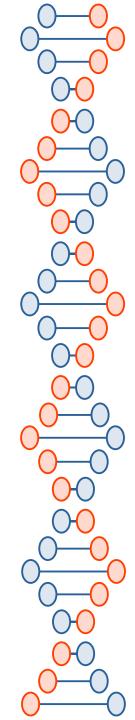


Freedom in the Age of Digital Slavery

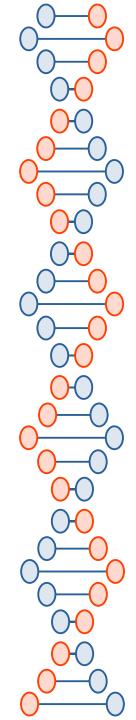
Ajith Kumar B P

https://scischool.in

bpajith@gmail.com



- Are you using a Computer?
- Do you like to be exploited?
- To be under surveillance?

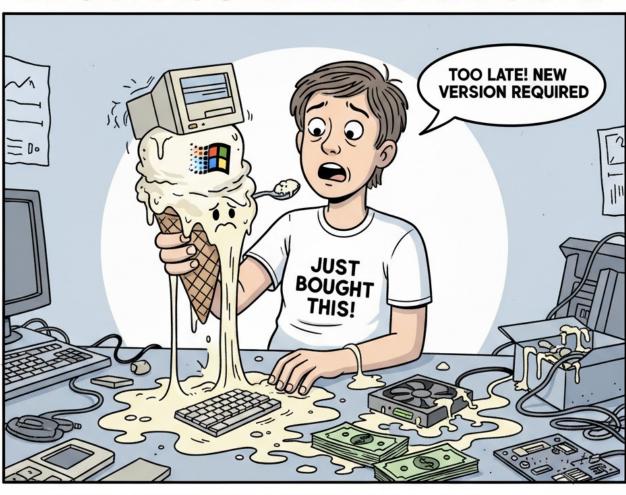


My Experience with Windows

- In 1995, I was running Windows-3 on an 80386 PC, using a word processor included in it for drafting letters.
- Once I received a .doc file from someone, and opening it required the latest version of MSWord.
- Bought MSWord and it demanded Windows 95.
- Installing Windows 95 required an 80486 computer.

Total expense to the institute was around 1.2 lakhs. I was not the only one faced such exploitation. It continues even today.

THE WINDOWS OBSOLESSENCE MELTDOWN!

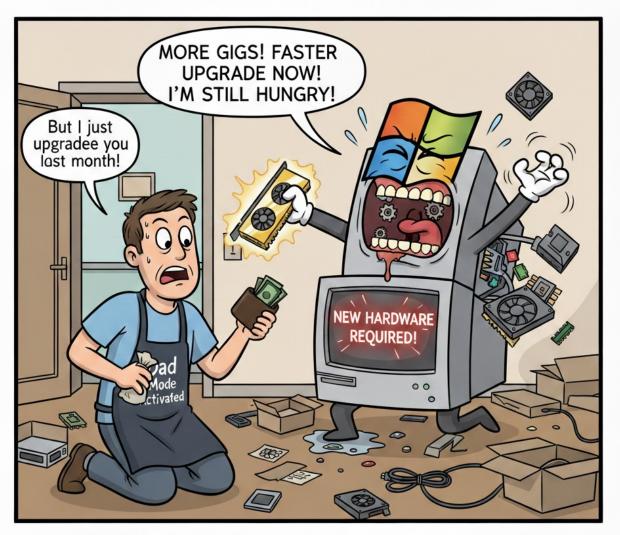


Windows 3.1 - 1993 Windows 95 - 1995 Windows 98 - 1998 Windows ME - 2000 Windows XP - 2001 Windows Vista - 2007 Windows 7 - 2009 Windows 8 - 2012 Windows 8.1 - 2013 Windows 10 - 2015

Windows 11 – 2021

WINDOWS: THE UPGRADE TAX - COLD HARD CASH, HOT FAST MELT!

