



FEDORA ASAHI REMIX 40

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Member, Fedora Asahi SIG

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NEAL GOMPA

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WHO ARE WE?

Davide Cavalca

- Contributor and package maintainer in Fedora and CentOS
- Member of Fedora Asahi SIG
- Member of Fedora Cloud and Fedora Server WGs
- Co-chair of CentOS Hyperscale SIG
- Member of CentOS Alternative Images SIG
- CentOS Board Director
- Production Engineer, Linux Userspace at Meta Platforms, Inc.

Neal Gompa

- Open Source Advocate
- Contributor and package maintainer in Fedora and CentOS
- Member of Fedora Engineering Steering Committee (FESCo)
- Chair of Fedora Asahi and KDE SIGs
- Member of Fedora Workstation, Fedora Cloud, and Fedora Server WGs
- Co-chair of CentOS Hyperscale SIG
- Member of AlmaLinux Engineering Steering Committee (ALESCo)
- Member of CentOS Alternative Images SIG
- Member of KDE, e.V.
- Member of X.Org Foundation Board of Directors
- Co-host of the [Sudo Show](#) podcast
- Principal Consultant at [Velocity Limitless](#)



FEDORA ASAHI OVERVIEW

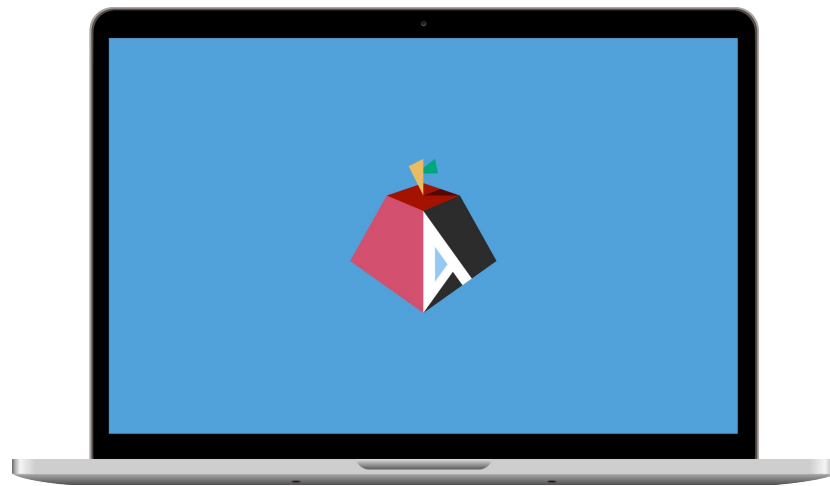


FEDORA ASAHI

Fedora Asahi SIG

The Special Interest Group (SIG) packages and maintains the software used to support Apple Silicon platforms on Fedora Linux.

We develop and maintain variants of Fedora media for Apple Silicon platforms.



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FEDORA ASAHI REMIX

Fedora Asahi Remix

This Remix is a special derivative of Fedora Linux that is optimized around Apple Silicon hardware.

Core changes:

- Custom kernel derived from the Fedora kernel with Asahi patches
- Custom mesa derived from the Fedora packaging with Asahi patches
- Custom u-boot derived from the Fedora packaging with Asahi patches
- Fedora Asahi Remix branding

The Remix comes in KDE, GNOME, Server, and Minimal flavors. Our flagship is the KDE flavor.



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WHERE WE ARE TODAY



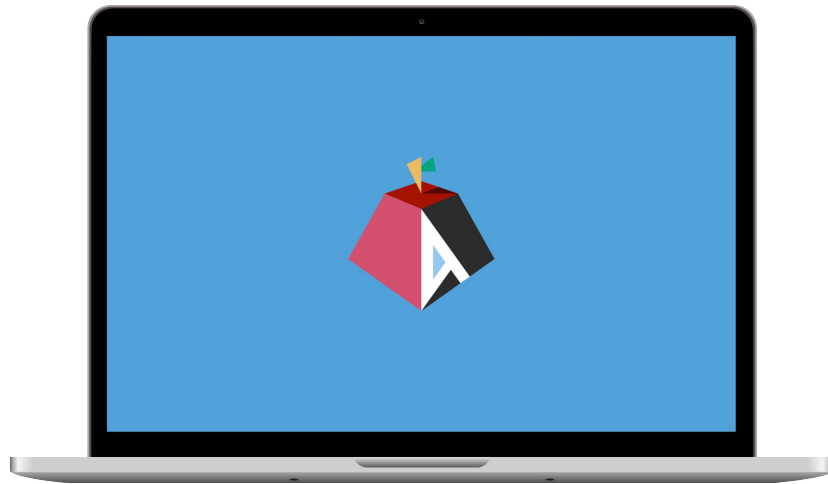
FEDORA ASAHI CURRENT STATUS

Broad support for ARM Macs

Today, Fedora Asahi Remix has good coverage of Apple Silicon hardware:

