

Connected Home Devices: The Internet of Things (IoT)

A little over ten years ago, we only accessed the Internet through a laptop or a desktop computer. Then, we added mobile phones and tablets to our list of connected devices. Today, we have even more connected devices. According to estimates, there will be over 30 billion devices connected to the Internet by 2020. The list of Internet connected devices, or “internet of things” (IOT), keeps growing. Today, IoT consists of everyday devices that are connected to the Internet, such as fitness trackers, vehicles, smart televisions, doorbells, light bulbs, home security systems, thermostats, and refrigerators. Basically, if it is not a computer, smartphone or tablet, and it connects to the Internet, it can be called an IoT device.

Most people probably do not consider their IoT devices to be a security threat. These devices are more accessible and make managing our lives simpler, but most of the companies behind these new devices are not designing them with security in mind. Leaving IoT devices unsecured, as with any Internet connected device, is like leaving the brand new and most technically advanced lock you just installed on your house’s back door unlocked. It gives attackers access to your personal information and the potential to further compromise other devices on your network. It also gives attackers the means to propagate their attacks onto others by using your insecure devices to attack other internet devices.

So, what can you do to enjoy the functionality of IoT devices and remain more secure at the same time? The following tips may help you in these endeavors:

- Know what IoT devices are connected to your network.
- Consider only purchasing devices that you need to use.
- Isolate IoT devices from other devices on your network by creating a separate network just for them. This protects your other devices if your connected IoT devices are compromised.
- Update the device’s software regularly, if possible.
- Replace default passwords with unique and strong ones of your choosing.
- Configure security and privacy options, such as enabling encryption and limiting the information your devices share.
- Replace insecure IoT devices with more secure ones. Seek out reviews on these devices that address security features and patching support to determine which ones may have a reasonable baseline of security.