Hey there,

All this started with plugging a new hardware into a USB port of a Windows 7 system.

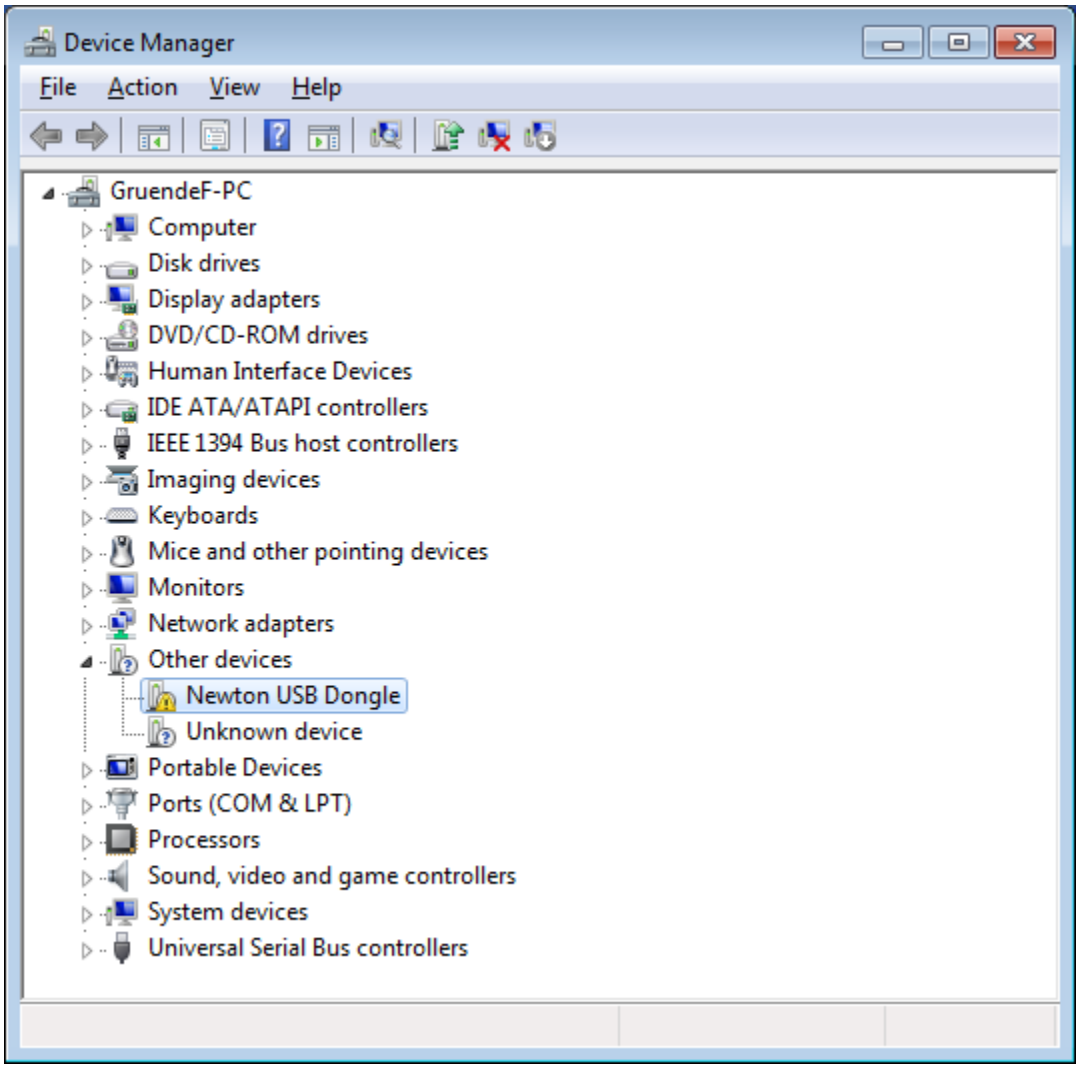
Ah, well, not quite. ..

Actually it started when, while enjoying a nice glass of decent single malt whisky, I realized that such hardware might be possible. And it might even be affordable.

Note that it is far from finished. On the opposite, it's still very much under construction, but I'm pretty confident that before long it'll see the light of the day.

