

# The progress of the Chromium/Wayland project

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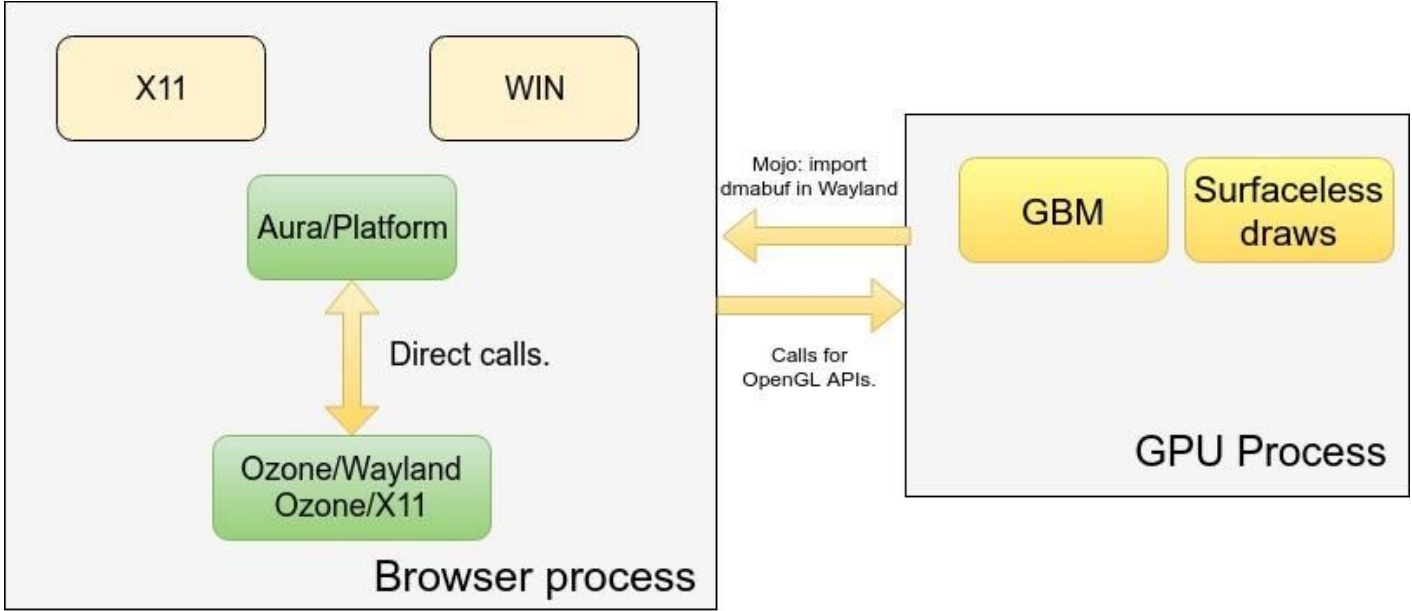


# Background - Cr Upstream

- The Ozone layer was an abstraction layer underlying the **UI Service** (aka **Mus**) for ChromeOS.
- In the beginning, Google UI team suggested to extend **Mus** to Linux Desktop.
- However, they have decided not to use **Mus** on Linux Desktop recently.
  - Uncertain about Mus (intention to use it only on ChromeOS).
  - Keeping simple design

# Developments

Current design



# Developments (done)

- Implemented many compulsory features in Ozone/Wayland and Mus:
- Started to work on a desktop integration without mus:
  - Integrated the existing patches into a downstream branch without mus,
  - Unblocked upstreaming,
  - Desktop integration does not rely on the Mus service.
  - Upstreamed patches allowed to run Ozone/Wayland from ToT (some functionality still has been missed) .
- Upstreamed ~89% of existing Ozone/Wayland patches.
- Worked on an UI/GPU split effort and upstreamed.
- Created a FileDialog working version in the downstream.
- Implemented a drag and drop support in the downstream.

# Developments (work in progress)

- Continue upstreaming Ozone/Wayland patches.
- Implement and upstream: frame callback, presentation feedback, zero-copy/native gpu memory buffers, gpu rasterization and better performance.
- Continue working on having an upstreamable solution for FileDialog implementation.
- Ozone/X11 upstreaming (requirement from Google as part of the Ozone/Wayland patches upstreaming effort).
- Upstream the drag and drop.

# Developments (plans)

- Improve zero-copy with gpu rasterization and native gpu memory buffer support:
  - Better performance with css and skia draws.
- Improve the solution for the UI/GPU split and upstream it:
  - Add missing support for presentation feedback.
- Upstream all the Ozone/Wayland patches + Ozone/X11 patches,
- Address and resolve any performance issues,
- Add multi screen support
- Support non-english keyboard layouts.
- Enable more tests in ToT buildbot.
- Integration with AGL, analyzing and fixing performance problems of Chromium in AGL.

# Questions?

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