WINDOWS HARDWARE REQUIREMENTS



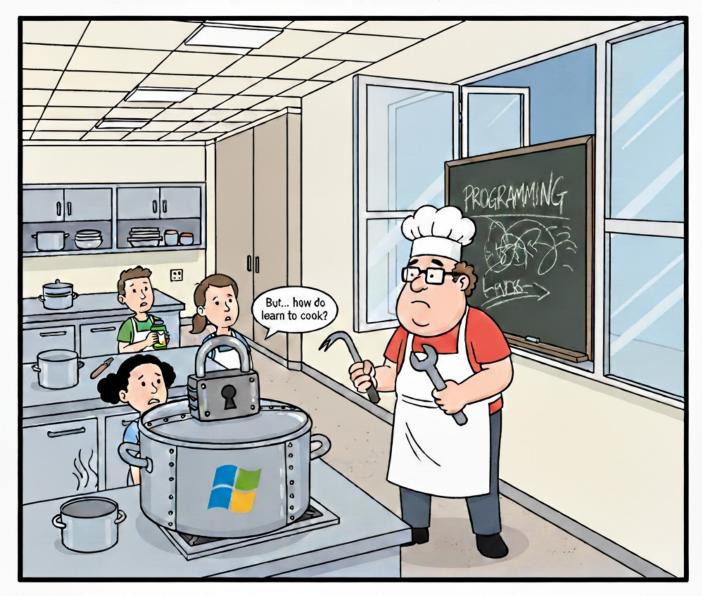
THE UPGRADE TANT-RUMBLE!

PROPRIOTARY FILE FORMATS!



YOUR DATA? NOT REALLY YOURS!

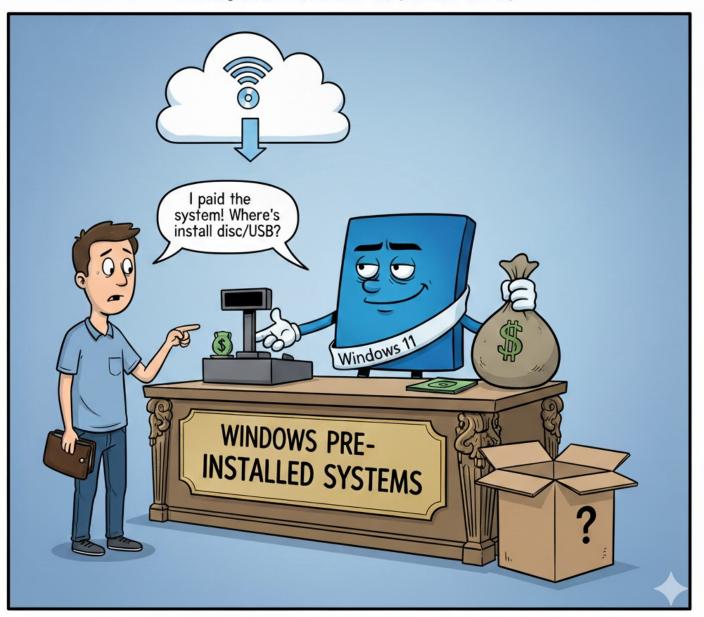
CLOSED SOURCE COMPUTER SCIENCE CLASS



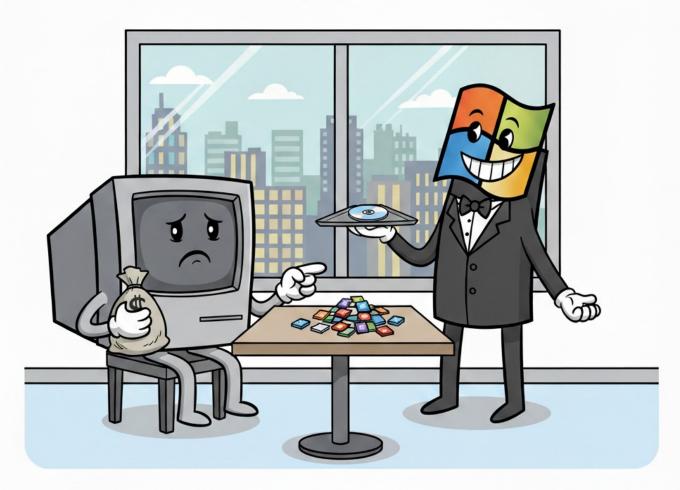
WINDOWS: THE UN-OPEN-SOURCE POT. YOU CAN LOOK, BUT YOU I CAN'T COOK!

