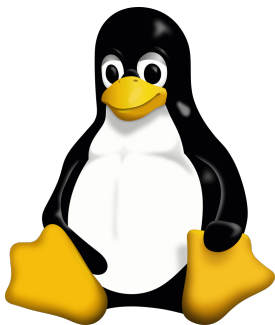


Getting Started with Linux

Zoltán Szabó @ Department of Statistics, LSE (Sept. 25, 2026)



- Desktop tour ✓
- Applications.
- Linux history.
- Distributions.
- Installation.
- Ricing and phones.

Applications: categorized; some handy ones

Notations:

- **link**. OD := Odysee, YT := YouTube (as fallback).
- **M** = '∈ main', **A** = '∈ AUR', **W** = web client, p = proprietary.

Web & mail:

- browser:
 - **librewolf**[†] (**A**; ∋ **uBlock Origin**), **tor-browser-bin** (**A**); to keep an eye on: **Ladybird**!

[†] Librewolf: the best browser? [**YT**]

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 - Chromium-based browsers: **warning!** ⇐ Manifest v3 [**OD**₁, **YT**₁; **YT**₂].



The Internet



The Internet
when you
block ads

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- e-mail: **ProtonMail** (**W**), **thunderbird** (**M**).

ProtonMail: **get a free month** on the **Mail Plus plan**!

[†] Librewolf: the best browser? [**YT**]

Media:

- image:
 - viewer: `feh` (M), `gthumb` (M).
 - editor: `gimp` (M; bitmap), `inkscape` (M; vector).

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- video (& audio):
 - player: `mplayer` (M), `vlc` (M), `mpv` (M).
 - private YouTube viewer: `freetube` (A).
 - editor: `kdenlive` (M).
 - recording, live streaming: `obs-studio` (M).
 - downloader: `yt-dlp` (M).

Applications+

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- audio:
 - player: **mpd**, with **mpd-mpris**, **rmcp**, **kitty**, and **playerctl** (all M).
 - editor: **tenacity** (M).



- Text:
 - document viewer: `xdvi` (texlive (M, group), `xpdf` (M), `okular` (M),
 - .pdf annotation: `xournalpp` (M),
 - text editing: `texlive` ($\text{\LaTeX}$, M, this group), `kile` (M) ($\approx \text{WinEdt}_p$), `vim` (M), `libreoffice-still` (M).

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- Chat & collaboration:
 - chat: `zoomp` (A), `teams-for-linuxp` (A), `BigBlueButton` (W), `Proton Meet` (W), `Jitsi Meet` (W), `linphone-desktop-appimage` (A),
 - version control: `git` (M),
 - calendar & reminder: `remind` (M).



Network:

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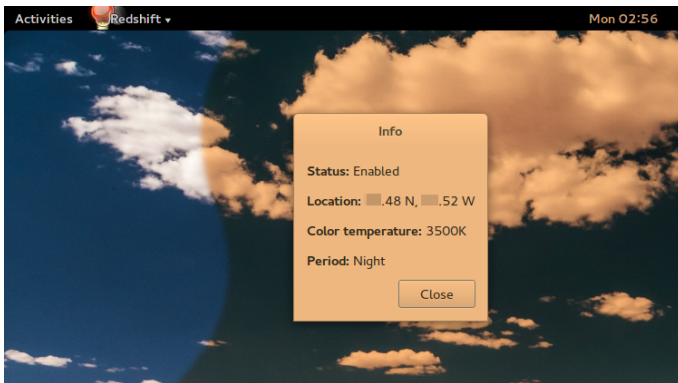
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- Programming: **python** (M), **jupyter-notebook** (M), **spyder** (M).

Applications+

Utilities:

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- sunrise, sunset, moonphase: [solunar2-git](#) (A).

Else: ?

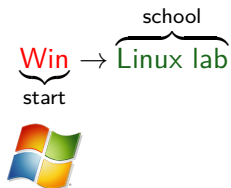
My view

I do not miss anything, and have freedom.

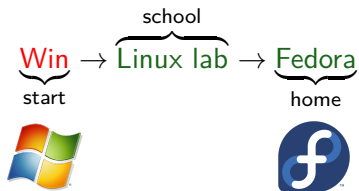
A journey



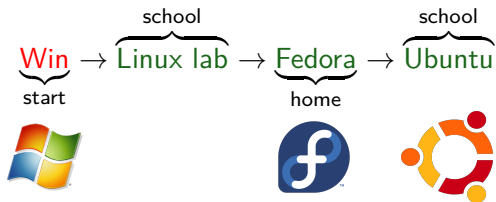
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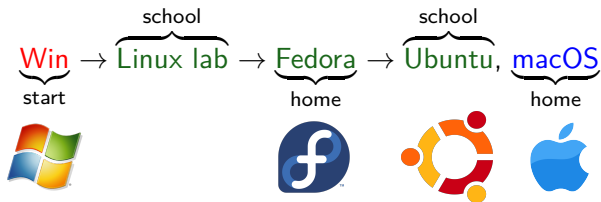
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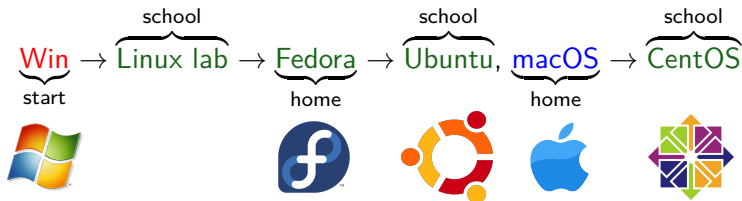
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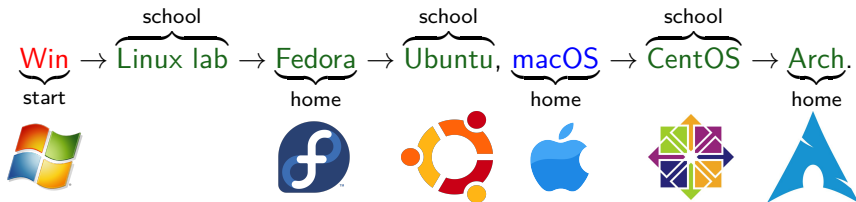
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A journey



