestoreformilk.

- b. Better:!!went!to!the!store!for!milk#
- c. Even Better:1!Went!2!the!St0re!4!m1lk#

4. If you will share a password, consider using a “one-time password” that will force the password to be reset the next time you start up the HOTSPOT.

Now that you’ve gotten to this point, you can look at pairing your device. This is not going to be a very fast connection. Most likely, you are going to use a Bluetooth or similar connection. You can make the connection at this point.

Ideally, you should use a VPN (Virtual Private Network) to protect your data from disclosure. Talk to your cell phone provider to ask if they offer this. Some VPNs can be free if you're more technically comfortable. Give this some serious thought.

HINT: You may find a section on the mobile hotspot screen that says, “MOBILE DATA SHARED TODAY.” If you are the only one who is supposed to be using your hotspot, check to see that only your device name appears here. If there is another device, record its name, turn off the tethering, change the password, and then start over. If you are at a relief station, you may want to report this to one of the staff there to pass to security.