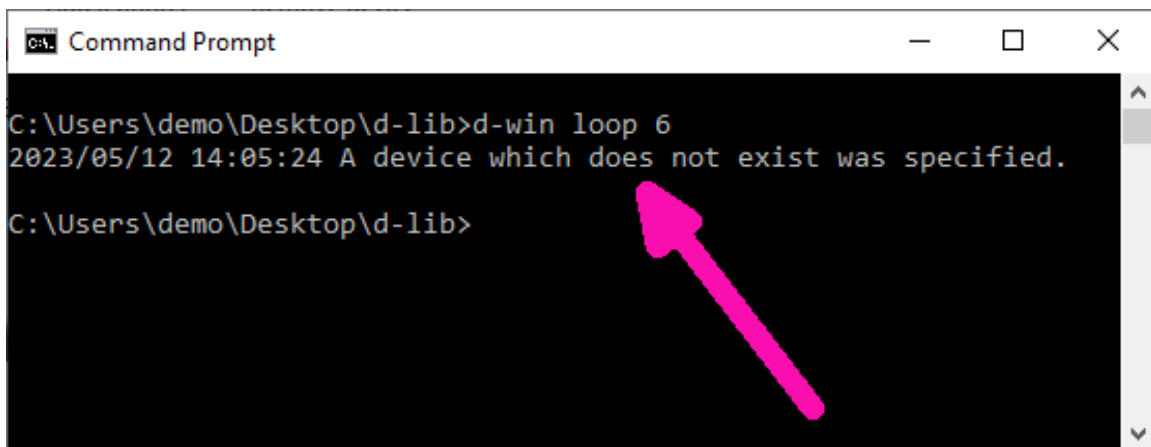# Dongle Wars: The Prolific Menace

The Scenario

So I was upstairs, setting up to make a short D-Lev kit video. I noticed that the kit #0 software was rather old and needed updating, so I plugged the kit USB serial dongle into it our Windows 10 laptop, download the latest command line librarian from the support page, unzipped it to a directory on the desktop, and opened a terminal window there, naively anticipating an uneventful minute or so of EEPROM pumping.

The Problem

The librarian `ports` command revealed a single COM3 serial port with index 0, which was the librarian default – so far so good. But the `view -k` command returned a strange error message that I'd never seen before. Thinking maybe it was a defective USB serial dongle, I unplugged the D-Lev and plugged another known-good dongle into the laptop, with the white and green RX and TX wires connected via a 1k resistor (one could just use a plain wire here too). A `loop` (diagnostic loopback) command returned the same error message:


What fresh Hell? This was the original dongle, and in the past I'd used this laptop to compile the Windows C++ librarian and pump the odd kit, so it was clear that something else had changed. I panicked a little, imagining the cross compiled librarian Go code was to blame, and didn't know where to even start with a problem like that. After some thought I opened the Windows Device Manager to check to see if there were any driver issues, only to find this waiting for me:
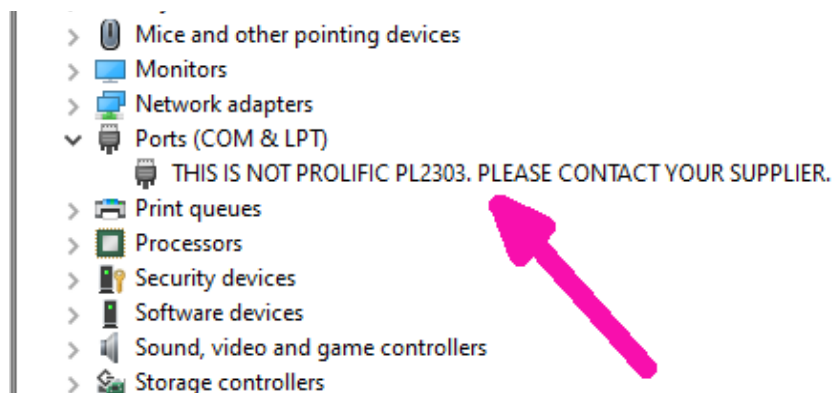
Double clicking it, they were trying to tell me something I didn't know:
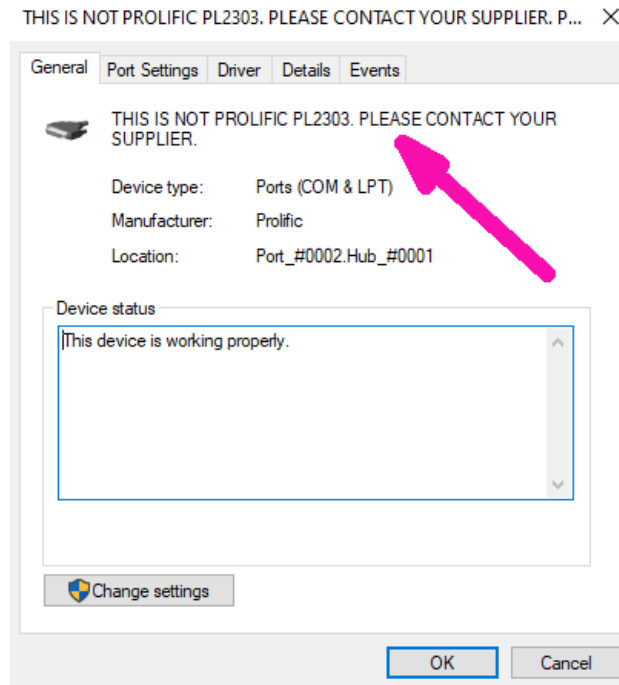
I should have noted or screen grabbed the driver version, it was dated 2022 something. "This device is working properly" LOL.