⇒ Currently

- laptop, dept-al server, research computing (cluster),
- mobile phone: **PinePhone Pro**,
- paper-like tablet (**Remarkable Paper Pro**),
- router (OpenWrt ∈ **Flint 4**),
- home automation (**Home Assistant**): reading about it.

Some fun (a 21Y Finish CS student)

From: [Linus](#) Benedict [Torvalds](#)
Date: Aug 25, [1991](#), 10:57:08 PM
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- Supercomputer world: 100% market share,
- Runs: from old laptops [OD_1 , YT_1 ; 1980= YT_2] to top 500 supercomputers, even on a RISC-V laptop [YT]



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- At the heart of > 3 billion Android devices.

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Linux today – continued

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One of the main secrets

free and open source $\Rightarrow$ knowledge sharing $\Rightarrow$ creativity can kick in $\Rightarrow$ versatility!

In fact, Linux = GNU/Linux: Linus used the GNU development tools for his kernel, ...

- Late 1970s: companies started to spread proprietary software ⇒



- GNU project = GNU is Not Unix:
 - Goal: write a UNIX-like operating system entirely of free software.
 - Users are legally free (GPL)
 - 0 to use,
 - 1 to study,
 - 2 to modify, and
 - 3 to distribute the software.

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- mass collaboration announced by Richard Stallman ('83; his website).

Richard (Matthew) Stallman: RMS – his hacker name;)



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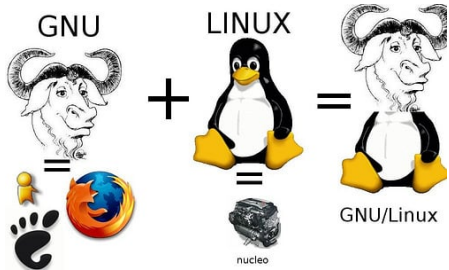
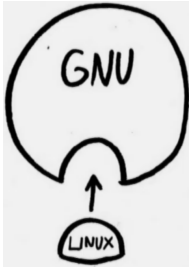


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- Creator of **GNU Emacs**: 'text editor' (**LISP** interpreter).

GNU/Linux ('92-), shortly **Linux**

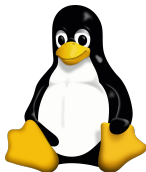


- ① GNU utils: high-level utilities.
- ② **Kernel**:
 - low-level 'stuff', written (mostly) in C, GPLv2,
 - manages the CPU, memory, device drivers, file system, ...

- Tux (the mascot of the Linux kernel) := Torvalds UniX.



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- Author of Git (GPLv2):
 - distributed version control system,
 - gold standard in collaborative coding efforts,
 - developed for the Linux kernel ('05),
 - # of lines in the code of Linux kernel: 40+ million (2025).



Free vs open

Free software (a.k.a. **FOSS**, libre software):

- goal: to respect user freedom and privacy.

to *not constrain* the user

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- free $\ni$ open-source, but
 - free $\neq$ open-source: **text**, video [**OD**, **YT**],
 - open-source code can 'spy' on you,
privacy matters [**OD**, **YT**].



Free vs right to repair

- my experience: battery replacement in Surface Pro = 600€,
- idea in 60s [OD,YT]: \$12.9 $\ll$ \$1500 (repairing for 18Y@2026; ~iPhone)



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 - a laptop initiative: **frame.work** $\approx$ anti-MacBook $\Leftarrow$ designed to be easy to upgrade & repair.



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 $\xrightarrow{\text{push notifications}}$ governments [OD, YT], collect data even in incognito mode or with apps disabled)

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 - ④ create accounts or watch dummy ads on the UI

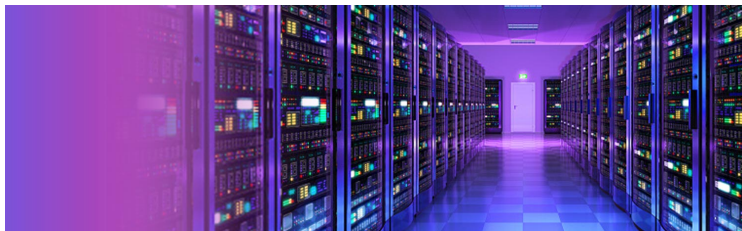
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 - 1 upgrade to the latest hardware,
 - 2 throw money out of the window (e.g., Win 11 Pro: £219.99),
 - 3 have your entire life history saved (e.g., Win 11: Recall $\in$ Copilot+ PCs [OD₁, YT₁; OD₂, YT₂; OD₃, YT₃; article]; mobile: Google & Apple
 $\xrightarrow{\text{push notifications}}$ governments [OD, YT], collect data even in incognito mode or with apps disabled),
 - 4 create accounts or watch dummy ads on the UI,
 - 5 go with the trust us bro security/privacy guarantee.