THE WINDOWS TAX: NO MEDIA INCLUDED!

PAYING FOR SOFTWARE YOU CAN'T HOLD!

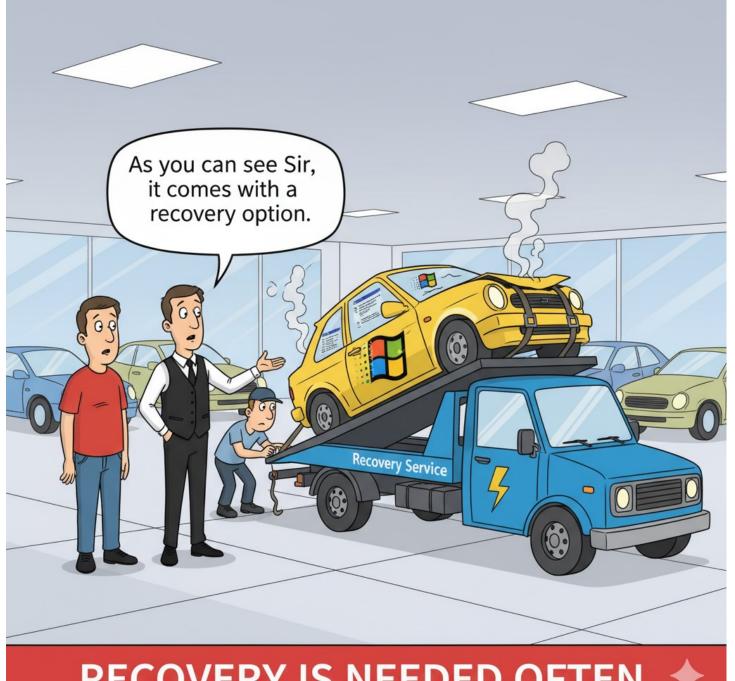


Computer Restaurant with a Windows View



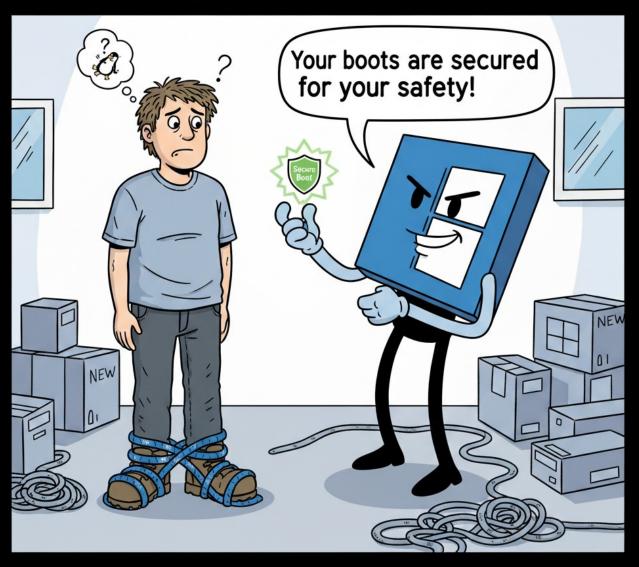
OUR DISHES ARE NOW OR NEVER SIR!





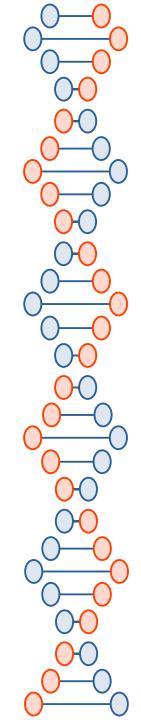
RECOVERY IS NEEDED OFTEN

MICROSFT & SECURE BOOT: "HELPFUL" RESTRICTIONS



BOOTS SECURED FOR YOUR SAFETY!

