Fedora and KDE with KDE Plasma 6

Introducing Fedora KDE and KDE Plasma

Neal Gompa

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Who am I?

- Open Source Advocate
- Owner and Principal Consultant at Velocity Limitless
- Contributor to Fedora, CentOS, openSUSE, and Mageia
  - Member of Fedora Engineering Steering Committee (FESCo)
  - Member of Fedora Workstation, Fedora Cloud, and Fedora Server WGs
  - Chair of Fedora KDE SIG
  - Co-chair of CentOS Hyperscale SIG
  - Member of CentOS Alternative Images SIG
  - Member of the openSUSE Board
  - Member of the openSUSE Heroes (Infrastructure)
  - Member of the Mageia Council and Mageia.org Board
- Contributor to RPM, DNF, KIWI, Koji, Open Build Service, and various other similar projects
- KDE contributor
  - Member of KDE, e.V. and X.Org Foundation
- Co-host of the Sudo Show podcast

Fedora KDE Overview

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Fedora Project and Fedora Linux

The Fedora Project is a community of people working together to build a free and open source software platform and to collaborate on and share user-focused solutions built on that platform.

That platform is “Fedora Linux”, a Linux distribution that aims to provide the latest and greatest in free and open source software (FOSS) in a well-integrated fashion.

Fedora Linux offers a number of variants in the form of Editions (flagships), Spins (alternative desktops), and Labs (variants targeting a specific niche).

Fedora KDE SIG

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The Fedora Project Special Interest Group (SIG) packages and maintains the Qt stack and KDE software ecosystem for Fedora (and RHEL, starting with RHEL 8).

It also develops and maintains variants of Fedora media with KDE software on it.

As part of this work, the SIG contributes to KDE projects to support the broader community.

Also… fedoraloveskde.org

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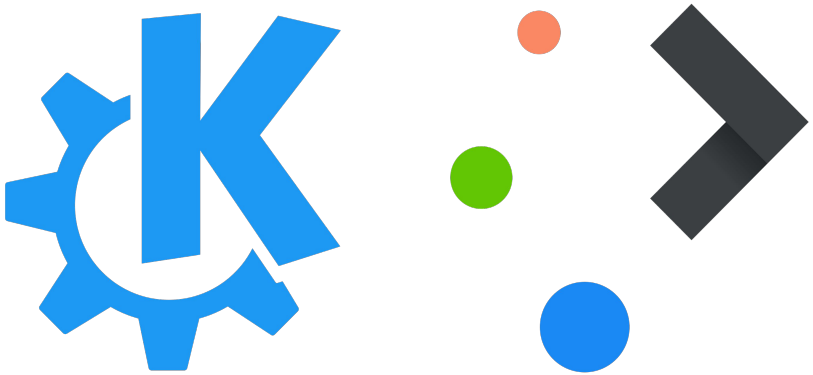
Fresh KDE Plasma

The Fedora KDE SIG has a policy of continuously updating KDE Plasma for the latest stable releases of Fedora Linux.

In addition, for KDE Plasma for RHEL/CentOS and derivatives, we refresh to the latest stable release at least twice a year for the latest stable release of RHEL/CentOS.

With KDE Plasma 6, things are a bit different, as it is a new major version. It is new to Fedora Linux 40 and will be new with EPEL for CentOS/RHEL 10.



Fedora KDE Plasma Spin

The flagship KDE Plasma experience

- Curated collection of KDE software to demonstrate the quality of the ecosystem
- Aims to provide quality KDE Plasma Desktop experience largely based on upstream defaults
  - Minor branding and usability tweaks
  - Mozilla Firefox as the browser
  - FirewallD and SELinux for security
- Shipped as a live media ISO for 64-bit x86 and ARM systems and a disk image for 64-bit ARM systems
  - Available from kde.fedoraproject.org

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Fedora Kinoite

A new experience that offers much of the same features as the main KDE spin, except…

- A more minimal default experience
  - Applications delivered as Flatpaks
  - RPM-OSTree supports a reliable “atomic” base Linux desktop experience
  - Developer workflows supported through containers with Podman and Toolbx
- Shipped as an install ISO for 64-bit x86, ARM, and POWER systems
  - Available from kinoite.fedoraproject.org

KDE for Enterprise Linux

KDE software is packaged and maintained in the Extra Packages for Enterprise Linux (EPEL) repository for RHEL/CentOS and derivatives.

Notably, the CentOS Hyperscale SIG and the AlmaLinux project both offer live media ISOs using KDE Plasma on their distributions.