- specifically – continued:
 - significant storage reduction $\Leftarrow$ code sharing.

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 - standard for computing clusters (example: **slurm**).



Various distros (tree; periodic table):

- there have been **> 1000** distributions,
- **currently** (Sept. 25, 2026): **520 distributions**



Versatility $\Rightarrow$

Various distros (tree; periodic table):

- there have been **> 1000** distributions,
- **currently** (Sept. 25, 2026): **520 distributions**,
- but minor differences.



Primary choice to make

point release vs rolling release.

Point release model: Windows

- Example:
 - **Windows:** 3.0, 3.1x, 95, 98, Me, NT, 2000, XP, Vista, 7, 8, 10, 11.

Point release model: Windows, macOS

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 - **Windows**: 3.0, 3.1x, 95, 98, Me, NT, 2000, XP, Vista, 7, 8, 10, 11.
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 - **macOS**: Cheetah, Puma, Jaguar, Panther, Tiger, Leopard, Snow Leopard, Lion, Mountain Lion, Mavericks, Yosemite, El Capitan, Sierra, High Sierra, Mojave, Catalina, Big Sur, Monterey, Ventura, Sonoma, Sequoia, Tahoe, Golden Gate.
- Properties:
 - 1 occasional **big** changes,
 - 2 **end-of-life** date!

Point release: Linux distributions



(Debian →) Ubuntu → Pop!_OS; Fedora; openSUSE.

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- **openSUSE: Leap,**
 - released 1 $\times$ /year.

- Arch Linux:



- one-time installation with continuous upgrades,
- lightweight and flexible,
- follows the keep it simple (KISS) principle,
- designed to teach its user.

Rolling release: Linux distributions

- other examples: **openSUSE** **Tumbleweed**, **Gentoo**.



Point release vs rolling release

point	rolling
	always up-to-date + (new software features, bug fixes, security patches)
	supports even very new hardware +
	more secure +
	no need to reinstall it +
	requires semi-decent internet bandwidth -
	less suited for servers (where stability is max-ed) -

My choice: Arch (released in 2002)

- 0 rolling release.
- 1 great package manager (pacman),
 - fast,
 - allows parallel downloading.



[Package managers handle dependencies.]

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- 3 excellent software availability:
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Both are searchable.

Installation

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- 4 Follow the instructions.

Downloading note

- .iso size:
- 17.1 GB (MacOS Golden Gate) – for comparison.

Downloading note

- .iso size:
 - 7.9 GB (Windows 11) – for comparison.
 - 17.1 GB (MacOS Golden Gate) – for comparison.

Downloading note

- .iso size:
 - 5.9 GB (Ubuntu),
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Downloading note

- .iso size:
 - 3.3 GB (Pop!_OS),
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Downloading note

- .iso size:
 - 2.7-3.1 GB (Fedora: Gnome - Plasma),
 - 3.3 GB (Pop!_OS),
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 - 17.1 GB (MacOS Golden Gate) – for comparison.

Downloading note

- .iso size:
 - 1.5 GB (Arch),
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Downloading note

- .iso size:
 - 23 MB (Tiny Core Linux) – for comparison.
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- .iso size [1st = smallest op. system; not Linux]:
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- downloading:
 - **http**; **torrent**: this can be faster ($\Leftarrow$ sharing).



Notes on the boot process — a bit technical

- ① system's **firmware** (such as **BIOS/UEFI/Coreboot/Libreboot**) $\xrightarrow{\text{starts}}$
- ② **bootloader** (such as GRUB $\Leftarrow$ GNU; **features & others**) $\xrightarrow{\text{loads}}$
- ③ the **kernel** (your operating system).

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In practice:

- **firmware**:
 - probes for hardware, simple health checks,
 - it has a UI accessible with a magic key (Esc, F1/F2/...),
 - allows you to designate a boot device (USB/hard/CD/DVD drive, ...),
 - consults the GPT[†] partition table to identify the **ESP**[‡], and launches the target application (typically the bootloader).

[†]no chat 😊, [‡]EFI System Partition.