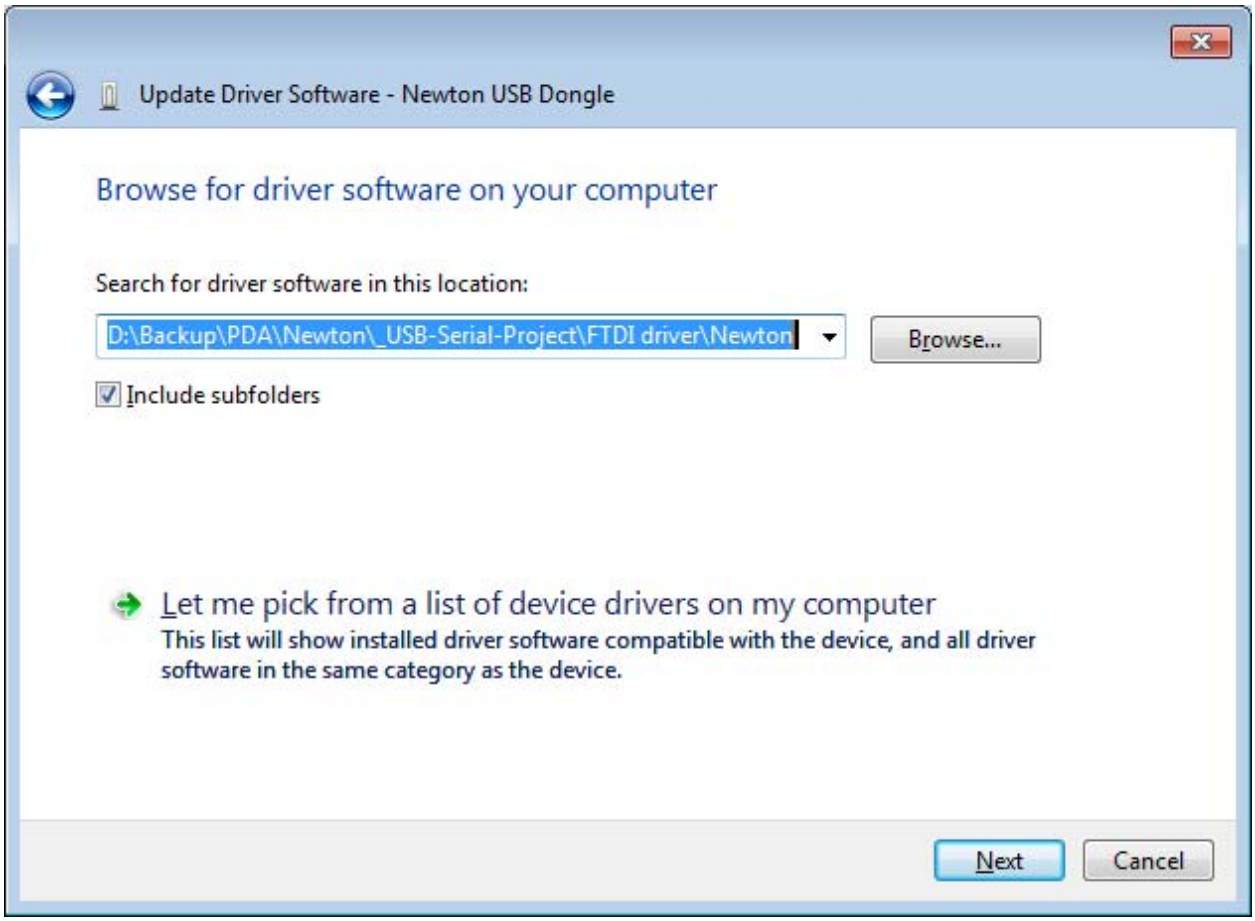
So, let's roll back to when I plugged this animal into a USB port of my Windows 7 computer for the second time. The first time I had been using a USB cable that only contained power wires and no data wires, which I noticed after only two nights of desperate hardware debugging…

Hey! What do we have here?



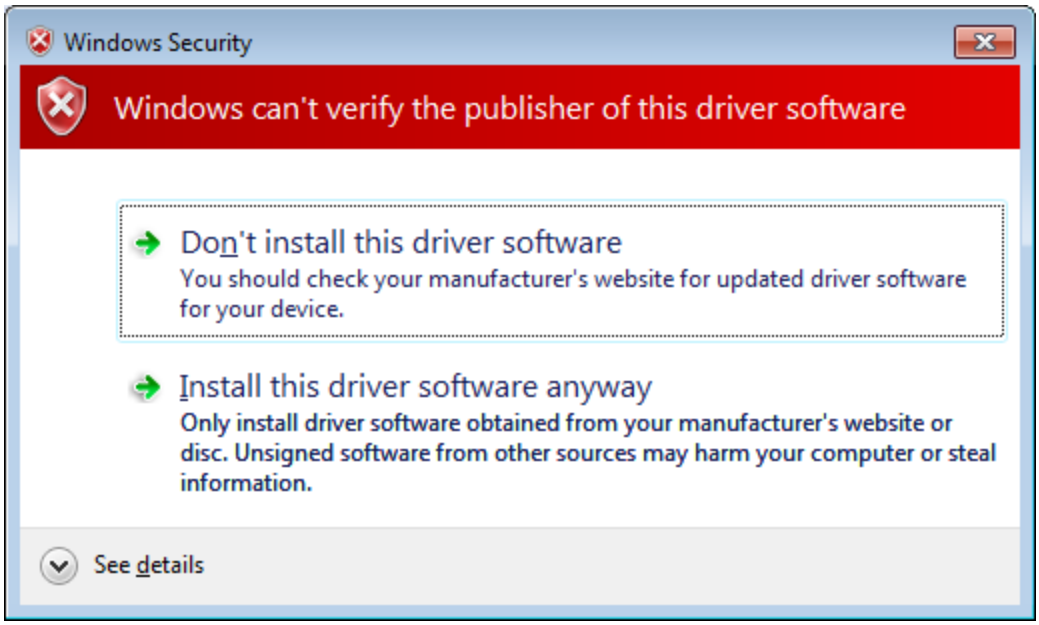
I wouldn't bet, but I am pretty sure this is the first time the word "Newton" appeared in a Windows 7 Device Manager. Seems it's missing its driver, though. This is why we have this tiny exclamation mark in that yellow bubble. So let's try to install one. A driver, I mean. Not a bubble.

