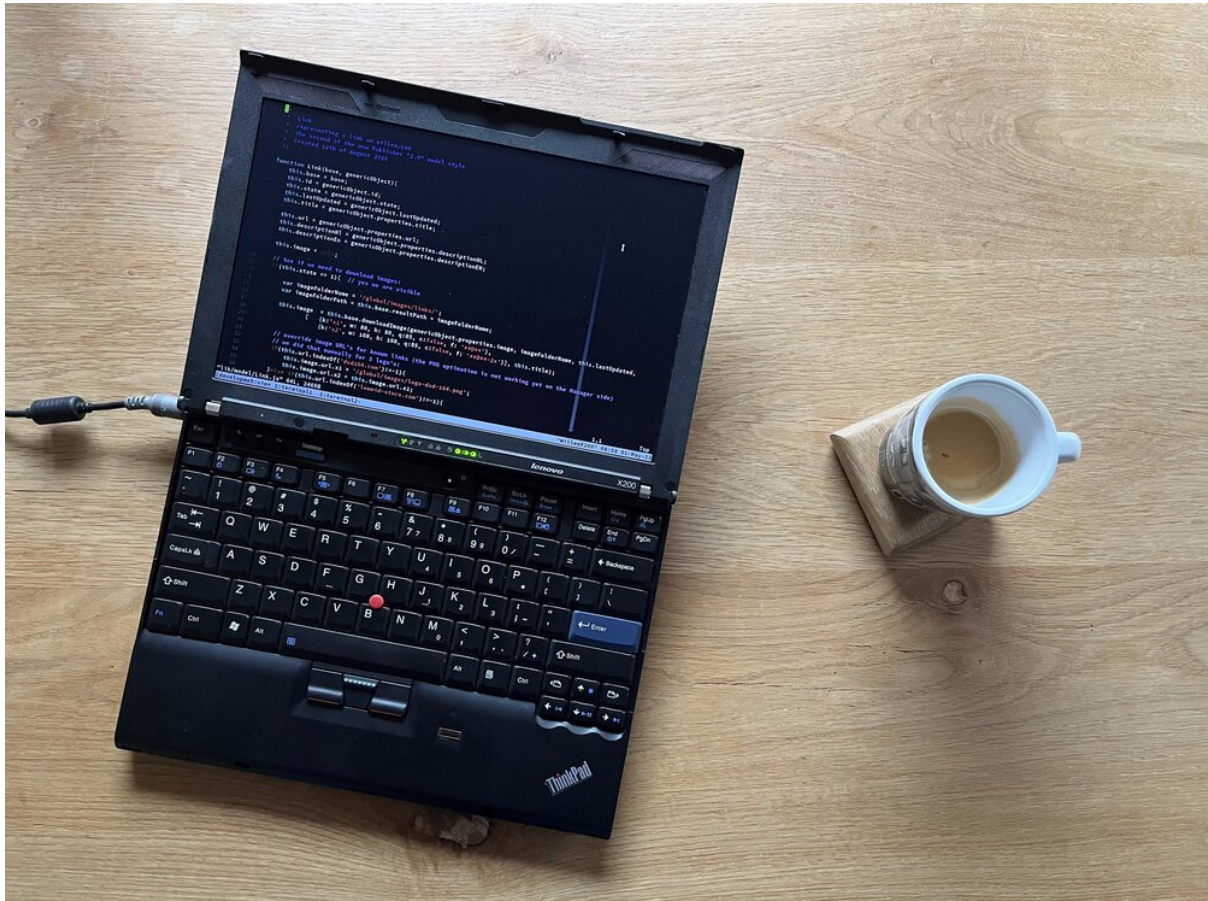


# Working Offline First

*Learning from a 15-year old ThinkPad X200*

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As part of a greater plan to optimise my entire workflow, I am doing a little experiment this month: using a 15-year old ThinkPad X200 laptop as main computer. It's from an era before “the cloud”, popular among free/libre software enthusiasts. What can we learn from this antithesis of modernity?