The Solution

A brief web search suggested rolling back the driver, but there were no other versions in the driver list to pick. Another hour or so of web searching (this modern world) indicated a much older (2008!) driver v3.3.2.102 was the ticket, but of course Prolific has suppressed copies of that floating around too. This also seemed to be associated with a "Code 10" issue, wherein Prolific in their wisdom decided to just drop support for some of their older chips that were being pirated, leaving even legit chip users high and dry. One site recommended a program which would remove any new borked drivers, install the old working driver, and prevent Windows from ever updating it. The installer is on this fascinating drag racing site, it's free with the option to donate:

https://www.ifamilysoftware.com/Prolific_PL-2303_Code_10_Fix.html

I downloaded, installed, and ran it, following the directions on that page closely. After a reboot the Device Manager nastygram was gone and the librarian was working once again:
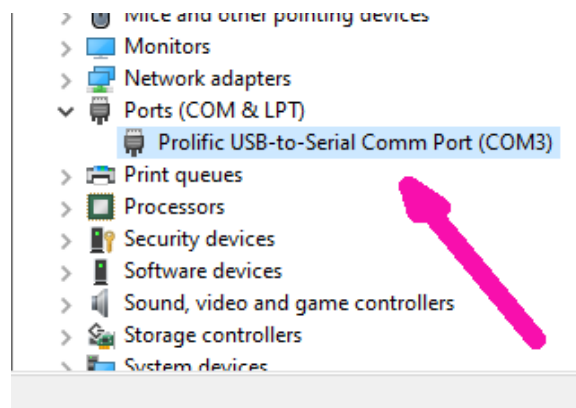
Epilogue

Prolific has a history of antisocial behavior, who knows what loutish stunt they'll pull next? How am I supposed to know if a tiny chip in some random dongle is genuine or not, or merely a bit too old? They don't seem to care that relative innocents are being caught in the crossfire of their paranoid war on counterfeit ICs. And big thanks to Microsoft for allowing Prolific to replace the old working driver with the newer borked driver via Windows Update.

Coming soon to a Mac near you too, perhaps. My advice is to run, don't walk, to the Linux side of the force, where this driver is generic, corporate malfeasance is rare, and system updates are very friendly and entirely under user control. Needless to say, but I will go out of my way to make sure that I never buy anything that has even the slightest chance of containing a fake – or real! – Prolific chip, and instead will endeavor to pick something like the Silicon Labs CP2102. There are plenty of fish in this sea, and it's hard enough getting things to work without having bad faith actors in the mix.

My video didn't get made that afternoon, and Prolific can go jump in a lake.

2023-05-14 – EDW