Profiling virtualized GPU acceleration with Perfetto

Recently, we have been using Perfetto to successfully profile Apitrace traces in crosvm through VirGL renderer. We have now added perfetto instrumentation to VirGL renderer, Mesa, and Apitrace to see what happens precisely in a frame.

Direct3D 12 to Vulkan layer VKD3D-Proton 2.3 is out with early DirectX Raytracing support

Even more progress towards having a layer that will translate Direct3D 12 nicely over to Vulkan, as the VKD3D-Proton project just had a fresh release out. This is the official project for Valve's Steam Play compatibility layer Proton, with performance and compatibility with Windows games running on Linux as the main focus.

The VKD3D-Proton 2.3 release headline feature is early support for DXR (DirectX Raytracing), with it being hooked up to the newer vendor-neutral Vulkan Ray Tracing support. They say the current DXR compatibility is a work in progress "but it is good enough to run some real content". It's also NVIDIA only right now, as they're waiting for AMD drivers to catch up and the recent Radeon Software for Linux 21.10 does not work. Games that work include Control and Ghostrunner.

VKD3D-Proton 2.3 is now available as the latest release of this Steam Play (Proton) component for running Direct3D 12 games over Vulkan.
Most significant with VKD3D-Proton is early, work-in-progress support for Direct3D 12's DirectX Ray-Tracing (DXR) implemented atop Vulkan ray-tracing. For those with a GPU/driver supporting Vulkan ray-tracing, VKD3D-Proton is beginning to work with "real content" albeit still work-in-progress and a limited number of games working. The Radeon Software Linux driver released this week with Vulkan ray-tracing also isn't working so for the moment is just the NVIDIA proprietary driver.