



# Vulkan Presentation Timing

XDC 2020

# History

- Evolved from `VK_GOOGLE_display_timing`
  - Same fundamentals: provide target present time, query past present times
- In effort to standardize as KHR, added various features:
  - Variable refresh rate display support
  - Additional time domains (QPC for windows, “swapchain local”)
  - Negotiation of raised framerate (hint to driver to boost clocks, hint app when ready)
- Intermittent attention from IHVs and ISVs
  - Struggled to get required level of feedback and iterate under NDA
- Many related presentations at XDC 2019. Felt we needed to engage broader community
  - Make development public, convert to an EXT extension
  - Put it on github!

# Patches Welcome!

- Read the spec, send pull requests, point out typos, make high level suggestions
- Implement it in your favorite driver/window system/etc.
  - Not possible? Difficult? Let us know why!
- Write support for it into your toolkit/game/media player/VR compositor/etc.
  - Not possible? Difficult? Let us know why!

<https://github.com/KhronosGroup/Vulkan-Docs/pull/1364>

Questions?