- Device support: All released M1 and M2 laptops and desktops (except Mac Pro)
- Firmware support: All on v13.5
- Hardware accelerated graphics by default
- Camera and touch bar support
- Speaker support (except iMac)
- HDMI output (over physical HDMI port)

More details on [the Asahi Linux website](#).



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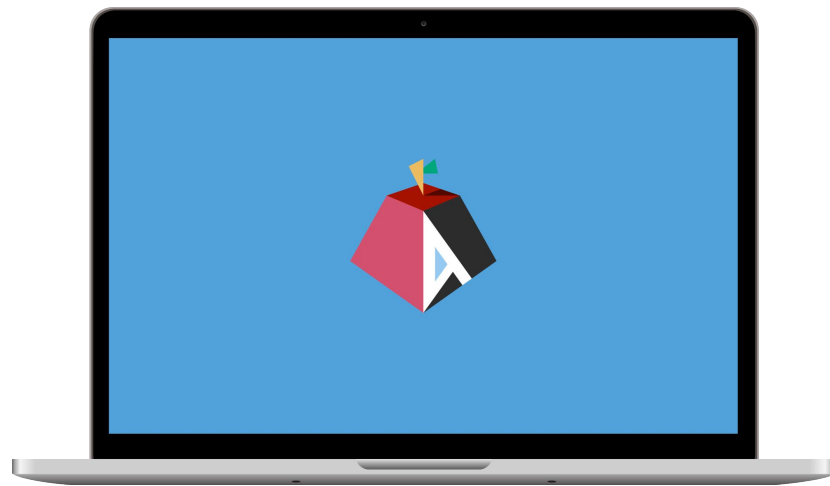
FEDORA ASAHI CURRENT STATUS

Broad support for ARM Macs

A few things are **not** supported (yet!), some of note:

- Microphone
- HDMI audio support
- DP Alt Mode, Thunderbolt / USB4, DisplayPort
- SEP, TouchID

Detailed status on [the Asahi Linux wiki](#).



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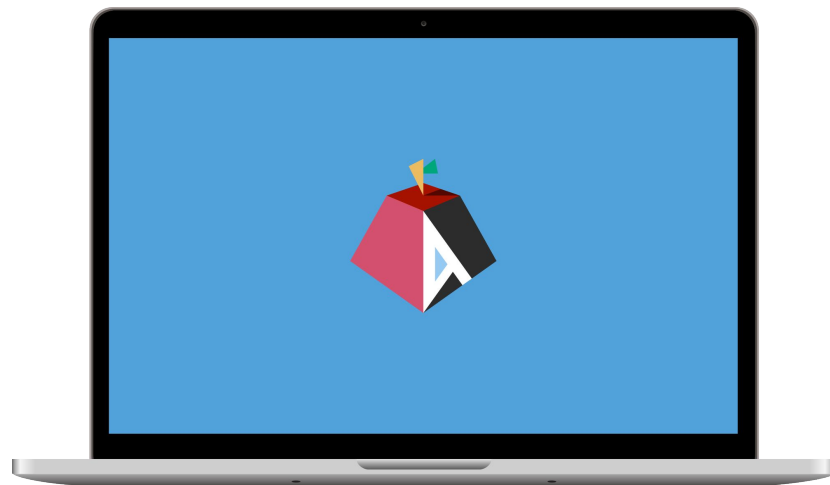
FEDORA ASAHI CURRENT STATUS

New features

First-class audio support

- Speaker protection
- Psychoacoustic bass extender
- Optimized DSP chain out of the box via PipeWire and WirePlumber

More details in the [Asahi Linux blog](#).



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FEDORA ASAHI CURRENT STATUS

New features

First conformant OpenGL 4.6 implementation

- Blender support
- Games!
- Better than macOS

More details on [Alyssa's blog](#)



Blender “Wanderer” demo by Daniel Bystedt, licensed CC BY-SA.