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In practice:

- **bootloader**:
 - gives a menu on which kernel / operating system to invoke.

```
GNU GRUB  version 2.02

*Arch Linux, with Linux linux-lts
Arch Linux, with Linux linux-lts (fallback initramfs)
Arch Linux, with Linux linux
Arch Linux, with Linux linux (fallback initramfs)

Use the ↑ and ↓ keys to select which entry is highlighted.
Press enter to boot the selected OS, 'e' to edit the commands
before booting or 'c' for a command-line. ESC to return previous
menu.
```

Instructions: for Arch – scary;)

- ❶ Step-by-step text guide (official one).
- ❷ Video guide:
 - vid₁ [OD, YT]: UEFI; check the YouTube comments as well!
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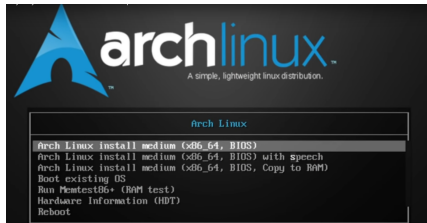
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Definitions

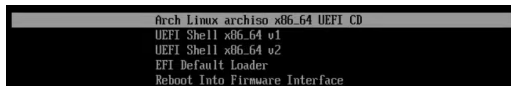
- firmware: BIOS (very old machine), UEFI (semi-new computer).
- partition table: BIOS $\Rightarrow$ MBR (a.k.a. DOS, MS-DOS); UEFI $\Rightarrow$ GPT.
- LVM: adjustable layout, LUKS: encryption.
- LUKS: your data can't be read even if your laptop is stolen.
- ZRAM: compressed RAM.

Instructions: BIOS or UEFI

BIOS:



UEFI:



Installation hints

- 1 use ethernet: faster.

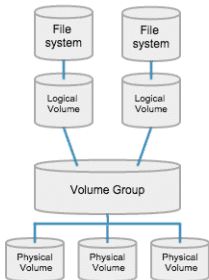


Installation hints

- 1 use ethernet: faster.



- 2 start simply: no encryption, no LVM.



Installation hints

- ② start simply – elaborated (nerdness-level dependent):
 - ① Live media/USB/image (Fedora, Ubuntu):
 - .iso writing, hardware support check, quick look at the system ✓,
 - slower than SSD.

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 - declarative approach based on Nix [YT] ⇒ reproducibility,
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[†]Start with a DE before a WM.

Note: **Asahi** (Linux on a MacBook).

③ partition formatting:

- **ext4**: more settled – my choice,



- **btrfs**:

- modern alternative,
- supports compression $\Rightarrow$ less space, increased storage lifespan,
- copy-on-write $\Rightarrow$ consistency even in case of power loss,
- snapshot feature,
- limited LUKS support.

$\Rightarrow$ It is worth keeping an eye on it!

- ④ **kernel** (stable), **LTS kernel** (longterm) [**others**]:
 - stable: maintained **until the next stable** release,
 - LTS: maintained **for a few extra years**,
 - good to have both: flexibility.

Installation hints – continued

- ④ **kernel** (stable), **LTS kernel** (longterm) [**others**]:
 - stable: maintained **until the next stable** release,
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 - good to have both: flexibility.
- ⑤ **swap**:
 - helps if RAM is exhausted (but slower, $\times 1000!$); **size recommendations**.
 - 2 types:
 - ① swap partition: often preferred,
 - ② **swap file**: easier to resize, but less tested.

Installation hints – continued

- ⑥ good boot time ($\sim 11s$):
- SSD matters: Samsung 970 EVO Plus $\leftarrow$ my choice (for laptop).



Installation hints – continued

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- ⑦ Use a spare drive (to avoid the wrestling of the op. systems),
- example: (used) Thinkpad $\rightarrow$ T480 [YT]: low-budget, flexible.

- 8 Create a normal user (beyond the root; $\in$ wheel; sudo).

Installation hints – continued

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- 9 Log your installation, usage, information sources (e.g. by [Vimwiki](#))!

Installation hints – continued

- 8 Create a normal user (beyond the root; $\in$ wheel; sudo).
- 9 Log your installation, usage, information sources (e.g. by Vimwiki)!
- 10 Post-installation:
 - think in terms of tasks not software, and use the native applications.
 - a weekly system update can be healthy.

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- Desktop environments:
 - windows manager, and
 - a bundle of applications (calendar, image viewer, file manager, ...).

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Desktop environments (DE)

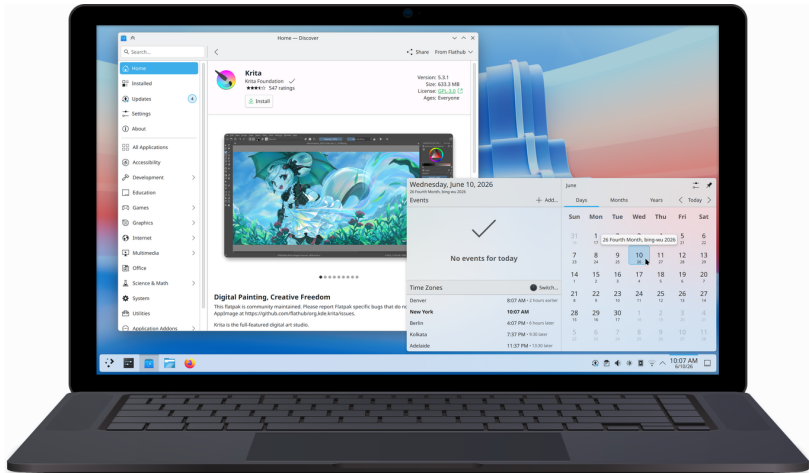
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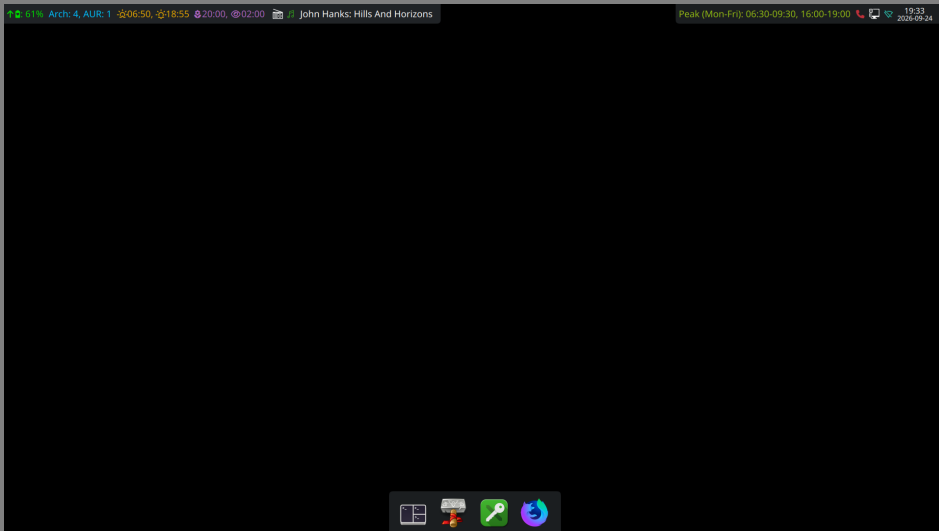
Examples follow

