What’s cooking for KDE Frameworks 6

Qt 6 and beyond

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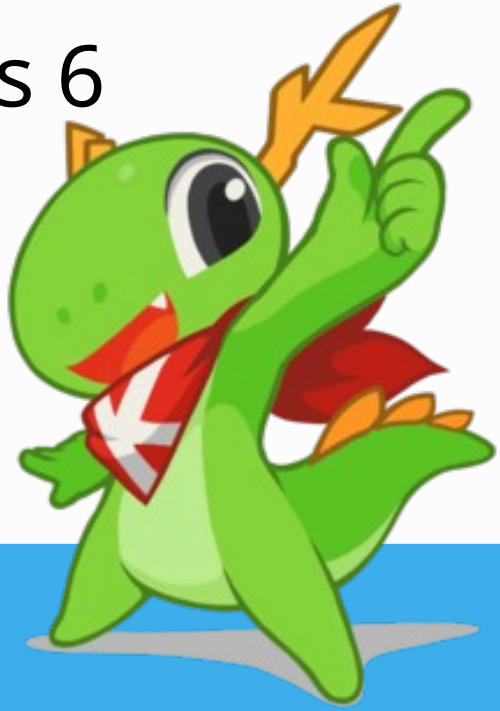


There’s a new Qt in town

- Qt 6 was released end of 2020
- Next major version of KDE Frameworks on the horizon
- New challenges and opportunities
- This talk:
  - What has happened so far
  - What’s going to come
  - And why?

Kickoff

Akademy 2019 – CC-BY Paul Brown

Kickoff II

Virtual D4

Easy porting

- Qt promises easy 5 → 6 transition
- We want the same for KF5 → KF6
- General principles for breaking API changes:
  - Introduce new API now
  - Port users to new API
  - Once all (significant) users are ported deprecate old API
  - Remove old API when branching
- Keep amount of transition-time breakage minimal

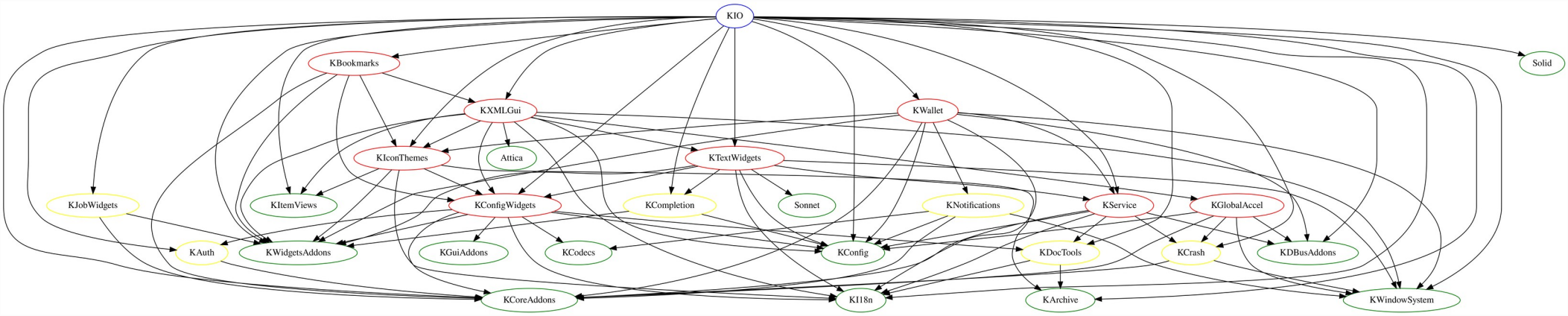
Better APIs

- Use Qt or std:: API where appropriate
- Avoid duplication
- Use new C++17 vocabulary
- Address // TODO KF6
- Remove some rarely used stuff

Better Widgets/QtQuick separation

- Many things are entangled with Qt Widgets without needing to
- Improve QML compatibility
- e.g. QWidget → QWindow
- Widgets popups
- Avoiding QtWidgets saves binary size

Reduce dependencies



KIO dependencies

- Make things easier to deploy
- Save installation size
- Make Frameworks more attractive for third-party users

Better Interface/Implementation separation

- Some Frameworks mix interface and implementation
- Password storage via KWallet
- Sharing via Purpose
- File indexing via Baloo

Better cross-platform support

- Ties into platform/interface topic
- Create such separation where appropriate
- Fill gaps where separation exists
- Avoid DBus, X11, Wayland dependencies
- Add new API to solve recurring problems

Retire some frameworks

- KDELibs4Support
- KHTML
- KDEWebKit
- KJS(Embed)
- Kross
- KMediaPlayer
- KXmlRpcClient
- KInit

A nice Workboard

- Phabricator workboard: https://phabricator.kde.org/project/view/310/
- Currently 384 tasks
- Help needed!

Sprint II

Highlights

- Retire KServiceTypeTrader
- Retire KIconLoader
- Replace KWallet API with QtKeychain
- Rework KRun
- Finally remove KToolInvokation
- Break up KDeclarative

Questions?