FEDORA ASAHI CURRENT STATUS

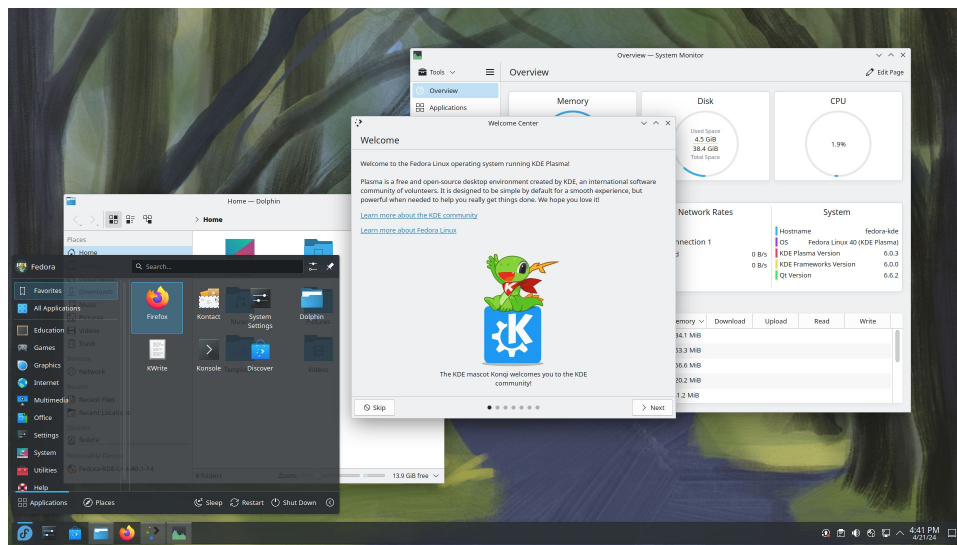
Flagship with KDE Plasma 6

KDE Plasma 6 is the latest major version of the KDE Plasma desktop, offering a refinement of what has been available for the past decade and major improvements throughout the stack to support the future of the Linux desktop.

Among the user-visible changes are:

- Refined look and feel for a cleaner experience
- Refreshed default feature set
- More extensibility than ever before

More details on [Fedora Magazine](#).



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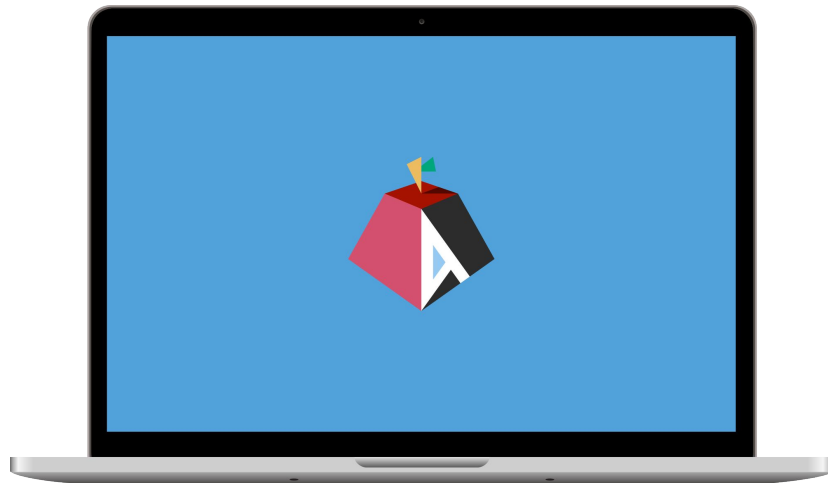
FEDORA ASAHI RELEASE

The Asahi Linux flagship!

Fedora Asahi Remix is the flagship distribution, developed in partnership between Asahi Linux and the Fedora Project.

