Plasma 2: the workspace construction kit

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What is Plasma today

- A library
- 5 different shells, for different devices
- 71 plasmoids just in the SC
- Countless on kde infrastructure and kdelook
- The 4.11 release is after years of stabilization, the final of 4.x series
Future

• Where we can go from here?

• We are doing many things right, some other can be improved

• Can we make it more flexible?

• Can we make it easier to build 3rd party plasmoids, 3rd party workspaces and device experiences?
Technology: 4 elephants in the room

- Qt5
- QML2: requires a lot of change
- KDE Frameworks 5
- Wayland
QML2: big change, why?

- Modern hardware support: faster and prettier
- Better JS engine
- Actively developed (QGraphicsView and QML1 in life support mode)
- Promising ecosystem for having many 3rd party plugins as "imports": bigger toolbox
Other Technical changes

- Libplasma loses all its UI-related features
- Slimmed down: from ~3MB to ~700KB
- Kept what's really important
  - asynchronous data: dataengines, runners and services
  - logic of shell loading: rebuild the object hierarchy from a config file
- All QML related code is only in the shell
One shell to rule them all

- The shell executable won't have UI: only the logic to load UI from QML files
- All the UI of a Plasma2 based workspace will stay in two kinds of Plasma package
  - Shell package
  - Look and feel package
Shell package

- Activity switcher
- Extra chrome in the view (panel background, containment switch animation..)
- Widget explorer
- Configuration UIs for desktop, panel etc
Look & Feel package

- Login manager
- Lock screen
- Logout screen
- User switching
- Desktop switcher
- Alt+Tab
- KSplash
- KRunner
- Window decorations
- Most of them are not managed by the plasma shell, but the user doesn't care, it's all "workspace"
Device specific

- Different device experiences (or distribution customizations) will use different look and feel and shell packages, allowing a completely different UX
- Will be possible to switch on the fly, ie plug a tablet into a docking station
Where we are

- Basic shell implementation using Qt5, QML2 and Frameworks
- Libplasma refactoring is almost done, smaller and more manageable
- Start of some QML2 based plasmoids, containments, and a shell package
- Plasma1/QML1 are easy to port (but a port is needed)
A white canvas for creativity

- Still a lot of work to do, UI and art for the look and feel package will be an interesting point for new contributors/designers
- ETA ~1year, together we can do it
Questions?