

Drunk on Asahi

an Asahi Linux presentation, by Jared Feekery

(presentation name by Camden *aka* carbonatedcaffeine)

topics

- introduction
- what is asahi?
- why would you want install it?
- what is it like to use?
- gaming benchmarks
- conclusion & questions

hello



Jared F (cyberviolets)
cyberviolets • any | pfp: @cringeazoid 

 *Best thing you ate this week?*

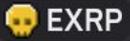
     

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- linux novice, mainly used *Ubuntu* and *OpenSUSE*, currently using *CachyOS*



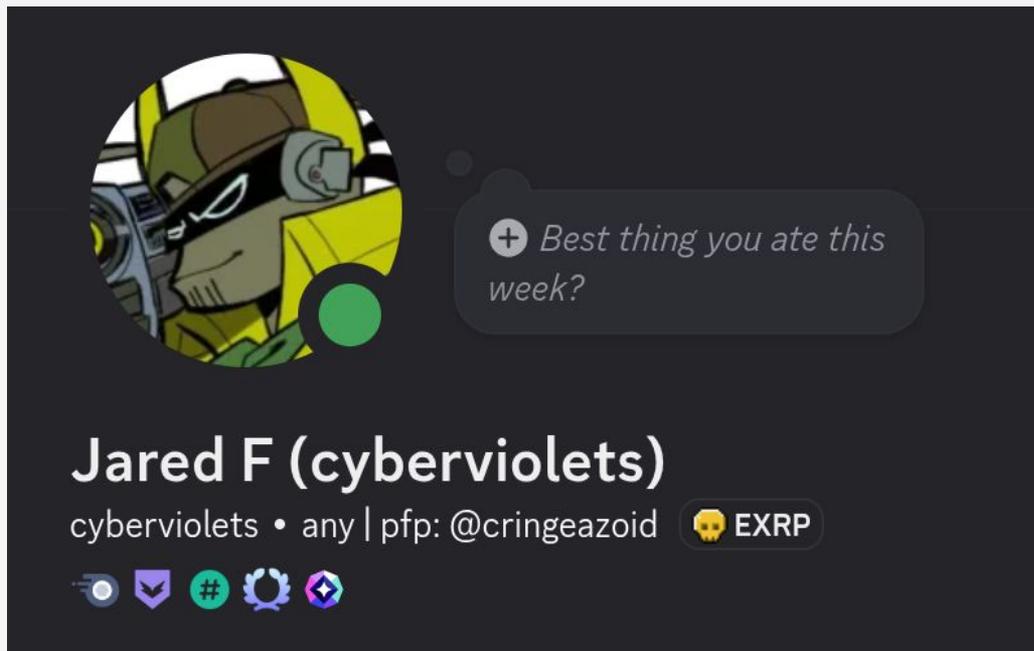
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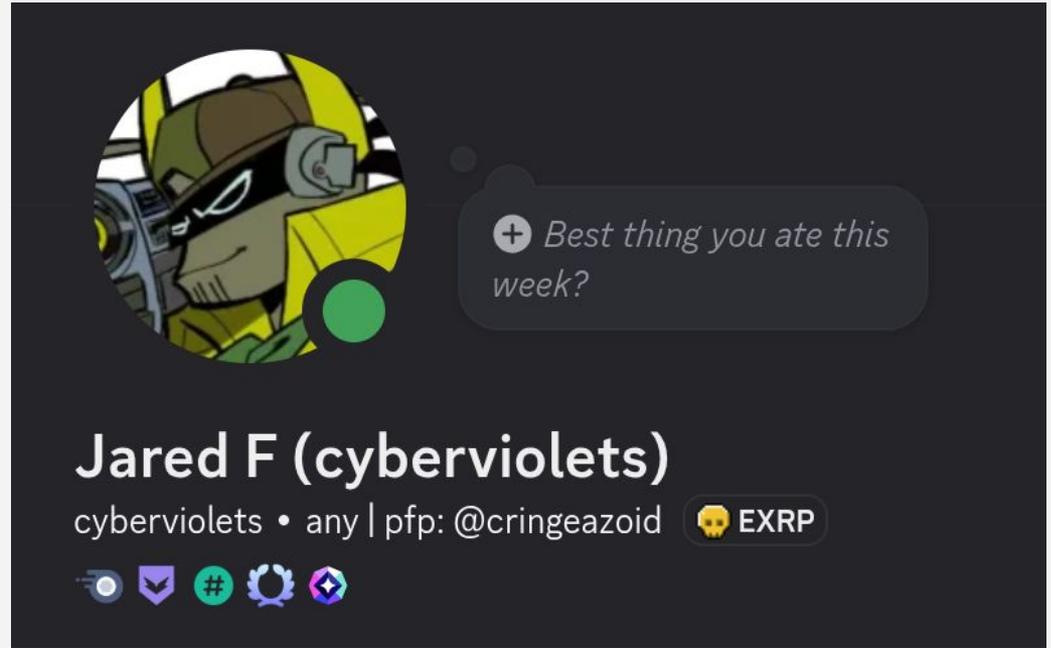
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- mac user (ewwww)