Of course, we won't use what we get from FTDI out of the box. If we were, people wouldn't notice how smart I am.

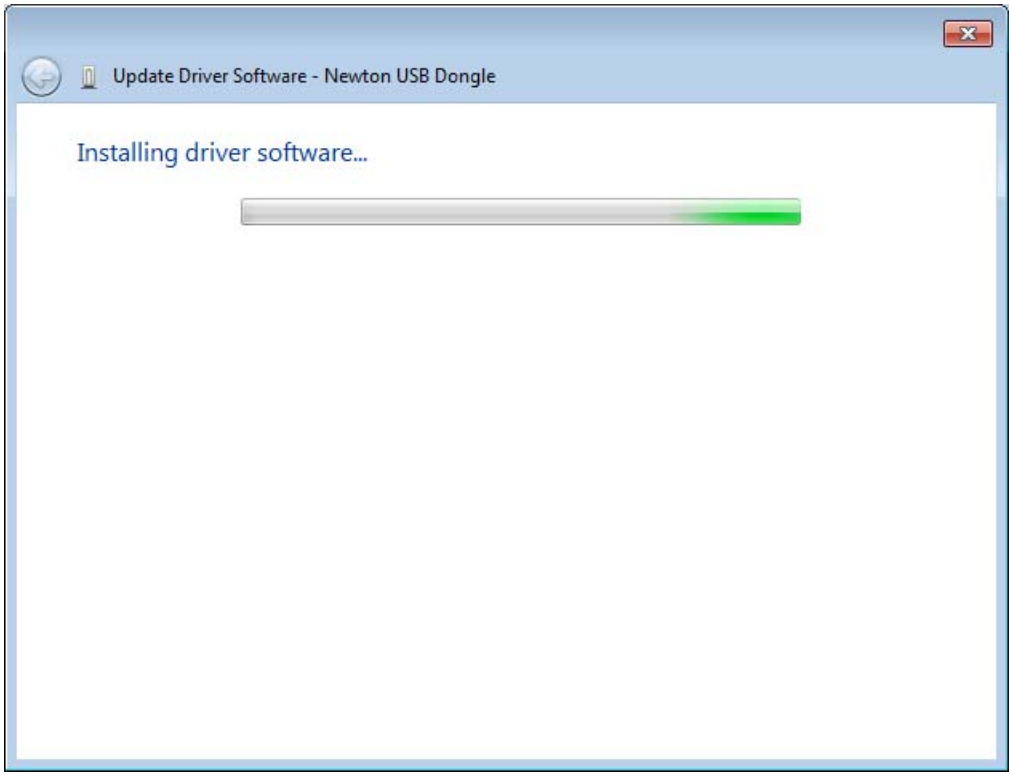


Well, that was to be expected, because yours truly had to tinker with the original FTDI driver. We could get rid of that warning by asking Microsoft to be acknowledged as a certified OEM manufacturer. But it is kind of late right now, and my brain refuses to understand what it takes to do so, and how much it would cost.

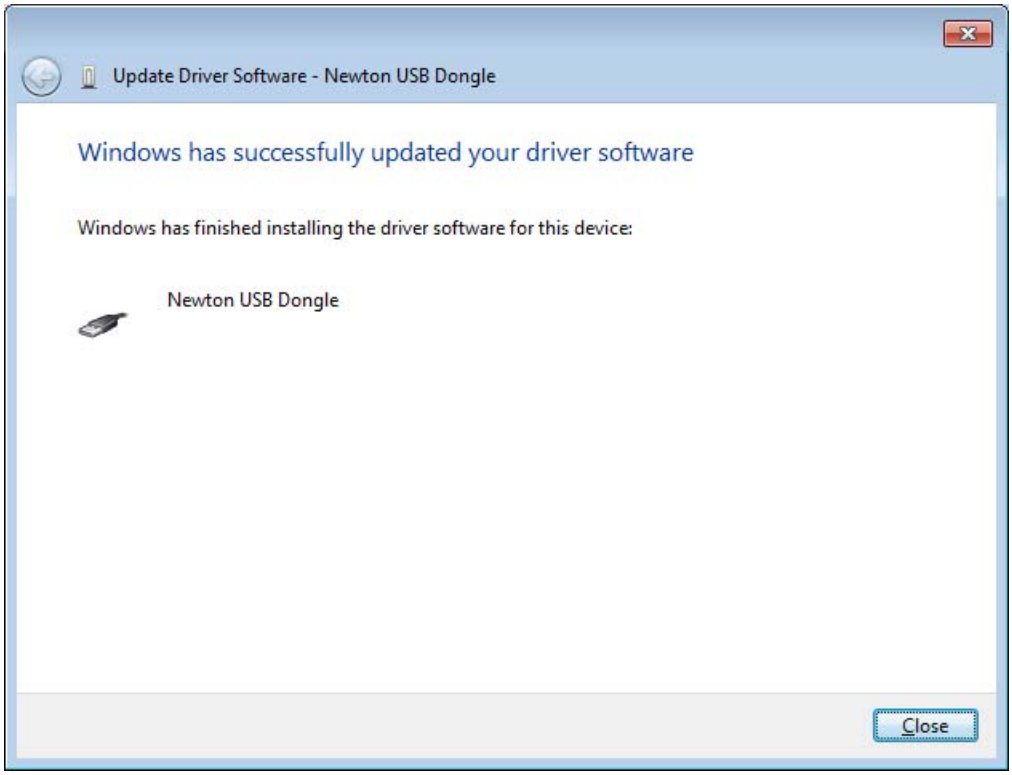
But since Frank considers himself a more or less trustworthy person, he's going to install this driver software anyway…