The first “official” stable release based on Fedora Linux 39 released in December 2023. The current release based on Fedora Linux 40 released in early May 2024.

fedora-asahi-remix.org



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NEXT UP

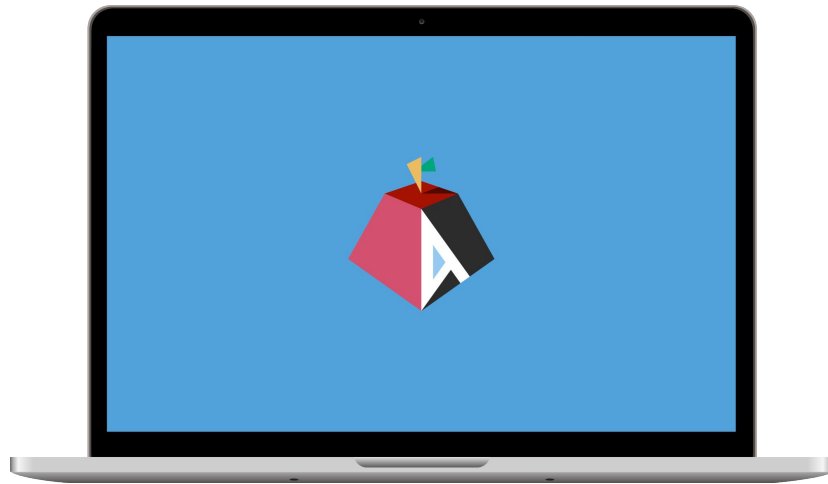


ASAHI UPSTREAM EFFORTS

Working through patches...

Asahi Linux platform patches are (slowly!) getting reviewed and integrated in various projects (kernel, u-boot, mesa, etc.)

Most of this effort is driven by Hector Martin, Mark Kettenis, Alyssa Rosenzweig, and Asahi Lina.



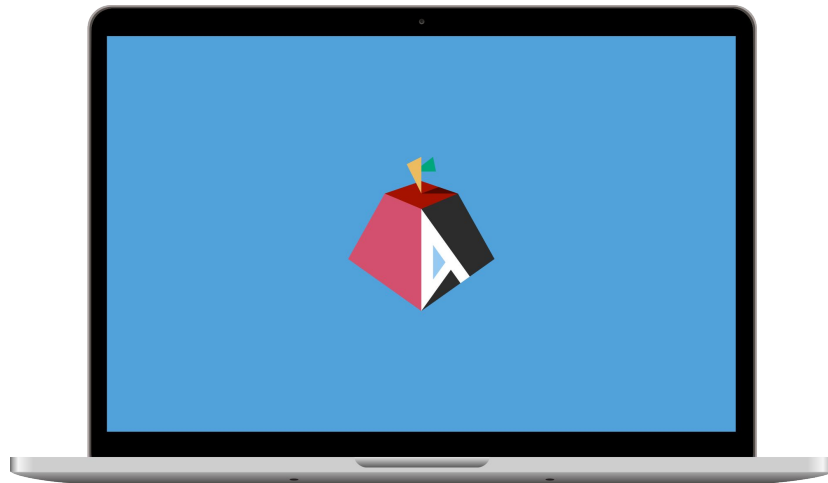
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FEDORA ASAHI SIG EFFORTS

Working through packages...

One of the main focuses is on reducing the packaging delta between Fedora Asahi and upstream Fedora packages that have been forked by the Asahi SIG.

Some effort has succeeded thus far, more to come on this...

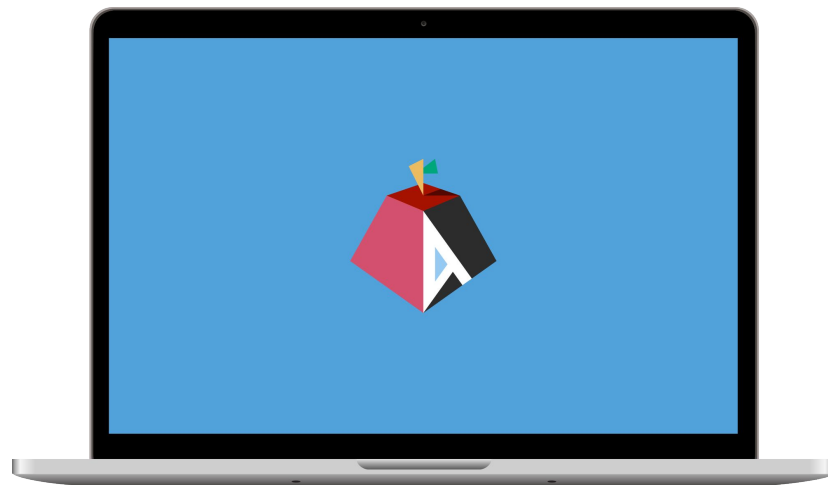


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FEDORA ASAHI SIG EFFORTS

Work in progress

- Fedora-build first stage bootloader
 - [PR#5 on m1n1](#) (merged)
- Fedora-built installer
 - [PR#2 on asahi-installer](#) (in review)
 - Requires prebuilt macOS binaries for now (Python, libffi)



