Subject: [APPROVED] GLCtrl flickering on Win32
Posted by Klugier on Fri, 14 Mar 2014 17:44:28 GMT
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Hello,

It seems that GLCtrl flickers when window is resized on M$ Windows. The main problem with current implementation is that "WindowProc" method does not support resizing events like "WM_SIZE" and "WM_ERASEBKGND". The other thing that was wrong is calling glFinish() (We should only use "glFlush" in case when doubleBuffering is off).

So, below is the corrected implementation "WindowProc" method(GLCtrl/Win32GLCtrl.cpp - line 87):

```
LRESULT GLCtrl::GLPane::WindowProc(UINT message, WPARAM wParam, LPARAM lParam)
{
 if((message == WM_PAINT || message == WM_SIZE || message == WM_ERASEBKGND) &&
hDC && hRC)
 {
  PAINTSTRUCT ps;
  BeginPaint(GetHWND(), &ps);
  ActivateContext();
  ctrl->GLPaint();
  ctrl->doubleBuffering ? SwapBuffers(hDC) : glFlush();
  EndPaint(GetHWND(), &ps);
  return 0;
 }

 return DHCtrl::WindowProc(message, wParam, lParam);
}


// **********
```

The second less important thing is that GLDraw dosen't support resizing by default. The first solution is improve virtual method GLResize(int w, int h) part of GLCtrl class. Implementation: (GLCtrl.h - several header changes, GLCtrl.cpp - GLResize implementation)

```
void GLCtrl::GLResize(int w, int h)
{
 glViewport(0, 0, (GLsizei)w, (GLsizei)h);
}
```

The second option is writting documentation for GLDraw for instance: "If you want to have GLDraw resizing you should override GLResize method with following code: glViewport(0, 0,

(GLsizei)w, (GLsizei)h);.".

// **********

At the end I have one question: can we move "GLEW" from GLDraw to separate module or plugin. It would help a lot...

P.S.
Tested on NVIDIA & Intel GPU.

Sincerely,
Klugier

File Attachments

1) GLCtrl.cpp, downloaded 430 times
2) GLCtrl.h, downloaded 421 times
3) Win32GLCtrl.cpp, downloaded 680 times