

A blurry photo of the legendary USB Cart of Death

 devblogs.microsoft.com/oldnewthing/20240521-00

May 21, 2024



Raymond Chen

Some time ago, I talked about the USB Cart of Death. This appears to have drawn a lot of attention, with some people wanting to see a picture of this fearsome assemblage of hardware.

Commenter “dimples” found an old promotional video for the Windows NT build process, and at time code 4:21, there’s a brief appearance of the USB Cart of Death.



That’s the steering wheel on the left, and a horrible tangle of USB devices on the right.

In that interview, we briefly talked about the bluescreen error at a Windows 98 demo. Commenter patrickm.635 explained (which I partially corroborated with another source) that the development team had a scanner that they had tested and validated in the lab. However, the demo team didn’t use that scanner. Instead, the demo team went to a local electronics store and bought a scanner off the shelf.

Oh great, so now we’re running a demo of beta code, with hardware that’s never been tested, using a protocol specification whose ink is barely dry.

On stage, during the USB power negotiation, the scanner reported itself as a bus-powered device (meaning that it promised not to draw more than 500mW), but it ended up exceeding this limit. This faulty hardware triggered an untested error condition, and that caused the bluescreen.

Of course, they didn't know at the time that that's why the system crashed. They only discovered this after bringing the offending scanner back to Redmond and debugging what went wrong.

As a painful reminder of this error condition, the scanner was mounted on a World War II infantry helmet and worn by one of the engineering managers to the War Room meetings for the remainder of the project.