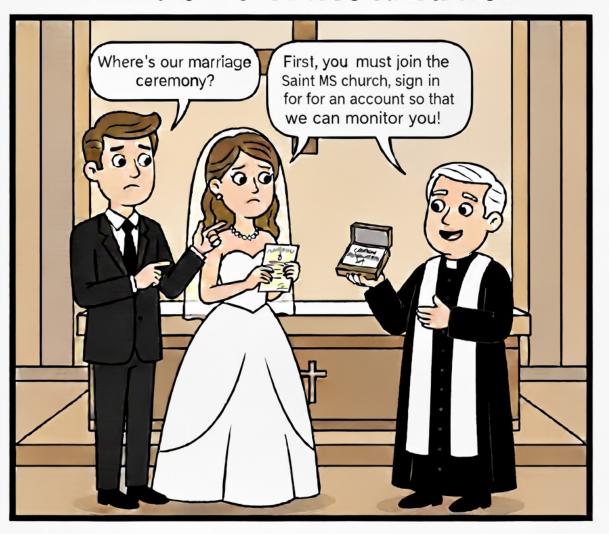




- Windows-11 insists on a Microsoft Account?
- Your computer becomes Microsoft's surveillance device.
- Bundling features that create new data flows (AI + tracking).
- Designing defaults that allow data collection (enabled by default, buried settings).

Whom you are trusting with your Data?

Windows 11 Installation



You MUST Join to Tie the Knot!

WINDOWS 11 SURVEILLANCE!



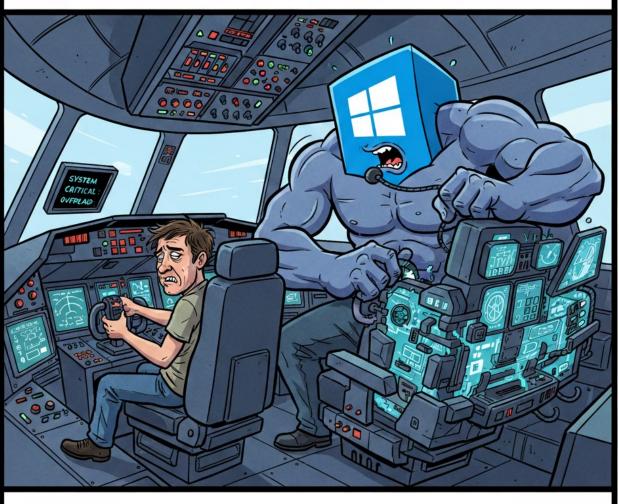
PRIVACY? WE'LL INSTALL IT LATER...

WINDOWS 11: THE DATA HEIST!



YOUR DATA? IT'S JUST A ROPE FOR TO THEM!

MICROSOFT COPILOT: THE RESOURCE HOG!



USER, GIVE MY AI A BIGGER CPU!

THE MICROSOFT BARAGIN



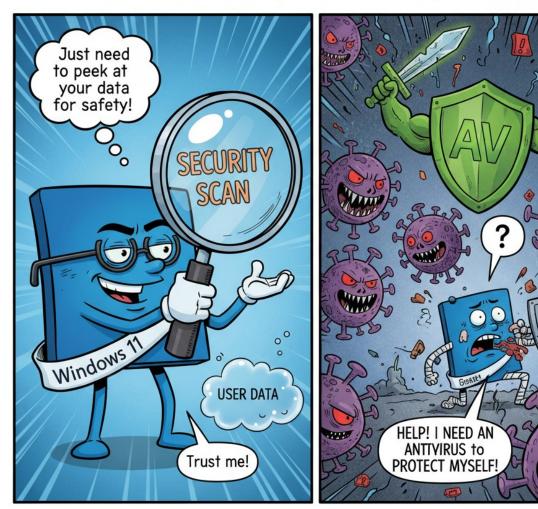
YOU PAY TO BE THE PREY!