That's what I wanted to see…

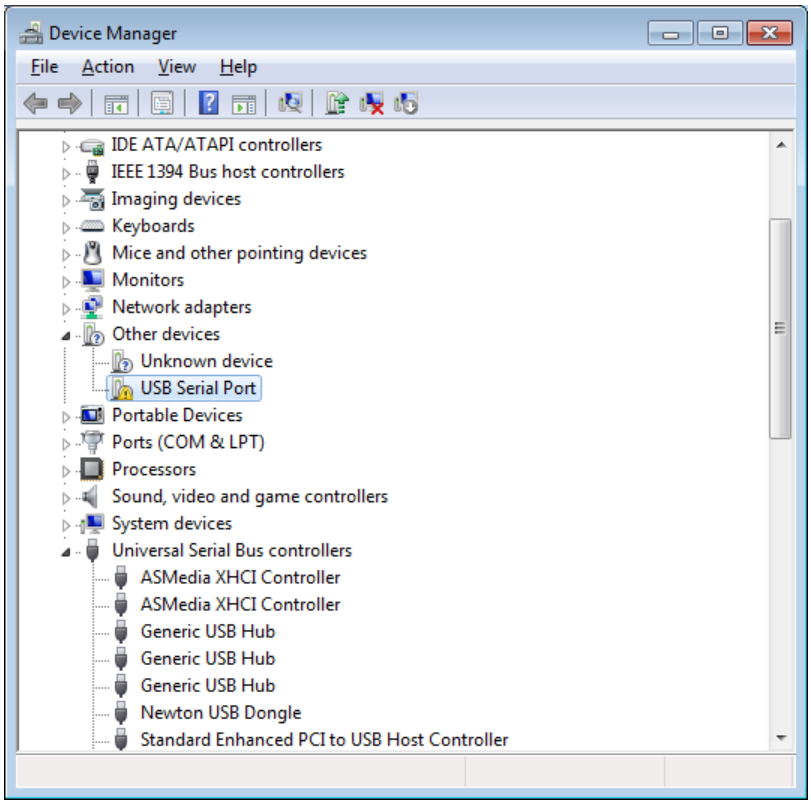


And finally…now how cool is that…

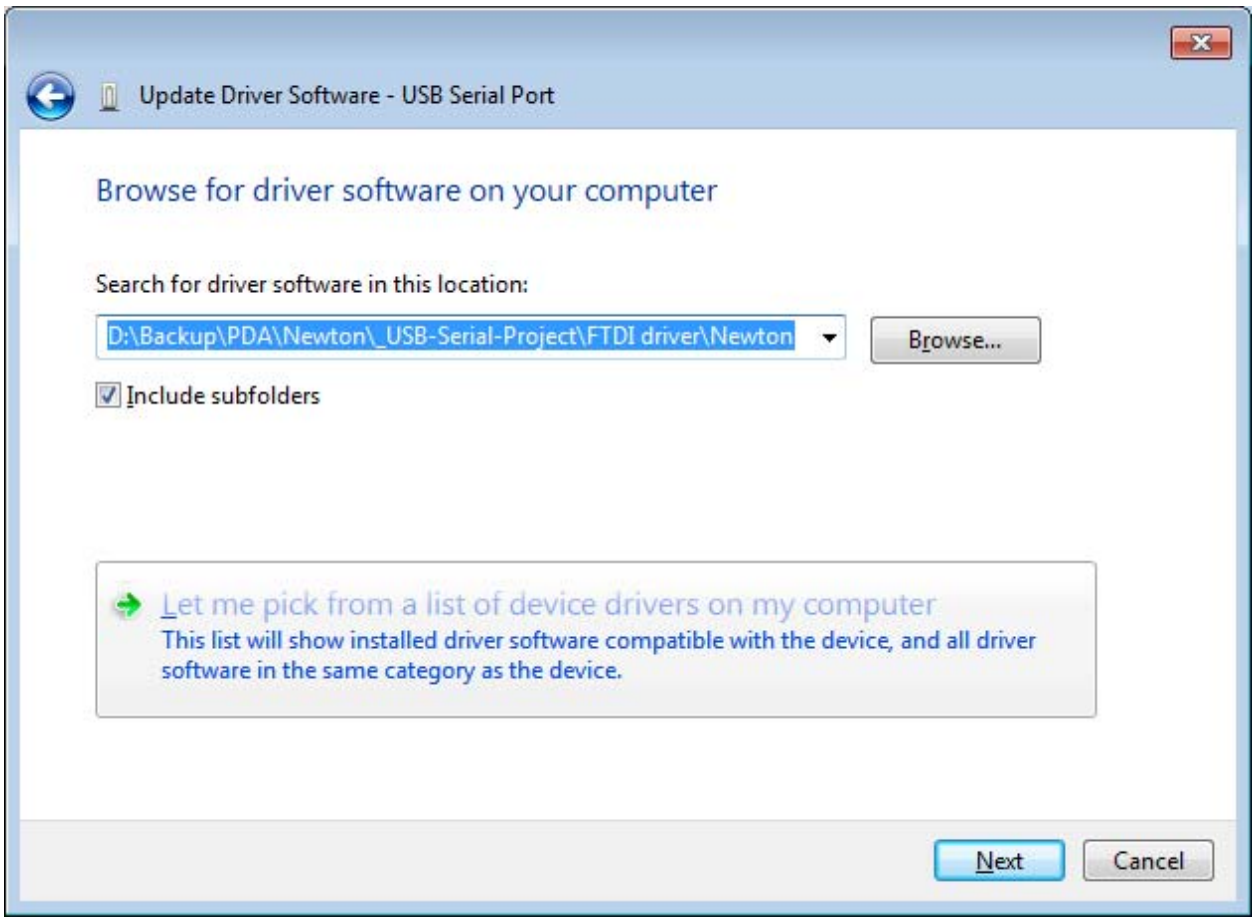


