

Subject: : AmigaOS4

Topic: : Still interested in Huno's games ?

Re: Still interested in Huno's games ?

Author: : Hans

Date: : 2015/4/5 22:56:27

URL:

@noXLar

Quote:

how well does Warp3D use the gpu?

The GPU isn't being used to its full potential, but Warp3D drivers **do** provide working 3D today. That was the goal of this project; to end the long wait for 3D support with something that's usable.

With Warp3D, tasks such as Transformation, Clipping & Lighting (TCL) are done on the CPU rather than letting the GPU take care of that.** This extra load on the CPU reduces the speed at which it can send commands and geometry to the GPU to render. We also don't have GART support yet, so that further reduces the transfer speed to the GPU. So, Warp3D will struggle to feed the GPU fast enough to keep it busy. This is one reason why increasing the resolution has little to no effect on the frame-rate.

At the end of the day Warp3D is a very old API that was designed back when 3D accelerators were pretty basic. It would be unrealistic to expect it to achieve maximum performance with modern hardware.

While the GPU may not be used to its maximum potential, it's more than adequate for existing 3D software. More modern 3D will come later; for now, it's just great to have working 3D with modern cards.

Hans

** NOTE: Warp3D itself doesn't do TCL; that's the job of MiniGL, or Warp3D applications themselves.