The State of KWin Wayland

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Agenda

Architecture

What’s new in 5.0

What’s new in 5.1 and beyond
Agenda

Architecture

What’s new in 5.0

What’s new in 5.1 and beyond
Architecture as planned in 2011

Wayland Client
Wayland Client
Plasma Desktop Shell

KWin
Compositor & X11 WM
Wayland Server

Kernel

input rendering

XClient
rootless XServer

XClient (Remote)
Current Architecture

Wayland Client
Wayland Client
Plasma Desktop Shell

KWin
Compositor & X11 WM Wayland Server

Weston

input
rendering

Kernel

XWayland

XClient
XClient
XClient (Remote)
Architecture of KWin Core
Agenda

Architecture

What’s new in 5.0

What’s new in 5.1 and beyond
Qt5 was difficult!
New Wayland features

Features in 5.0

- Binary renamed to kwin_x11
- Q Painter based Compositor backend
- XRender Compositor supports Wayland
- Better detection on when KWin should use Wayland
- Compositing gets enforced in Wayland mode
- Input redirection module
Agenda

Architecture

What’s new in 5.0

What’s new in 5.1 and beyond
Features for 5.1

Already in master

- New binary kwin_wayland
- Starting nested X Server
- Wayland client connection hold in a dedicated thread
- Support for Fullscreen Shell in Client mode

Server module

- Headless
- Used in auto tests of Wayland Client code
Test Coverage of New Code

Wayland Client Module

Wayland Server Module
Unfinished Features for 5.1

In the Pipeline

- Start a Wayland Server
- Rendering to one Surface per Output
- libinput integration
More work needed!

Kanboard (Project "Plasma on Wayland")
http://ur1.ca/i44d1

Wiki
- https://community.kde.org/Plasma/Next/Wayland
- https://community.kde.org/Plasma/Wayland
Questions?