The Paradox of Windows Security

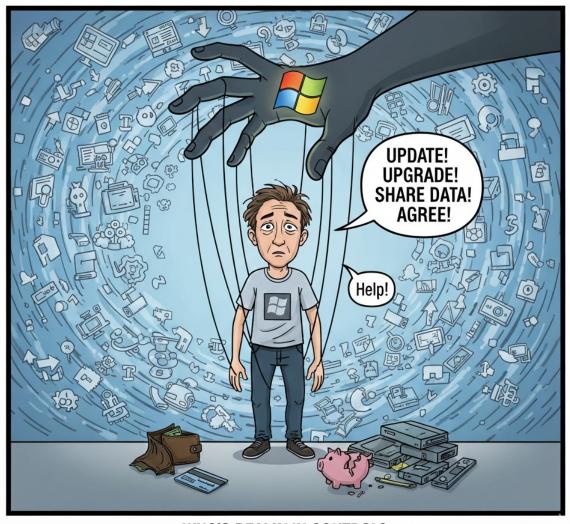
- Windows says it needs your data to keep you safe.
- It needs an antivirus program to keep itself safe.
- Who's protecting whom?

WINDOWS' PARADOXS!

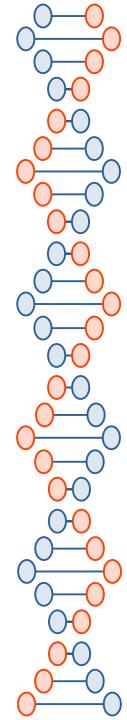
SECURITY VS. SELF-PRESERVATION?



WINDOWS USER: THE HELPESS PUPPET



WHO'S REALLY IN CONTROL?



Standards, and it's Enemy

- IBM: PC architecture (ISA, BIOS), SQL,
- AT&T Bell Labs: UNIX, C language, foundation of open OS design
- Sun Microsystems: Java, NFS, ODF (OpenDocument), open networking
- Intel: x86 architecture, USB, PCI/PCIe hardware standards
- Netscape: JavaScript (ECMAScript), SSL/HTTPS, open web
- Google : Android (Linux-based), Chromium, TensorFlow
- Microsoft: Twisted HTML, tried to sabotage Open Document Format



MANIPLATING THE OPEN STANDARD: THE CROOKED SHOPKEPER!

The solution

GNU/Linux ecosystem created by Richard Stallman, Linus Torvalds and many others.







Richard Stallman: The Programmer - Idealist

- Harvard University (1970–74) BA Physics
- MIT AI Lab as a Programmer (1971–1980s)
- 27-Sep-1983, Announces the GNU project (a free OS).
- Established the Free Software Foundation (FSF) in 1985
- Wrote GCC, GNU Emacs and many other tools
- GPL (GNU General Public License)

Inspired a movement, not just tools

Open Book: Free as in Freedom



Linus Torvalds Linux kernel for the GNU/Linux OS

Biography: Just for Fun



- Started coding in BASIC on a VIC-20, at the age of 10
- Joins MS computer science at Helsinki University, Finland
- 1991, Bought a 386 computer, partly on credit.
- Started writing an OS Kernel (Used GNU tools like GCC)
- Named it Linux (Unix from Linus), suggested by a co-worker.
- Shared according to the ideals of Science
- Switched to GNU GPL, after listening to a talk by Stallman
- Version 1.0 of Linux released in March 1994
- Together with GNU, a complete free OS became available.

THE OPEN-SOURCE RECLAMATION!



GNU/LINUX: BUILDING A FREE DIGITAL WORLD, ONE PROPORLARY SYSTEM A ATIME!