## ThinkPad X200

Originally released in 2008, the ThinkPad X200 was described as a lightweight, sturdy laptop with plenty of hardware options including different storage options, memory configurations and a wide range of processors to choose from.



*The ThinkPad X200 from 2008*

There are many “[love stories](#)” on the web about the ThinkPad’s legacy and iconic design, if you’re unfamiliar with it you should check out its dedicated [wikipedia page](#). In short, it is a computer highly focussed on function, designed to be reliable, repairable and capable.



*IBM ThinkPad 700C from 1992 was instantly acknowledged as a big deal for the industry*

**Introducing ThinkPad**

The top-of-the-line ThinkPad 700C sports a cutting-edge IBM® 233 MHz processor. The ThinkPad keyboard has a unique, ergonomically designed keyboard, and a unique, flat-topped touch pad. The ThinkPad 700C also features a 15.5" color display, 64 MB of RAM, and a 2.1 GB hard drive. The ThinkPad 700C is available in a variety of configurations. For more information, visit [www.ibm.com/thinkpad](http://www.ibm.com/thinkpad).

**IBM**

**Its mother was a mainframe.  
Its father was a Maserati.**

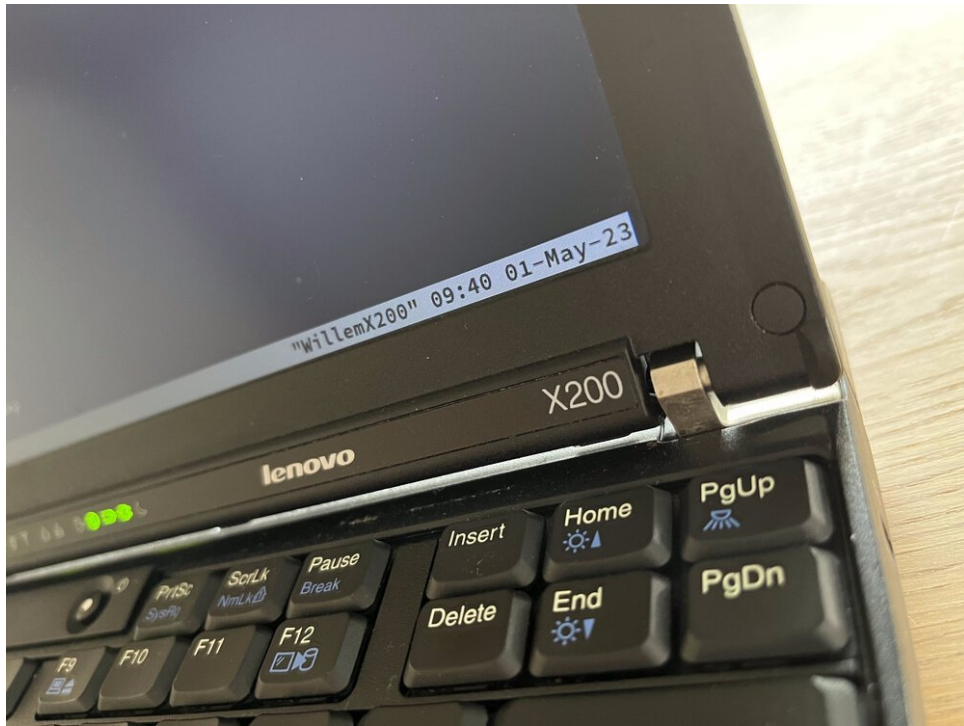
Classic ThinkPad advertisement “Its mother was a mainframe, its father a Maserati”

Unlike many cheap modern computers, the yesteryear’s ThinkPad’s were designed to last. They are repairable and use many common parts. Their (bottom) panels even have indicators showing you which screws hold what parts - making servicing very easy. You can upgrade the computer with third party components, like memory and (SSD) storage. The battery is removable (with a simple/sturdy click) and can be replaced while the computer is running (on wired power).