Wonder what the Device Manager will say now.

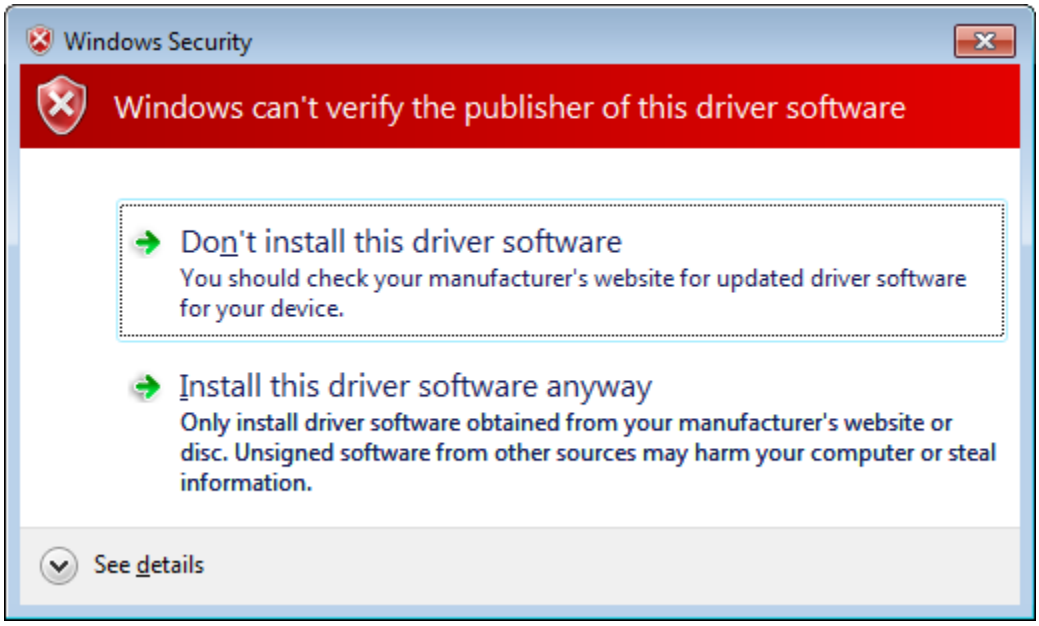
Err… hmm… ah, yes. We'll need to install a virtual serial port, too.