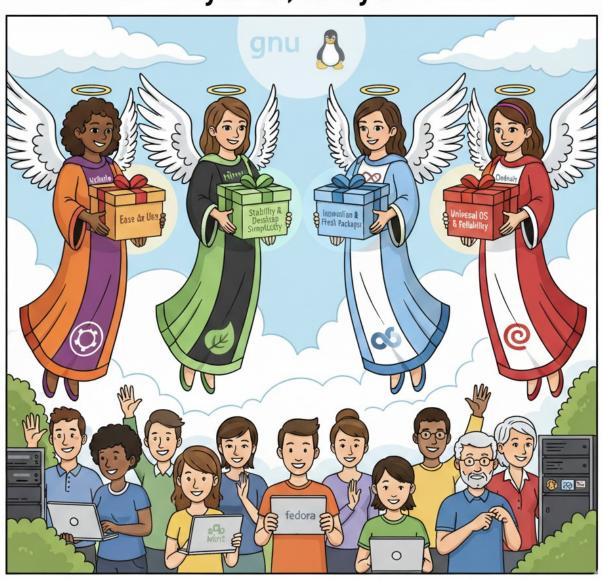
How GNU/Linux reaches you

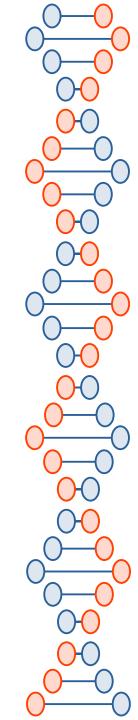
Different parts like the Kernel, Compilers, Web Servers, etc. are developed by different groups. An ordinary user need to get them ready for installing on a computer.

This need is taken care by the GNU/Linux Distributions, like

- Slackware Started by an individual
- Redhat First corporate distro (Fedora)
- Debian An organization of Free Software developers
- Ubuntu A Debian based distro, from Canonical Inc.
- Mint A Debian based distro, community supported.

Same System, Many Flavours

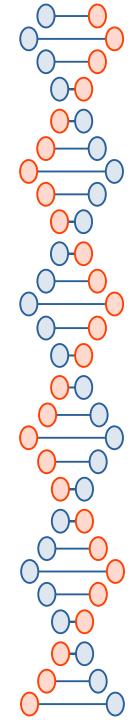




Current Status of GNU/Linux

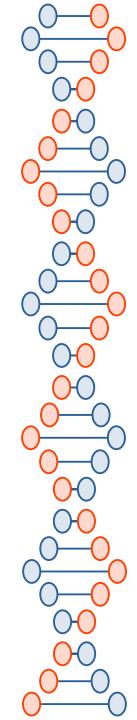
- Supercomputers: All of the top 500
- Web Servers: Approximately 70% of all websites
- Cloud Infrastructure: Around 90%.
- Software Development: About 53% of software
- Machine Learning: 87%

Desktop: Around 4% only, mainly because of the OEM vendors (Like Dell, HP etc.) influenced by Microsoft.



Implications of Free Software

- Prevents wasteful expenditure
 - Save the ~Rs 3000 crores annually on Windows OS
 - No Forced Hardware upgrades
- Avoids dependence on foreign or proprietary software vendors (e.g., Microsoft, Oracle)
- Freedom from proprietary file formats.
- Ideal for teaching and learning, since students can study how the software works.
- Freedom isn't just technical it's social and political.



Relevance in the area of AI

- In 1980s the entire software industry was controlled by few corporations and software was very expensive.
- Arrival of GNU/Linux enabled a lot of new firms to come up (Google for example)
- Software became cheaper, open and more democratic due to the Free Software movement.
- Current AI scenario resembles the Operating Systems of 1980s, closed and owned by few.
- Free Software is the only option to make AI more democratic, essential due to many reasons.
- Available AI tools: TensorFlow, PyTorch, Scikit-learn, OpenCV, Hugging Face Transformers

How can you help?

- Start using a Free OS and software tools.
- Learn how to install GNU/Linux.
- Help others to convert to Free Software



Don't dance to strings unseen,

Stand tall, think clean,

Be your own being

A free human being.

Thank You