## The Experiment

Why would you want to use such an old computer? I think there is a lot to learn about the ‘modern way of working’ by doing exactly the opposite. Instead of using a wide range of cloud services to get work done, I will use this machine to develop an entirely cloud independent, offline first, workflow to get my things done.

As the X200’s modern counterparts like Microsoft Surface or Apple MacBook are seamlessly integrated with cloud services (e.g. you need a Microsoft ID to login to Windows 11), it is nearly impossible to do this with a modern machine. It will keep nudging you back into the cloud.



*This laptop lid hinge, made from metal, is designed to last - note the keyboard has keys a modern MacBook can only dream off (PageUP/PageDown, Home, End, Delete).*

To make this work, I installed a modern operating system on the X200: the newest stable version of Debian GNU/Linux. I have written about the [importance of free software](#) before; in short: **you are in control**. The great thing about this, is that all my favourite software tools are available on this machine, natively. No need to fiddle with third party package managers like [Homebrew](#), [Chocolatey](#) or [Scoop](#). Greatness is just one “apt-get install” away!



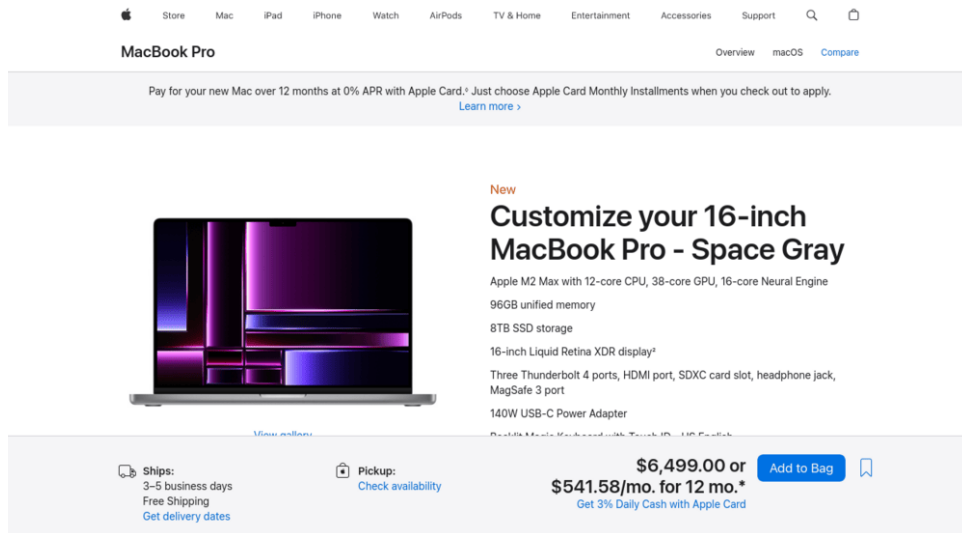
*The ThinkPad's keyboard is a dream to type on and features a "hate or love it" TrackPoint (I'm in the "love" department!)*

This particular X200 laptop is one with its [Intel Management Engine](#) disabled and it has its proprietary BIOS firmware replaced by [Libreboot](#). Although I am comfortable in using modern, closed, devices like an iPhone or iPad, I am open to the critics of the [Electronic Frontier Foundation](#) who make a [compelling case of the security risks](#) inherent to the power that these deeply integrated sub systems have. Better be safe, than sorry.