DE: KDE Plasma



spec. → Win XP [YT] & Win 11 mimicing [OD, YT].

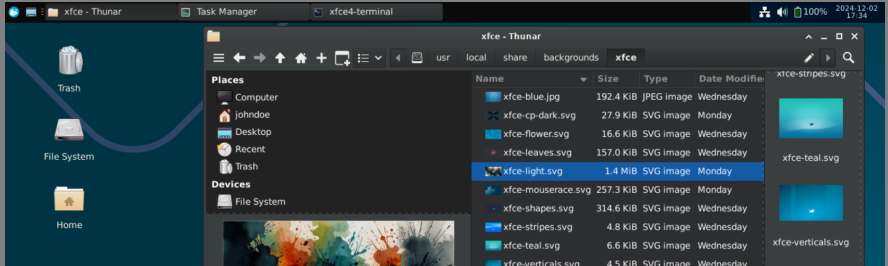
DE: KDE Plasma – my desktop



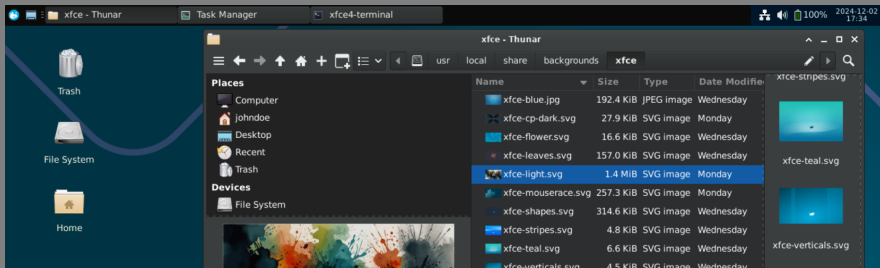
DE: GNOME



DE: Xfce



DE: Xfce



Extra DE inspiration

- **unixporn** (screenshots),
- **COSMIC DE**: worth keeping an eye on it! (Wayland-based)



Window managers (WM)

- It allows handling windows (open, close, min/max-ze, move, resize, ...).
- It can be part of a DE or standalone.
- Idea: WMs can be even snappier than DEs.

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- 3 types:
 - ① **stacking** (a.k.a. floating),
 - ② **tiling**: non-overlapping windows,
 - ③ **dynamic**: allows switching between **tiling** and **floating** layout.

- Stacking:
 - KWin → KDE,
 - Mutter → GNOME,
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Examples follow

```

main.c (/7/src) - VIM
}

/* Set up i3 specific atoms like I3_SOCKET_PATH and I3_CONFIG_PATH */
x_set_i3_atoms();

struct ev_io *xcb_watcher = calloc(sizeof(struct ev_io));
struct ev_io *xcb = calloc(sizeof(struct ev_io));
struct ev_check *xcb_check = calloc(sizeof(struct ev_check));
struct ev_prepare *xcb_prepare = calloc(sizeof(struct ev_prepare));

ev_io_init(xcb_watcher, xcb_get_event, xcb_get_file_descriptor(conn), EV_READ);
ev_io_start(main_loop, xcb_watcher);

if (xcb_supported) {
    ev_io_init(xcb, xcb_get_event, ConnectionNumber(xcbdp), EV_READ);
    ev_io_start(main_loop, xcb);

    /* Flush the buffer so that libev can properly get new events */
    fflush(xcbdp);
}

ev_check_init(xcb_check, xcb_check_cb);
ev_check_start(main_loop, xcb_check);

ev_prepare_init(xcb_prepare, xcb_prepare_cb);
ev_prepare_start(main_loop, xcb_prepare);

xcb_flush(conn);

manage_existing_windows(root);

if (!disable_signalhandler)
    setup_signalhandler();

/* Ignore SIGPIPE to survive errors when an IPC client disconnects
 * while we are sending him a message */
signal(SIGPIPE, SIG_IGN);

/* Autostarting exec-lines */
if (autostart) {
    struct Autostart *exec;
    TAILQ_FOREACH(exec, &autostarts, autostarts) {
        LOG("Auto-starting %s", exec->command);
        start_application(exec->command);
    }
}

/* Autostarting exec-always-lines */
struct Autostart *exec_always;
TAILQ_FOREACH(exec_always, &autostarts_always, autostarts_always) {
    LOG("Auto-starting %s", exec_always->command);
    start_application(exec_always->command);
}

ev_loop(main_loop, 0);
src/main.c 464,9 992