what is asahi?





Asahi Linux

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Linux on Apple Silicon

Asahi Linux aims to bring you a polished Linux® experience on Apple Silicon Macs.

[Learn more >](#)

Install from macOS

```
curl https://alx.sh | sh
```

[Device support >](#)



Who is working on Asahi Linux?

Asahi Linux is a community, and everyone is invited to contribute. If you are interested in contributing, check out our [contribute page](#)! The project infrastructure and finances are overseen by our board. For more information, see our [governance page](#).

Current major contributors are:

- [Alyssa Rosenzweig](#), the Asahi GPU lead. Alyssa is a Linux graphics hacker known for her work on reverse-engineering the Arm Mali GPUs to build the free Panfrost driver. She is an upstream Mesa3D developer today maintaining Asahi's OpenGL and Vulkan drivers.
- [Dougall Johnson \(dougallj\)](#), instruction set architecture extraordinaire. Dougall reverse-engineered much of the instruction set of the Apple GPU and has analyzed the timing of the Apple M1's CPU cores to infer microarchitectural details.
- [Eileen Yoon \(eijn\)](#), our signals guru covering multimedia and accelerators. Eileen is currently working on hardware video codec acceleration, having already knocked out the Neural Engine and Image Signal Processor (camera).
- [James Calligeros \(chadmed\)](#), who implemented energy-aware scheduling (EAS), hand-tuned fancy DSPs for the speakers, then added utilisation clamping to PipeWire such that the fancy DSPs don't draw fancy power. Also maintains asahi-gentoo.
- [Janne Grunau](#), who implemented touchpad/keyboard support for the M1 series and is now maintaining the display controller (DCP) driver, having recently added HDMI out support. He has also been involved in countless other bits and pieces, including device trees and submission.
- [Mark Kettenis](#), OpenBSD developer. Mark has written m1n1 and U-Boot drivers for the Apple M1 core peripherals, including the bringup needed for PCIe and NVMe (ANS). Mark has also written OpenBSD drivers for the Apple M1 as a parallel effort to the Linux port.
- [Sven Peter](#). Sven has worked tirelessly on upstream Linux support for Apple's Device Address Resolution Table (DART) required for USB, PCIe, Ethernet, and Wi-Fi. He also added USB gadget support to m1n1, and is now working on DisplayPort and Thunderbolt support.

Past major contributors include:

- [Asahi Lina](#), GPU kernel sourceress. Lina joined the team to reverse engineer the M1 GPU kernel interface, and found herself writing the world's first Rust Linux GPU kernel driver. Outside of GPUs, she sometimes hacks on open source VTuber tooling and infrastructure.
- [Hector Martin \(marcan\)](#), the founder of Asahi Linux. marcan is a seasoned reverse engineer and developer with more than 15 years of experience porting Linux and running unofficial software on undocumented and/or closed devices. Asahi Linux was his most ambitious project yet. His previous projects include [PS4 Linux](#), a Linux port to the proprietary hardware found on the PS4, capable of full 3D acceleration using OpenGL and Vulkan (radeon/amdgpu drivers); [AsbestOS](#), a PS3 Linux bootloader for GameOS mode, and associated kernel patches to make Linux work on the PS3 Slim; and numerous contributions to the [Wii Homebrew ecosystem](#), including being part of the team that developed [The Homebrew Channel](#) and [BootMii](#), documenting much of the hardware, and contributing to open homebrew SDK tooling.
- [Martin Povišer \(povik\)](#), who led our audio kernel driver effort. Martin wrote the Apple-specific SoC audio drivers as well as drivers for Apple-proprietary codecs and codec variants.