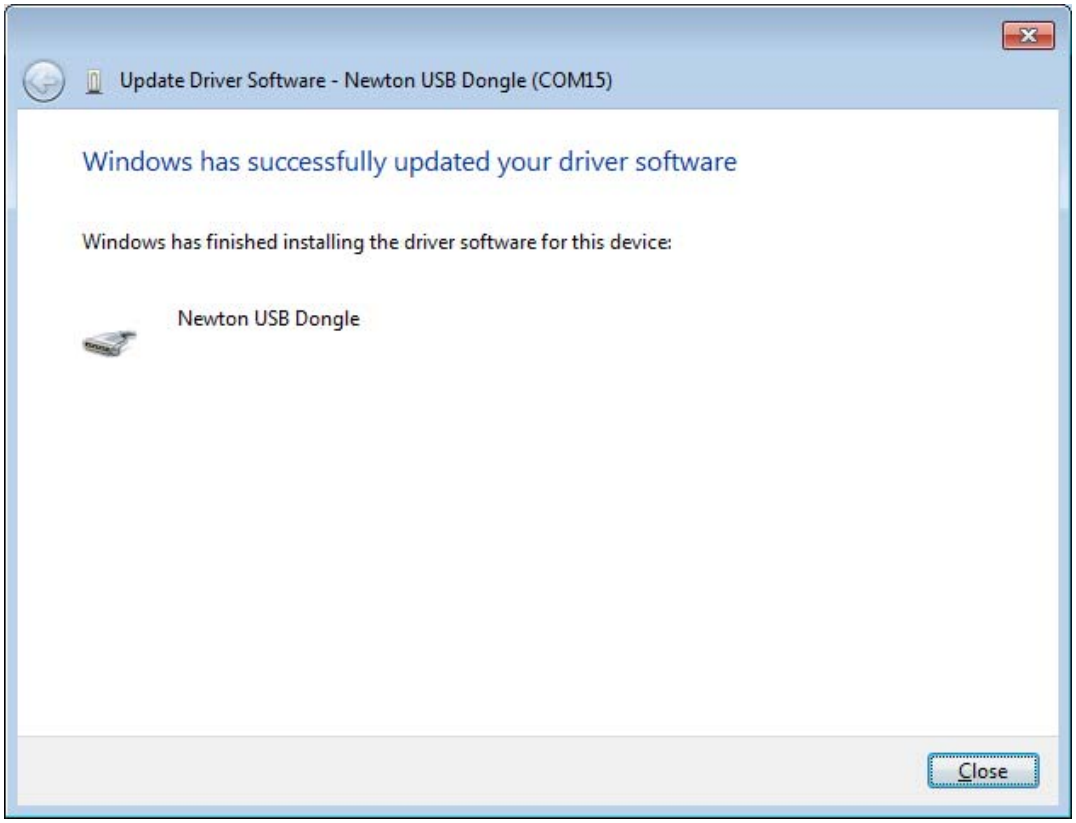
So…



That one looks familiar. But we'll ignore it for the time being, for the same reasons we ignored it last time.

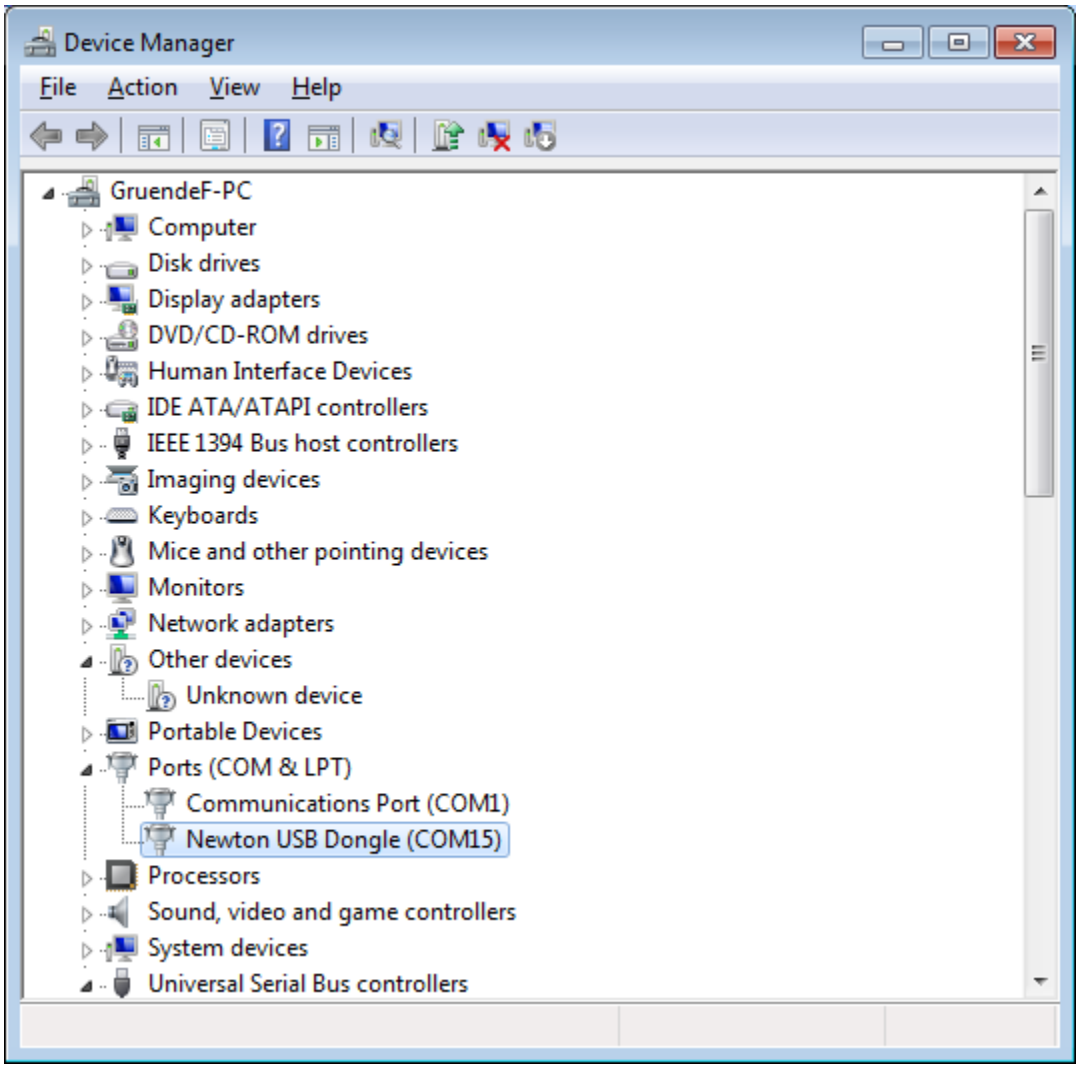


How nice…



Wonder what the device manager will say now?