```

x200: wplayer-502/E05.avi MPlayer



x200: git log

```

commit 48774c172b3802bade615418f4b48556bfcf143b
Author: Michael Stapelberg <michael@stapelberg.de>
Date: Sun Jul 17 22:18:00 2011 +0200

    Add missing function prototype for strndup on Darwin (Thanks Marcus)

commit 3da3a691063f7c4c7f09461bbe948fa48abeb5fd
Author: Michael Stapelberg <michael@stapelberg.de>
Date: Sun Jul 17 15:21:57 2011 +0200

    i3-config-wizard: use fgets on Darwin, use strndup from FreeBSD on Darwin (Thanks Mar

commit 02dfb8e891a753ed2152918778f6d0e928a71cac
Author: Michael Stapelberg <michael@stapelberg.de>
Date: Sun Jul 17 15:18:45 2011 +0200

    use memmem and strndup from FreeBSD on Darwin (Thanks Marcus)

commit fc583adb9956ff95e9019bef8bb0e7c2e21d133b
Author: Michael Stapelberg <michael@stapelberg.de>
Date: Sun Jul 17 15:17:24 2011 +0200

    makefile: link -liconv on Darwin (Thanks Marcus)

commit 7512f633a79c290f4e60287f82b1cd689f025b42
Author: Michael Stapelberg <michael@stapelberg.de>
Date: Fri Jul 15 19:21:39 2011 +0200

    [d]

```

```

2001:4d00:100e23:21f3:6ff4:fe1a:f9b0 | 2.3 GB | DHCP: no | WPN: no | Us: down | Et: 192.168.1.42 (1000 fbit/s) | MPT: 74,15% [E] | 012 | 0,03 | 2011-07-22 15:42:32

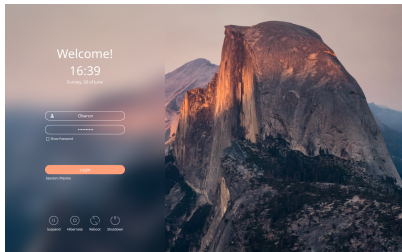
```

WM: Qtile



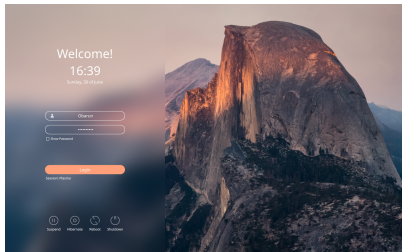
Login/display manager

- It gives graphical login – if you prefer not using/starting from tty;)
- Popular choices: (i) SDDM: tutorial [OD,YT] (inspiration+)



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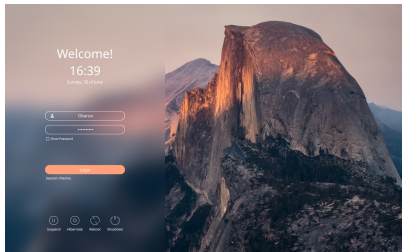


F1 shutdown F2 reboot

```
debian11
< GNOME on Xorg >
login:
password:
```

Login/display manager

- It gives graphical login – if you prefer not using/starting from tty;)
- Popular choices: (i) SDDM: tutorial [OD,YT] (inspiration+), (ii) Ly: tutorial [OD,YT], (iii) GDM: tutorial [OD,YT] (inspiration+).



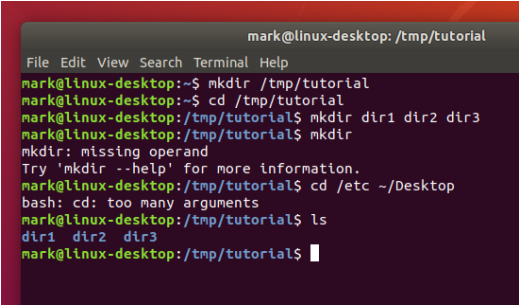
```
F1 shutdown F2 reboot
```

```
debian11
< GNOME on Xorg >
login:
password:
```

Terminal: used for instance @ Arch install

Command shell:

- like Jupyter notebook,
- interaction with the operating system,

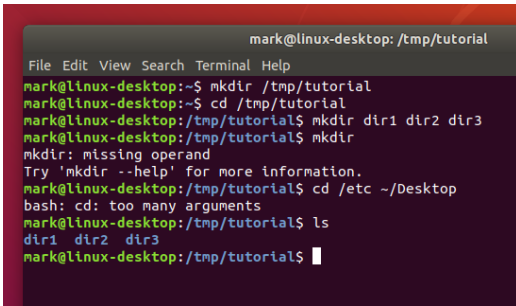


```
mark@linux-desktop: /tmp/tutorial
File Edit View Search Terminal Help
mark@linux-desktop:~$ mkdir /tmp/tutorial
mark@linux-desktop:~$ cd /tmp/tutorial
mark@linux-desktop:/tmp/tutorial$ mkdir dir1 dir2 dir3
mark@linux-desktop:/tmp/tutorial$ mkdir
mkdir: missing operand
Try 'mkdir --help' for more information.
mark@linux-desktop:/tmp/tutorial$ cd /etc ~/Desktop
bash: cd: too many arguments
mark@linux-desktop:/tmp/tutorial$ ls
dir1 dir2 dir3
mark@linux-desktop:/tmp/tutorial$
```