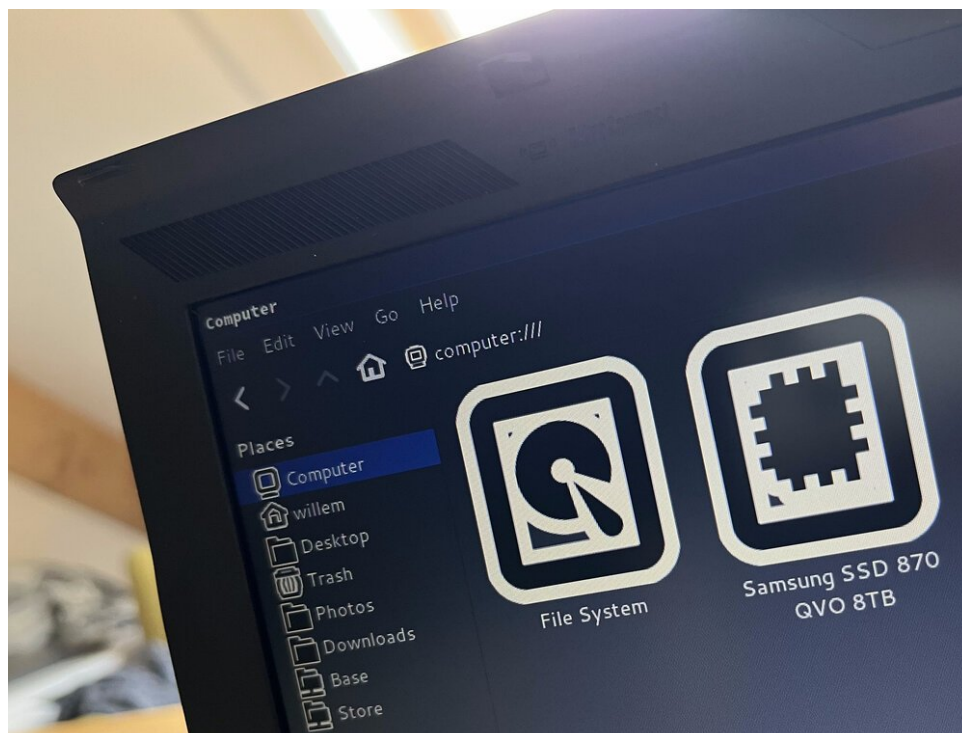


*Plenty of hardware ports, including a PC-card slot, integrated gigabit ethernet, USB-A and a hardware switch to disable WiFi*

If you think of using an old machine yourself, consider replacing old hardisks with modern SSD-storage. I replaced the original, slow, disk with a modern Samsung 8TB SSD. It is fast and offers a gigantic amount of storage, only equalled by a modern \$6499 costing MacBook Pro.



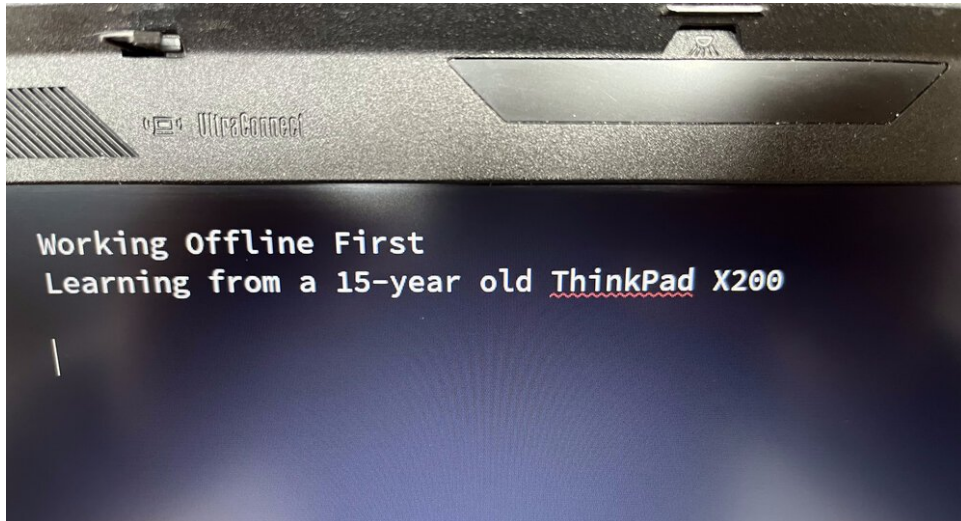
*The modern \$6499 costing MacBook Pro is one of the few laptops available that can be configured with 8TB flash storage today...*



*... yet, my 15-year old ThinkPad X200 has 8TB SSD storage, too (a Samsung 870 QVO SSD)*

Not all is great, however. The X200's display is clearly showing its age: blacks are grey and you can clearly see individual pixels. I don't expect to win any (web/app) design

awards utilising this display, but it does offer a (rather) confronting alternative view on modern (often, very light/thin) typography. I think that if you can make your software look clear and great on a mediocre display, all users can benefit from it (including those on HiPDI/Retina displays).