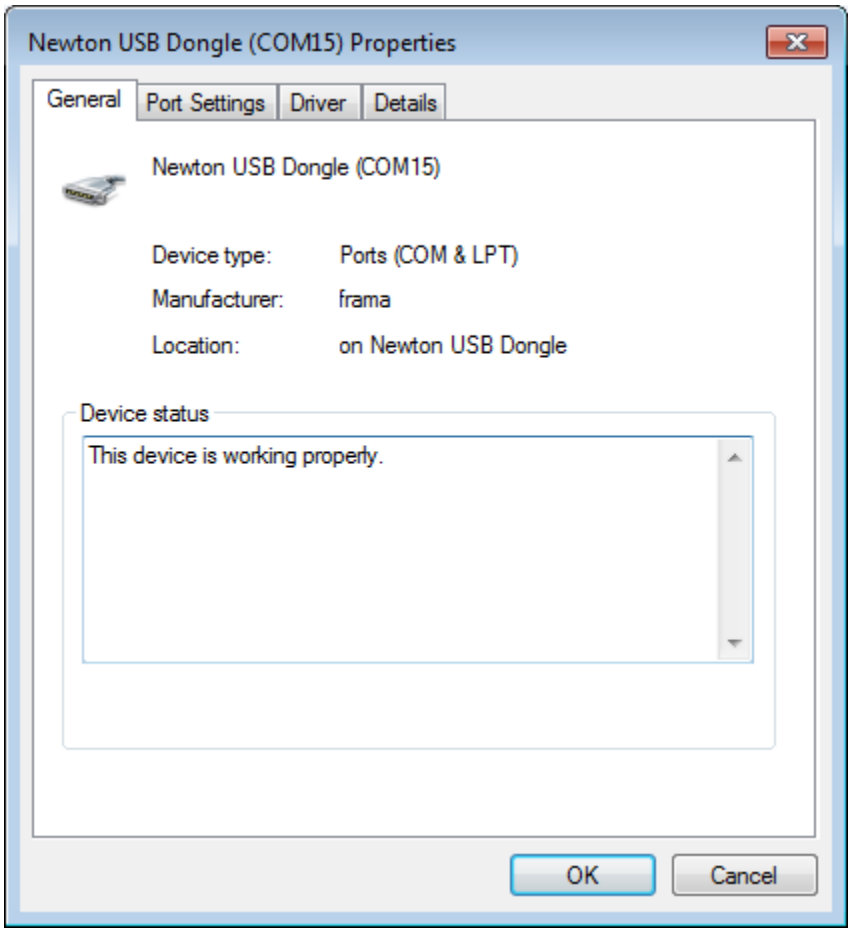
That looks better. We now have a new emulated serial port that our Newton can use.



Let’s have a closer look at it.

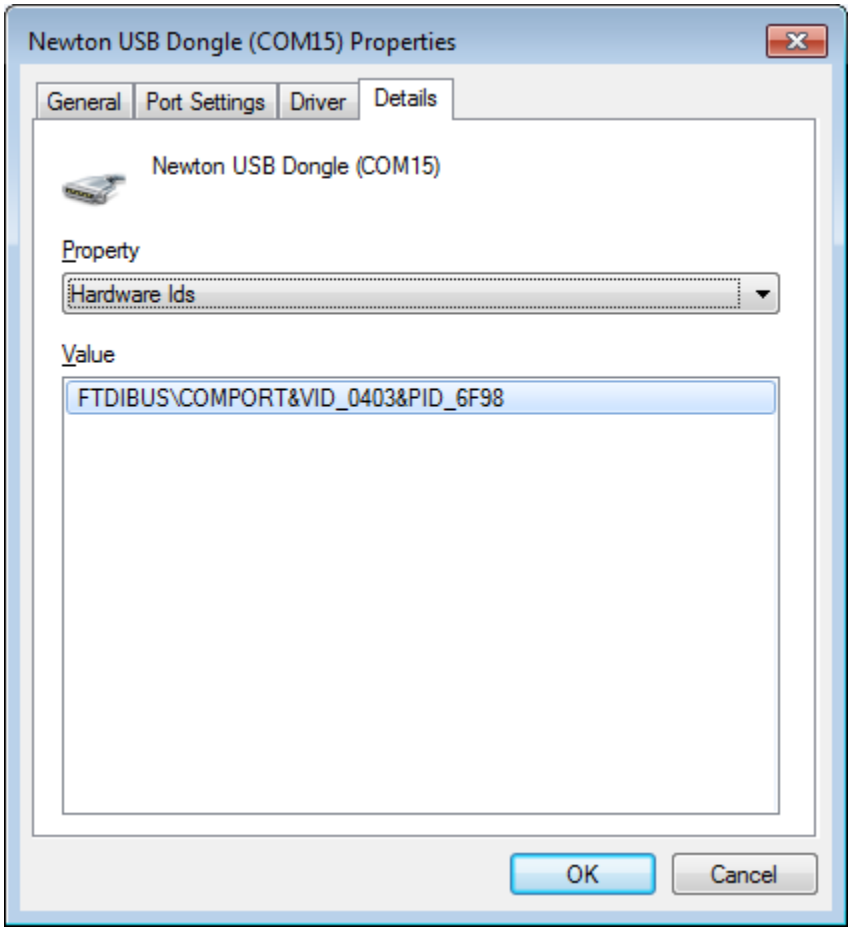
In case you're wondering now who "frama" is: I thought it would be a nice abbreviation of "Frank" and "Matthias". Although, given the fact that in Germany there's a margarine brand called "Rama", it sounds a bit like foodstuff…

You shouldn't believe what the device status says. Since Windows can't know what the device is supposed to do, all it can say is that it can properly talk to it. Right now, though, it can't talk to the Newton yet, since I only ordered the RS-422 transceivers yesterday, and they haven't yet arrived.