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A screenshot of a terminal window with a dark background and a red title bar. The title bar text is 'mark@linux-desktop: /tmp/tutorial'. Below the title bar is a menu bar with 'File Edit View Search Terminal Help'. The terminal shows the following commands and outputs:

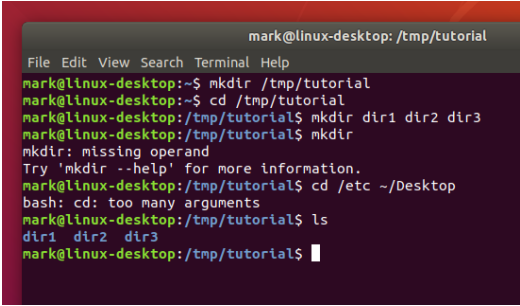
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dir1  dir2  dir3
mark@linux-desktop:/tmp/tutorial$
```

- Google Colab: !shellcommand

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```

- Google Colab: !shellcommand,
- **virtual console** = text terminal + login prompt (ttyX = Ctrl+Alt+FX, X ∈ [7]).

Command line (CLI) – continued

- Examples:

- \$ `cd` : change the current working directory,
 - \$ `ls` : list directory content,
 - \$ `pwd` : print the name of the current directory,
 - \$ `cp` : copy files & directories,
 - \$ `mv` : move or rename files and directories,
 - \$ `touch` : create file,
 - \$ `mkdir` : create directory,
 - \$ `man` : manual page of a command.

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⇒

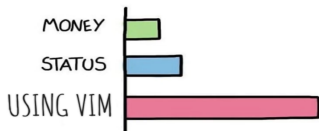
- shell/bash **scripting** [tutorial]
 - lot of **automation** possibilities.

Superb text editor: Vim

- modal editor $\xrightarrow{\text{change}}$ **i** = input mode, **Esc** = command mode,
- highly customizable & efficient,
- keyboard-driven, language-like.
- cross-platform.



WHAT GIVES PEOPLE FEELINGS OF POWER



Vim: usage example

`:q` : `q`uit ← most difficult;),
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`p` : paste

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<code>d3w</code>	: delete 3 words,
<code>di(</code>	: delete inside parentheses,
<code>dd</code>	: delete line,
<code>p</code>	: paste,
<code>y</code>	: yank (copy),
<code>yy</code>	: yank line, ...

Vim – continued (free $\Rightarrow$)

- integration to [browser](#), [Jupyter notebook](#), ...
- evolution: vi $\rightarrow$ Vim $\rightarrow$ [Neovim](#) (community-developed),



- personal Wiki: [vimwiki](#),
- tutorials: `$ vimtutor` and

Name	Vids
ThePrimeagen	YT₁ , YT₂ , YT₃ , YT₄ , YT₅ , YT₆
Missing Semester	OD , YT
DistroTube	OD₁ , YT₁ ; OD₂ , YT₂
Ben Awad	YT

Hint: How to ask?

- Netiquette [OD,YT]; discussion → guide.
- DIY mentality:
 - the community is friendly and helps *if* you put in effort,
 - ⇒ read & do your research first!



Odysee (with [LBRY](#)) / YouTube channels: good educators

Name	Platform		Note
DistroTube	OD	YT	Linux
Learn Linux TV	—	YT	Linux
Brodie Robertson	OD	YT	Linux
Bread on Penguins	—	YT	Linux (less active nowadays [†])
ExplainingComputers	—	YT	IT
Eric Murphy	OD	YT	(less active nowadays [†])
EF - Linux Made Simple	OD	YT	Linux (less active nowadays [†])
OldTechBloke	OD	YT	Linux (less active nowadays [†])
Mental Outlaw	OD	YT	Linux, privacy
Luke Smith	OD	YT	Linux (less active nowadays [†])
VeronicaExplains	—	YT	Linux (less active [†])
MobileTechReview	—	YT	laptop & mobile reviews
Naomi Brockwell: NBTv	OD	YT	privacy
Louis Rossmann [‡]	OD	YT	right to repair

[†] but her/his videos are nice. [‡] [FUTO's Guide to a Self Managed Life: part-1 \[YT₁\]](#),
part-2 [[YT₂](#)], [wiki](#).

Ricing: Conky

- system monitor: CPU, memory, swap space, disk storage, temperature, processes, network interfaces, battery power, system messages, e-mail, ...

Ricing: Conky

- system monitor: CPU, memory, swap space, disk storage, temperature, processes, network interfaces, battery power, system messages, e-mail, ...
- Example (inspiration+):