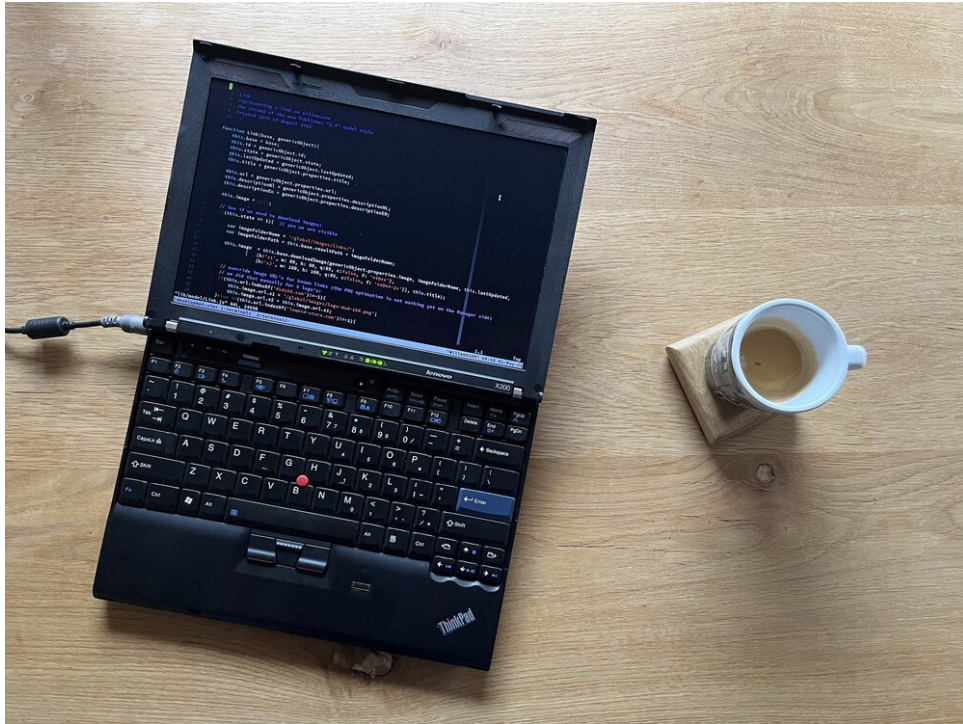
*See pixels on a greyish black background - the X200's display is no match for modern HiDPI micro led or OLED monitors*

Taking a page from Apple's design book, I took extra effort to make the software installation fit the hardware. Instead of using a bloated software experience, I carefully select a handful of apps and tools to run on the old computer. Instead of a full desktop environment like GNOME or KDE, I opted for a so-called tiling Window Manager that tries to maximise the usage of available screen estate. I use [SwayWM](#) that is a drop-in replacement for [i3](#), but based on the modern [Wayland display protocol](#). I used many of the same refinements that I applied to my ["WillemOS" tablet experiment](#).

## The goal

The goal is to use the X200 for the next weeks as main computer. My [modern MacBook](#) and [iPad](#) are switched off. I want to optimise my workflow by learning about my dependencies on the cloud and to find ways to become more self-sustaining, resilient and independent.

As the old laptop offers me fewer computing resources, it forces me to take great care in software optimisation. This is the other major goal as [cloud costs have been surging due to rising energy costs](#). I am eating my own dog food here, as they say.



*Work in progress - my X200 experiment*

## Conclusion

Time will tell how far the X200 will get me, but one thing is clear: these experiments push you out of the comfort zone - to a place where you have plenty of opportunity to learn. It is my hypothesis that the lessons that I will learn, will benefit me (and my customers) in the future.