Device support



MacBook Air



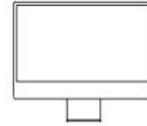
MacBook Pro



Mac Mini



Mac Studio



iMac



Mac Pro

Chips

M1

M1 Pro

M1 Max

M2

M2 Pro

M2 Max

Features

Display*

Keyboard (+ Backlight)

Trackpad

Touch Bar †

Headset Jack

Speakers

Microphone

Camera

MagSafe ‡

USB Type C (USB 3.0)

HDMI ‡

SD Card ‡

Wi-Fi

Bluetooth

USB-C Displays

Thunderbolt / USB4

Touch ID

* Local dimming available on 14" and 16" models. Maximum 60Hz refresh rate on all models. HDR/120Hz not yet supported.

† Available on 13" models only.

‡ Available on 14" and 16" models only.

why would you want install it?





Developer:	Apple Inc.
Manufacturer:	Foxconn Pegatron
Product family:	MacBook
Type:	Laptop
Release date:	November 17, 2020; 4 years ago

How long do Macs last?

So, in answer to the question: How long do Macs last? We'd say **five to eight years**, but beware that you may not be able to replace any faulty parts in a Mac when more than five years have passed since Apple last sold it.

How Long Does Apple Support Macs?

Apple's product lifecycle includes several key milestones for both hardware and software support.

- Security updates: Generally provided for 2 to 3 years after a macOS version's release
- Feature updates: Each macOS release typically gets 1 to 2 years of new features before security-only support
- Hardware service: Macs are considered vintage **5 years after Apple last sold them, and obsolete after 7 years**



Phil0124

Level 10 🏆 214,291 points

Nov 15, 2023 01:16 PM in response to marlou82

Hard to say, since we have no idea what the computer store specifically means by "supported". Also, its impossible to know when Apple will stop providing a particular model of Mac with macOS updates. In general its around **5 to 7 years of main macOS updates** (but there's cases where they have supported some models for longer), plus 2 more or so of security fixes. After that, it depends entirely on how you use it and whether the apps you use can continue to run on it when no more macOS updates are made available for it by Apple.



 MacBook Pro (16-inch, 2024) Apple M4 Max @ 4.5 GHz (16 CPU cores, 40 GPU cores)	25637	
 MacBook Pro (14-inch, 2024) Apple M4 Max @ 4.5 GHz (16 CPU cores, 40 GPU cores)	25578	
 MacBook Pro (16-inch, 2024) Apple M4 Max @ 4.5 GHz (14 CPU cores, 32 GPU cores)	23039	
 MacBook Pro (14-inch, 2024) Apple M4 Max @ 4.5 GHz (14 CPU cores, 32 GPU cores)	22954	
 MacBook Pro (16-inch, 2024) Apple M4 Pro @ 4.5 GHz (14 CPU cores, 20 GPU cores)	22398	
 Mac mini (2024) Apple M4 Pro @ 4.5 GHz (14 CPU cores, 20 GPU cores)	22360	
 MacBook Pro (14-inch, 2024) Apple M4 Pro @ 4.5 GHz (14 CPU cores, 20 GPU cores)	22323	
 Mac Studio (2023) Apple M2 Ultra @ 3.7 GHz (24 CPU cores, 60 GPU cores)	21388	
 Mac Studio (2023) Apple M2 Ultra @ 3.7 GHz (24 CPU cores, 76 GPU cores)	21388	
 Mac Pro (2023) Apple M2 Ultra @ 3.7 GHz (24 CPU cores, 60 GPU cores)	21341	
 Mac Pro (2023) Apple M2 Ultra @ 3.7 GHz (24 CPU cores, 76 GPU cores)	21341	



OpenCore Legacy Patcher

Experience macOS just like before

[Getting Started→](#)

Near-native OTA updates

Install updates from System Settings, with just couple more additional steps compared to native.

Zero firmware patching

Using the capabilities of the OpenCore boot manager, our protocol upgrades are done in memory and are never permanent.

Supporting more hardware

New life is breathed into your decade-old graphics card, WiFi, and Bluetooth chipsets. Even your upgraded hardware receives benefits by unlocking exciting features like Hardware Acceleration, AirDrop, Apple Watch Unlock, Sidecar, and much more!

