

---

Subject: : AmigaOS4

Topic: : SDL1 open issues

Re: SDL1 open issues

Author: : kas1e

Date: : 2019/8/24 19:07:32

URL:

@Capehill

Quote:

Ideally, Irrlicht should be configured to render to an ARGB "surface" (I mean video::Image, not SDL\_Surface) which could be then uploaded to the texture. SDL\_Surface would be only an extra step and hopefully unnecessary.

I think we can't rewrite irrlicht a lot, it will bring other problems imho. Its pretty heavy , and the more things to change in other files can lead to problems we will not see from first look :)

At least, if with SDL1 it was with SDL\_Surface, and it even was allocated each frame, maybe at first we can do same with SDL2, and then, thinking about how to get rid of it for speed.

Quote:

Do you know how to configure Irrlicht renderer?

Its not configured as i can tell, you just choice what one to compile in. Everything controlled from one include file : include/irrCompileconfig.h

Quote:

So this is SW rendering, how about HW? I suppose Irrlicht speaks also OpenGL?

Yeah sure OpenGL (over gl4es, minigl too old for). gl4es usage was the main point why i working on it. I made a port year ago, just now want to make it "all alright" for release, to have and opengl, and software renders works (software rendering will help for example those ones who don't have ogles).

Initially Irrlicht support those drivers:

- software rendering
- burning video (same as software, just more accurate)
- directx 8 & 9
- opengl

you can configure to use or one of them, or all of them, or some of them, etc.

Also, it can be configured to which device do render things. And initially Irrlicht support those: SDL1, win32 and X11.

So, you can mix it all you want. Just choice what drivers to compile in , and which device use with.

And as whole Irrlicht now progress veeery slow, all the tries like adding SDL2, or OpenGLES2 support, done by those random patches there and there by ppls who don't test things much, and "oh, i made it works ! its enough".

And before i can go route like "sdl2 + opengl" on amigosa4, i firstly need to made "sdl2+software rendering" works on both, amigosa4 and win32 (and be the same or better by speed as sdl1), and then, when all works on both oses, i can add opengl there (for both oses again, so can test differences between, etc).

And as next step i will try to add opengles2 directly without opengl (and so gl4es), but firstly need that software rendering to be sure that SDL2 rewrite works as expected , and then all other work can be done on top of it.

PS. ah, and what i forget to tell : i do all tests on 1.8.4 irrlicht. That link where SDL2 patch placed, are from unfinished 1.9.0 release. Its all the same, just there is no surface->getData() , but surface->lock() instead. So i had to change it.

Its in include/Image.h and relevant part are:

```
//! Use this to get a pointer to the image data.
/**
return Pointer to the image data. What type of data is pointed to
depends on the color format of the image. For example if the color
format is ECF_A8R8G8B8, it is of u32. */
void* getData() const
{
return Data;
}

//! Lock function. Use this to get a pointer to the image data.
/** Use getData instead.
return Pointer to the image data. What type of data is pointed to
depends on the color format of the image. For example if the color
```

```
format is ECF_A8R8G8B8, it is of u32. Be sure to call unlock() after  
you don't need the pointer any more. */  
_IRR_DEPRECATED_ void* lock()  
{  
    return getData();  
}
```

but that for unfinished 1.9.0, for 1.8.4 there was only `surface->lock()`:

[https://sourceforge.net/p/irrlicht/cod ... ases/1.8/include/Image.h](https://sourceforge.net/p/irrlicht/cod...ases/1.8/include/Image.h)

So, that one we need to use.