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FEDORA ASAHI SIG

Join Us

- Fedora Asahi Remix: fedora-asahi-remix.org
- Documentation docs.fedoraproject.org/en-US/fedora-asahi-remix/
- Project issue tracker: pagure.io/fedora-asahi/project
- Mailing list: asahi@lists.fedoraproject.org
- Forums: discussion.fedoraproject.org/c/neighbors/asahi
- Matrix: [#asahi:fedoraproject.org](https://matrix.fedoraproject.org/#asahi:fedoraproject.org)

Support Us

- Sponsor Hector Martin (Asahi Linux) on GitHub: <https://github.com/sponsors/marcan>
- Sponsor Neal Gompala (Fedora Asahi Remix) on GitHub: <https://github.com/sponsors/Conan-Kudo>
- More information at <https://asahilinux.org/support/>



QUESTIONS?



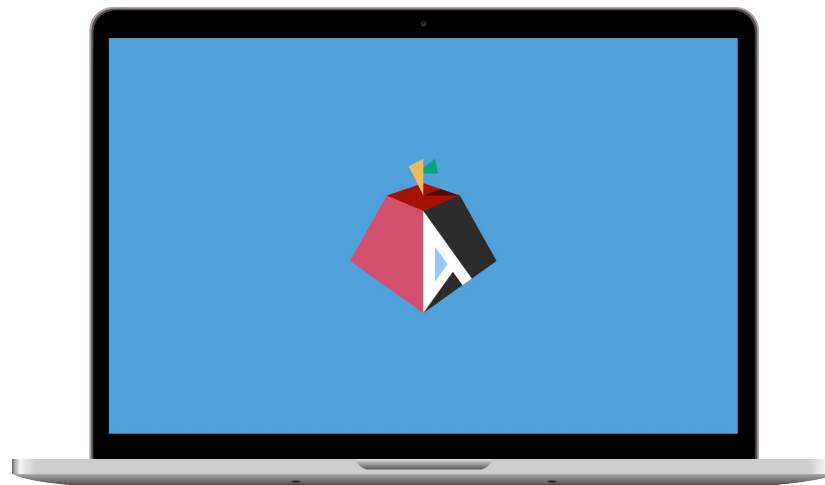
BACKUP



FEDORA ASAHI SIG EFFORTS

Packages status

- Maintained in copr
 - u-boot
 - mesa
 - kernel
 - Remix-specific support packages
- Maintained in Fedora
 - ~25 packages
 - <https://src.fedoraproject.org/group/asahi-sig>

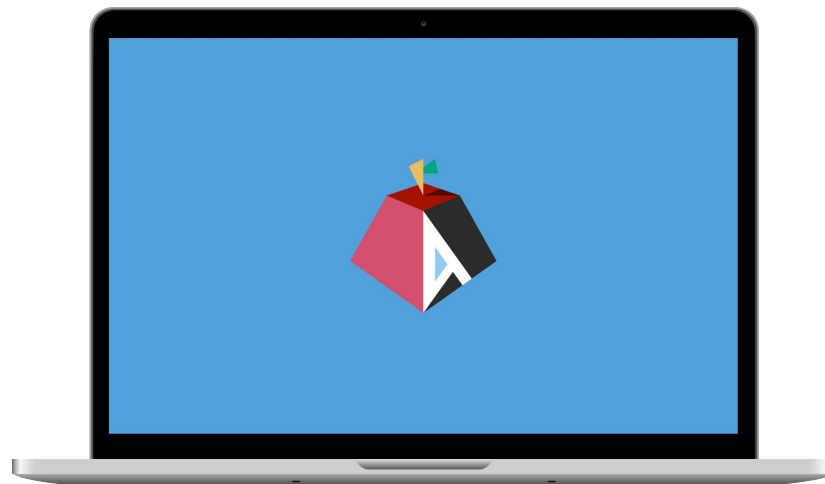


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FEDORA ASAHI SIG EFFORTS

Documentation

- Deviations from stock Fedora
 - <https://docs.fedoraproject.org/en-US/fedora-asahi-remix/deviations/>
- Coming soon: “how the Remix is made”
 - build process
 - infrastructure setup



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