Subject: Fastest way to capture control as image
Posted by luoganda on Thu, 30 May 2024 13:15:15 GMT
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What would be the best way to capture GLCtrl(or even screen) pixels into ImageBuffer?
There is a demo GrabDesktop(or something like that), but it's just for win32(gdi) and it's too slow, i think it's using SysInfo as main capturer(Snap_DesktopRectangle,etc).

I tried using glReadPixels(0,0,xs,ys,GL_BGRA_EXT,GL_UNSIGNED_BYTE,~ib);
but i always get an error 1282. Also tried GL_BGRA and GL_RGBA, the same thing.

This would be probably the best way, or is there a better one,
eg upp-ish one?

Subject: Re: Fastest way to capture control as image
Posted by koldo on Fri, 31 May 2024 06:21:52 GMT
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Hi Luoganda

There is this in GLCanvas. It works if the control is selected.

```
Image GLCanvas::GetImage() {
 Size sz = GetSize();
 ImageBuffer ib(sz);

 glGetError();
 glReadPixels(0, 0, sz.cx, sz.cy, GL_BGRA_EXT, GL_UNSIGNED_BYTE, static_cast<GLvoid
*>(~ib));
 if (GL_NO_ERROR != glGetError())
  return Null;

 Buffer<RGBA> temp(sz.cx);
 for(int i = 0; i < sz.cy/2; i++){
  memcpy(temp,ib[i], sz.cx*sizeof(RGBA));
  memcpy(ib[i], ib[sz.cy-1-i], sz.cx*sizeof(RGBA));
  memcpy(ib[sz.cy-1-i], temp, sz.cx*sizeof(RGBA));
 }

 for (int y = 0; y < sz.cy; y++)
  for (int x = 0; x < sz.cx; x++)
   ib[y][x].a = 255;

 return ib;
}
```

Subject: Re: Fastest way to capture control as image
Posted by luoganda on Fri, 31 May 2024 16:25:05 GMT
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koldo, this probably works.

For GLCtrl, it seems glReadPixels must be called within GLPaint,
since at that time - gl stuff is probably set up rightly to call that func.
Previously i tried to call it within LeftUp and it of course did not work as expected.
This is probably the reason why control(as you proposed) must be selected - to work.

Anyway, but what about independently capturing whole screen
or specific part of the screen(something like ffmpeg), is this possible without using too much low level gl code in Upp?
Some kind of trick would be creating invisible child of TopWindow, eg childTopWindowCtrl and capturing from that,
altough it would be a workaround.
I don't know if this would work, altough if there is a better way - it would be prefered.

Subject: Re: Fastest way to capture control as image
Posted by koldo on Fri, 31 May 2024 19:02:58 GMT
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Hi Luoganda

In Anboto/SysInfo/ScreenGrab.cpp you can find functions to take images directly from the screen.

Subject: Re: Fastest way to capture control as image
Posted by luoganda on Sat, 01 Jun 2024 15:27:38 GMT
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yes, that was the 1st i checked out,
but it's too slow for eg half(or fullScreen) capture - since regular gdi funcs are used.

Anyway, thanks for the reply, maybe i'll make something out from gl code.