October is National Cyber Security Awareness Month

Turn off Wi-Fi and Bluetooth

Wi-Fi and Bluetooth wireless technologies are very useful, and they are often set up to connect seamlessly to other devices or networks with no input from the user. As you move from home to Starbucks, your network connection just works, or from a headset to your car, Bluetooth keeps your phone calls connected. What you may not realize is that these radio protocols are constantly announcing your presence, and they are capturing information about other wireless protocols around you. These protocols work by looking for "beacons" that match your saved connection profiles. All of this activity is happening constantly and is visible and track-able by anyone who is interested. There are even devices, such as the Wi-Fi Pineapple, that take advantage of the beacons to trick your phone into connecting and monitoring your web traffic.

What can you do?

Turn off your Wi-Fi and Bluetooth if you aren't actually using them. Disable "automatic" connections to your wireless profiles, and save only wireless profiles that you actually need to save. When you have Wi-Fi profiles saved on your device, your Wi-Fi radio is sending out requests for those profiles and essentially advertising what coffee you prefer, the hotels you've stayed at, where you work, airports you've visited, and the name of your network at home.

If your mobile device or computer is set for "automatic" connections, anyone interested could say, "I'm that network," and connect to your device, then wait for your network requests to pass through their hands. And for various smartphone applications, the combination of GPS, Bluetooth, and Wi-Fi offer great data sets for companies like Apple and Google to map out where you have been and what is around.

So turn off the radios you aren't actively using to ensure that you are connecting to the network or device which you expect to. Doing so will decrease risk, increase privacy, and as an added bonus, improve battery life too.

PRO-TIP: Turn off Wi-Fi and Bluetooth when you leave the house, and only turn it on again when you are planning on using it.