I am a Cyber Investigator and here are some issues I have seen.

The hacking world is excited about the availability of and the ease of hacking IoT devices.

I personally feel that most IoT devices should be banned until we have a 100% IPv6 network (still about 15 to 20 years away) and have a much better overall security program. Until that hackers will continue to use IoT to hack and cause issues in the internet. An 10-12 year old recently showed in a science project how he could use an IoT device to hack into a school system.

First – all sold devices with embedded IoT technology should be sold with a warning and a method of turning off the IoT.

Reason – IoT devices are mostly designed to automaticially connect to the internet to report to the manufacturer. Most use IPv6 ICMP v3 neighborhood ping and access which the hackers have successfully used to get into non IPv6 networks and use for criminal behavior.

Second - IoT devices can lead to personal information loss and thief.

Simple – they are easy to hack and use common keystrokers or screen grabbers without any notice. I recent attack was through a refrigerator with an unknown IoT wifi allowed a hacker to push a DDOS attack against a political site and shut it down for hours. Even if an IoT device is in a home it can be used and botted to the advantage of criminals, worldwide.

Third – They can over tax and run of the internet usage high which costs in excessive bandwidth usage.

Fourth – IoT embedded devices are about 90% unprotected and cannot be protected from WIFI hackers.

This can allow criminals to turn things off or on, including most internet security devices, door locks, garage door openers...etc

There have been incidents where security alarms have been turned off allowing criminal entrance into a "secure" area, home and or offices.

Fifth – IoT hacking can easily lead to compromises to Home, company and Industrial controls. A recent IoT hack allowed several worldwide banks to be slowly drained of millions of dollars.

These are just a few issues with IoT devices and the IPv6 enviroment.

I have a friend that got a new refrigerator and saw his wifi going crazy, He found the IoT card and removed it so it is no longer in usage. The issue stopped.

This should be an option and people should NOT have an IoT device forced on them in any manner!

If I can help further, please reach out.

My Best - Tim

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