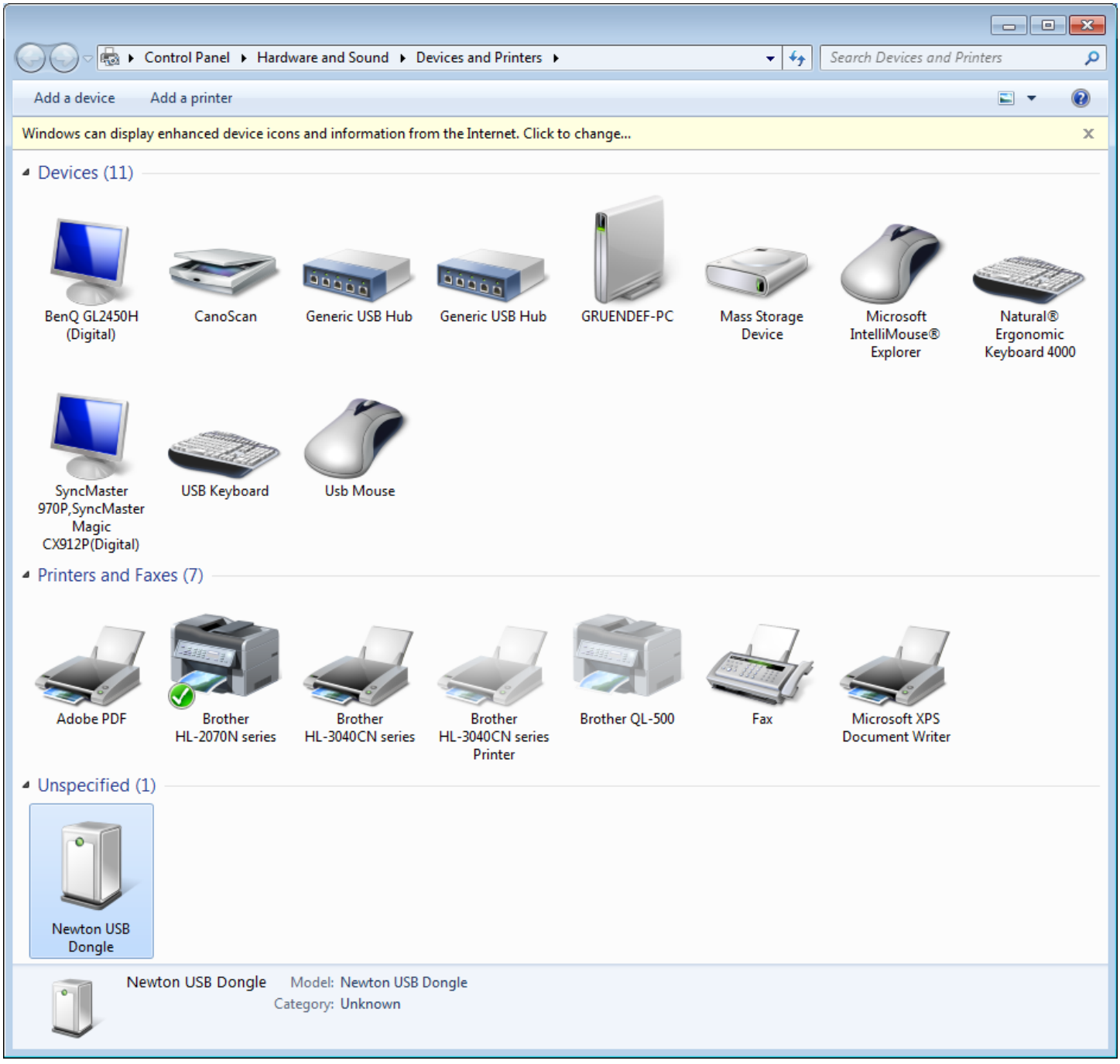


Do you have any idea why I like the product ID so much?

Well, the product ID is 6F98, right? And this product ID, along with 7 other product IDs, was officially issued to me yesterday by FTDI, the manufacturer of the USB interface chip the new hardware will be using. At my special request, they managed to come up with a product ID that contains “98”, the year the Newton was axed. What a nice setup: A hardware that’s still under construction, using state of the art interface chips, developed for a platform that has been stubbornly refusing to die for the last two decades.



And now, as it should be, our Newton is an equitable device among all those other devices. Well, at least it will be, if all works as expected after I have those RS-422 drivers. If anyone feels tempted to help me get rid of that stupid icon by furnishing me with a decent .ico file showing a lifelike Newton in all required resolutions: Go ahead. I have a rough idea how to add that to the driver.



Ah, yes, in case I didn't mention it: You will NOT need a driver on the Newton to use this hardware. This is why I'll be spending ten bucks on RS-422 transceivers. Doing so will allow you to connect this hardware to all Newton models ever built without the need for a driver.

I'll keep y'all posted. This project, by the way, is what I need the 3D printer for ☺