- CentOS Hyperscale: https://sigs.centos.org/hyperscale/content/spins/workstation/
- AlmaLinux: https://wiki.almalinux.org/LiveMedia.html

KDE Software

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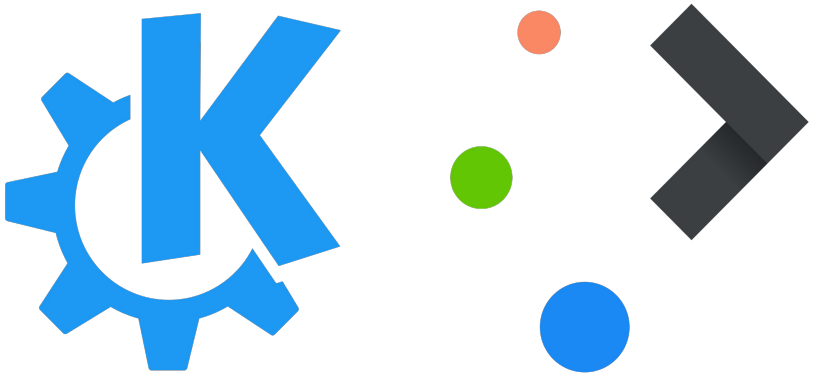
KDE Plasma

KDE Plasma is a modern, feature-rich desktop environment for Linux-based operating systems. Known for its sleek design, customizable interface, and extensive set of applications, it is also open source, devoid of ads, and makes protecting your privacy and personal data a priority.

KDE Plasma is built on top of the KDE Frameworks and Qt.



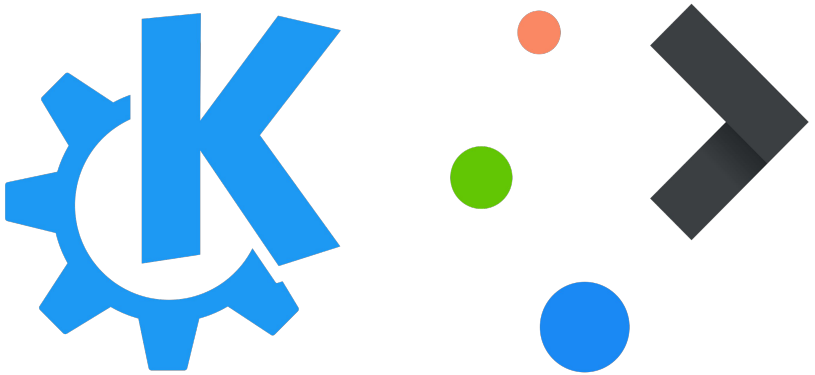
KDE Plasma 6

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

But what about the under-the-hood changes?



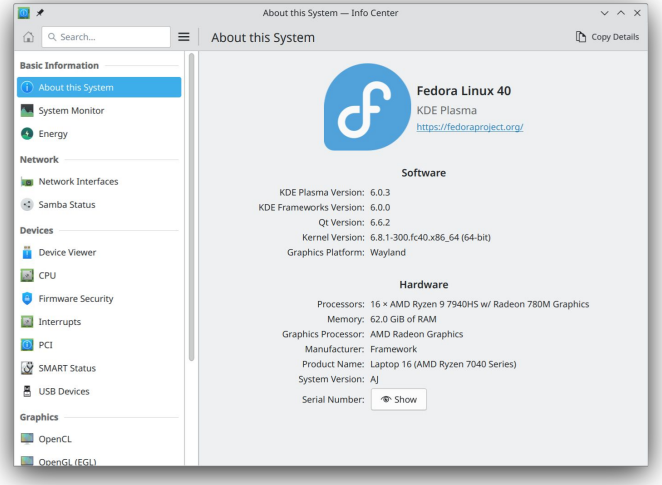
KDE Plasma 6 – Wayland by Default

KDE Plasma now runs with Plasma Wayland by default, rather than the legacy X11 session.

This gives us all the benefits: smoother graphics, greater performance, and lower resource usage.

Fedora was [the first distribution to make the switch for KDE Plasma with Fedora Linux 34](#).

Plasma 6.0 takes this change upstream for all Linux distributions.



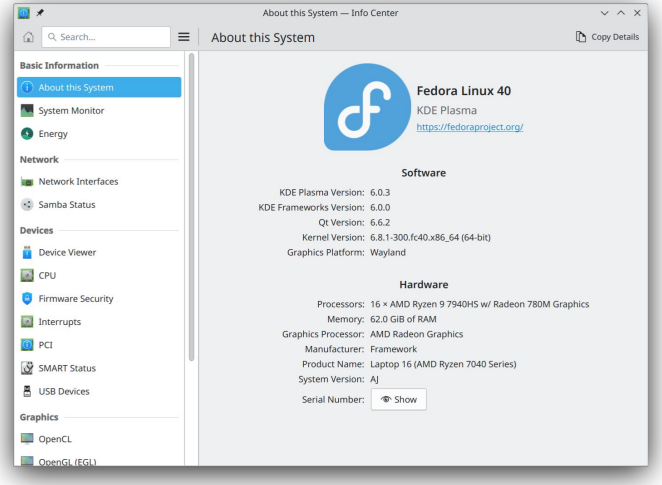
KDE Plasma 6 - Wayland by Default

KDE Plasma now supports SDDM running on KWin (the KDE Wayland compositor) to display the greeter.

Distributions are able to opt into this change.

Fedora was [the first distribution to make the switch for SDDM with Fedora Linux 38](#).

Fedora KDE was the first KDE Linux distribution running Wayland from beginning to end.