Unlock newer features

Unlock some newer features such as Sidecar, AirPlay to Mac, Night Shift, and Universal Control, even on natively supported models!

A helpful community

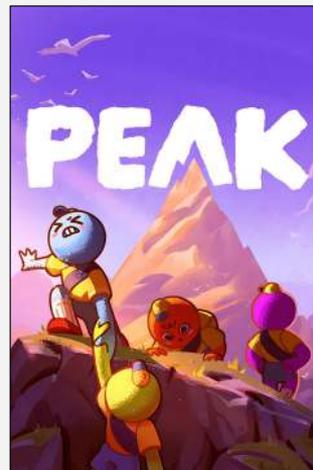
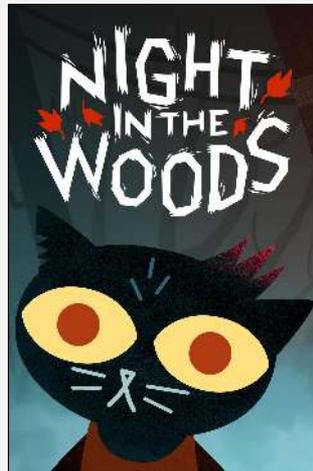
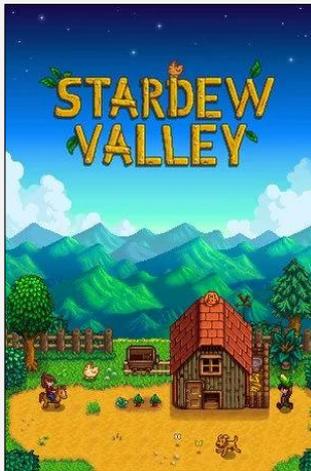
Whether it's getting started or learning the specifics, you can always find answers with our amazing community of tinkerers, developers, and dreamers.

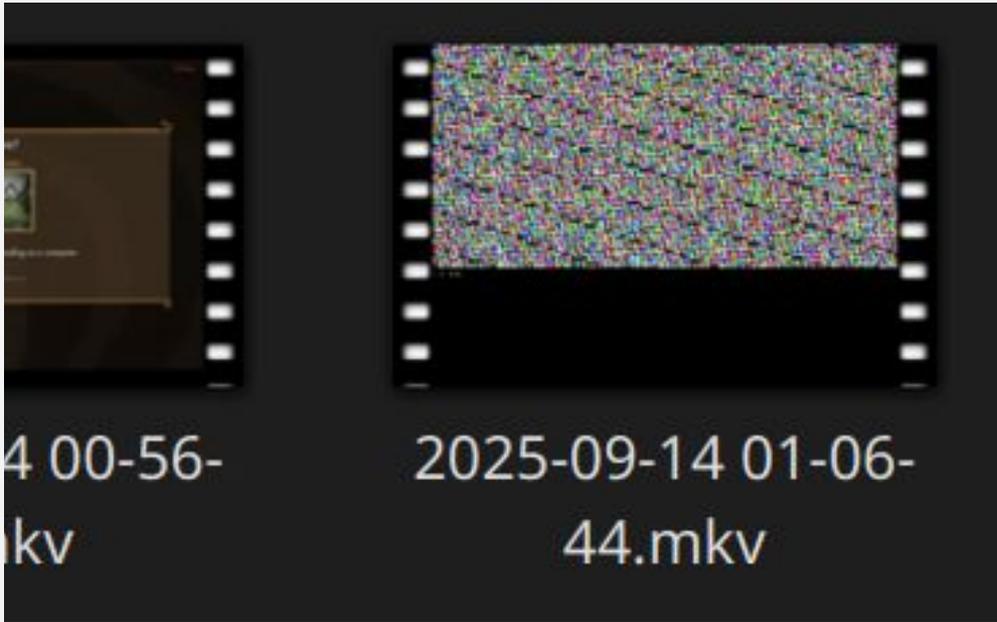
what is it like to use?



gaming benchmarks









Jamiroquai - Virtual Insanity (Official Video)

v.1.27.8

PEAK

NEW ISLAND IN
6h 52m 15s

- HOST GAME 
- PLAY OFFLINE 
- SETTINGS
- CREDITS
- 
- QUIT

MESA and ALPINE alternate each day now.
New graphics options to fix missing visuals and crashes.
CHECK THE PATCH NOTES.



conclusion