```
Linux 2.6.15-23-686 on i686
eirc @ druuna
-----
Date: Thursday, 25 May
Time: 6:51:15   Uptime: 10h 10m
-----
Temperatures
CPU: 40.5°C - MB: 37.0°C
-----
CPU: 42% ██████████
RAM: 97% 615M/630M ██████████
Swap: 1% 18.6M/957M ██████████
-----
File systems
/dev/sda1 53% 4.33G/9.17G ██████████
/dev/sda3 74% 113.92G/167.66G ██████████
-----
Now Playing
Pain Of Salvation
Song for the innocent
-----
"The Perfect Element pt.1"
2000 - Progressive metal
-----
Collection Information
Artists: 98   Compilations: 7
Albums: 271   Genres: 41
Tracks: 2717
-----
Collection Statistics
Most songs by Black Sabbath (190)
Most songs are Heavy Metal (651)
Most songs during 2005 (232)
Most albums by Black Sabbath (21)
Most albums are Heavy Metal (64)
Most albums during 2005 (22)
```

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explosia Linux 2.6.12-gentoo-r6 on i686
Batt: charged 105%

PROCESSING

CPU: 1596.051MHz 27 % 67°C



NAME	PID	CPU%	MEM%
X	4801	9.50	9.03
cpufreqd	6905	3.91	0.12
firefox-bin	7234	2.51	9.47
pypanel	4828	0.84	1.15

DATA

RAM: 24 %



NAME	PID	CPU%	MEM%
firefox-bin	7279	0.09	9.47
firefox-bin	7254	0.00	9.47
firefox-bin	7251	0.00	9.47
firefox-bin	7250	0.00	9.47

Swap: 2 %

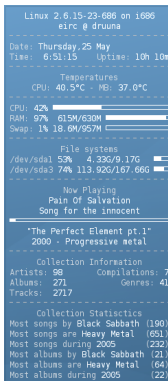
/: 81% 29.44G



Upload: 0 kb/s Download: 0 kb/s

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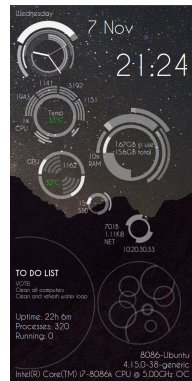


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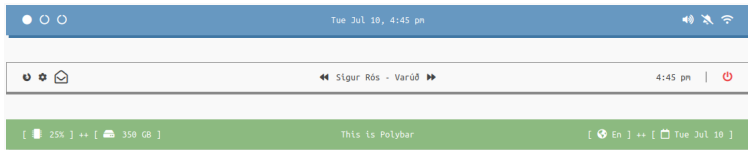
Ricing: Conky on desktop



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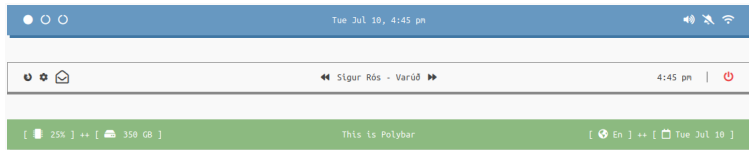


Ricing: Polybar (link₁, link₂)



- fast replacement of the status bar,
- date, time, keyboard layout, backlight, volume, MPD, network, CPU, ...

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Example follows.

Polybar example



Compositors: for Xorg (a.k.a. X), for Wayland

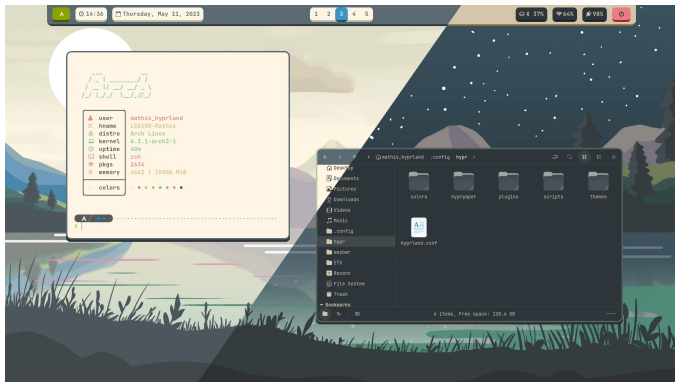
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 - add effects like transparency, animations or blur,
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- Example: **Picom**, **Hyprland**, **Wayfire**. Related fun [**OD**, **YT**] with Gnome extensions.
- For Hyprland: **website**, **wiki**; **demo** (screenshot):



Compositor: HyperInd_{vid}



Simple •

Linux phones (security & privacy; beta!)

- 1 Librem 5:
 - by Purism, running PureOS.



② PinePhone, PinePhone Pro:

- by **Pine64**,
- PinePhone Pro: **Wiki**; various op. systems $\ni$ **Arch**;
- recipe: **YT₁**, **YT₂**, **YT₃**, **YT₄**, **YT₅**.
- exploring: Arch with **Phosh** (SSH, VNC, ... ✓); **sxmo**: looks exciting.



My choice (more stable and transparent communication)

- ## ③ To keep an eye on: **Liberux Nexx**; **LibrePhone** (by **FSF**); **Jolla Phone**!

Summary



- desktop tour

Summary



- desktop tour,
- applications

Summary



- desktop tour,
- applications,
- Linux history, user freedom

Summary



- desktop tour,
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- Linux phones.

Are you ready to own your computer



Feel free to share your

- adventure (how you liked Linux, new softwares/channels found),
- constructive suggestions (what else would have helped you)!