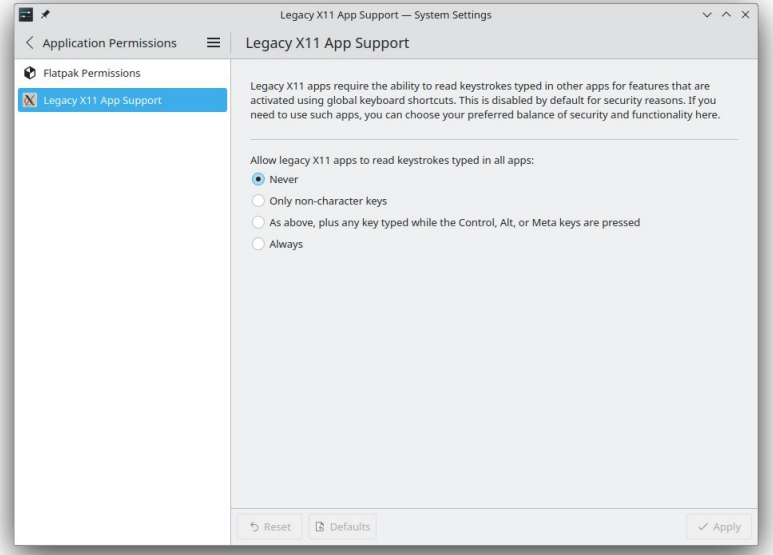
KDE Plasma 6 - Wayland by Default

KDE Plasma Wayland offers a number of enhancements to offer compatibility for legacy applications to enable a smooth transition to Wayland:

- Optional mode for allowing shortcuts to work from legacy X11 applications
- Configurable behavior for scaling legacy X11 applications for HiDPI with reasonable defaults
- Secure screen video bridge for legacy X11 applications to access the Wayland desktop with the user in full control

Naturally, native Wayland applications can leverage modern standardized APIs for global shortcuts, HiDPI rendering, and screencasting.

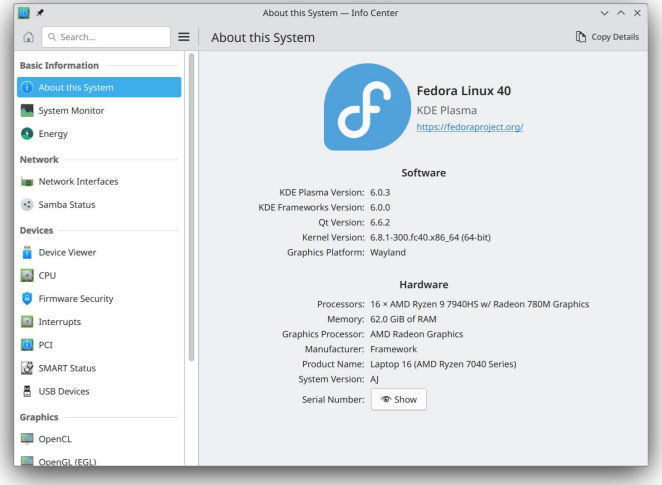
Fedora KDE was the first distribution to offer these capabilities out of the box with Fedora Linux 39.



Fedora KDE Plasma – Wayland only

Fedora is about working with upstreams to enable bringing features first to users. This is also balanced by the skillset of the KDE SIG and where we spend time and effort.

Plasma 6.0 was the right point to reset expectations. The Fedora KDE SIG no longer ships KDE Plasma with an X11 session with Fedora Linux 40, and this will carry over to EPEL for CentOS/RHEL 10.

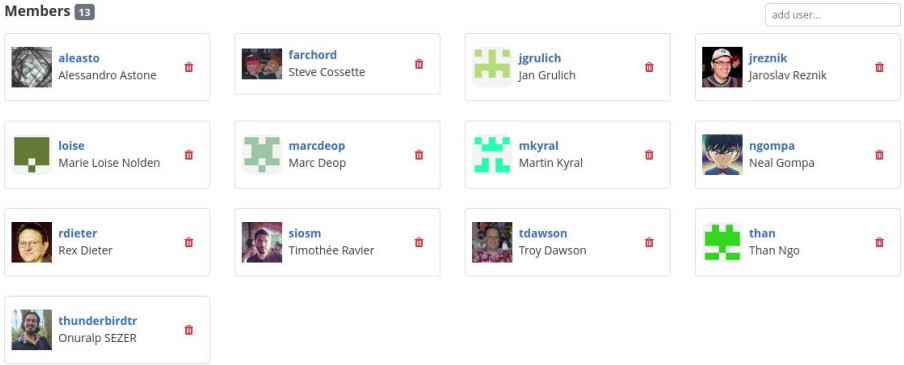


Demonstration

Joining the KDE SIG

The Fedora KDE SIG is open to new contributors interested in building the future of the Linux desktop!

- Project issue tracker: pagure.io/fedora-kde/SIG
- Mailing list: kde@lists.fedoraproject.org
- Matrix: #kde:fedoraproject.org



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The End

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