Contributing is more than just code

Akademy 2024, Würzburg

Kai Uwe Broulik

kde@broulik.de
kbroulik

Solid

- KDE's modular, cross-platform device abstraction Framework

- Enumerates batteries, storage devices
  - fstab
  - UDisks
  - Libimobiledevice
  - UPower
  - IOKit
  - etc

Solid

- Device Notifier

- Battery Monitor

- Places Panel

- File Previews

- Trash

- ... and many more

UDisks Backend

- Enumerates all (block) devices
  - There can be lots, e.g. loop devices
- For every device creates a device object
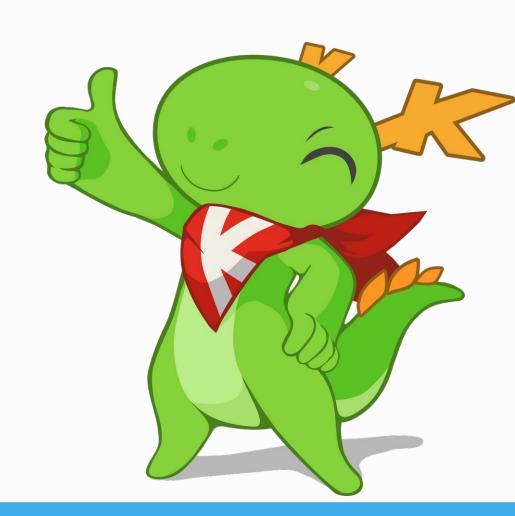- Every device object queries its properties, installs change listeners, etc

Can we do better?

QDBusInterface

Never use QDBusInterface

- Does a blocking "Introspect" call in its constructor

- Use `qt_add_dbus_interface` for compile-time generated interface via qdbusxml2cpp
  - Creates a `QDBus`*`Abstract`*`Interface`

Can we do better?

- Use DBus ObjectManager

- Get all properties for all devices at once

- https://invent.kde.org/frameworks/solid/-/merge_requests/158

Job done

Optical Media are Scary

- USB stick just goes away when unplugged

- Optical always drive + medium

  - Need to monitor the drive for its contents, too

  - Drive can also be hotplugged

- Audio CD, Data CD, Mixed Mode CD, etc

»Anyone got a spare DVD drive?«

- USB DVD drive

- Let me test all the obscure use cases

- Still need to write lots of unit tests
  - Is there a *umockdev* equivalent for UDisks?

Contributing is more than just code

- Artwork

- Translations

- Promo work

- IT Infra

- and much more