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Subject: : AmigaOS4

Topic: : GL4ES: another OpenGL over OpenGL ES2 emulation - some tech. info and porting progress

Re: GL4ES: another OpenGL over OpenGL ES2 emulation - some tech. info and porting progress

Author: : Daytona675x

Date: : 2019/9/18 6:43:36

URL:

@Hans

Quote:

You do need to make sure that *\*all\** VBO arrays are 8-bit or disabled (W3DNEF\_NONE), otherwise it'll fall through to the complex case of handling mixed data.

No, unfortunately it's not like this. Even setting all "unused" arrays to W3DNEF\_NONE and size / stride 0 doesn't change anything.

The *only* thing that helps is to create a simple 1 array VBO in the first place. Which I should have done and usually do for pure index-VBOs, but which wasn't enforced in this case here indeed, thanks for pointing me at it

And oh yes, that makes a difference indeed! However, not for the "own" vs. "Nova" endian conversion, there's no measurable difference here in this simple 1-array-scenario.

But, damnit, all this revealed again just *how* slow Nova buffer copy becomes as soon as you don't have the most trivial 1 array VBO layout! Here it's the difference between 7 and 30 fps! And this happens for every VBO you create with 2 or more arrays inside.

Now the thing is:

obviously there is *huge* optimization potential here. Whatever you do in your multi-array-copy function, it's very bad. And if ogles2 could get rid of it that would result in an incredible speedup for sure.

**But:** unless you make VBOSetArray with W3DNEF\_NONE work as you described above, I cannot implement it, because obviously an 1 array VBO is useless in that case. Or is any special parameter combination required for VBOSetLArray with W3DNEF\_NONE to make it work as promised?