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 IParam) {
    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, IParam);
}

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

The second less important thing is that GL Draw dosen't support resizing by default. The first
```

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 320 times
- 2) GLCtrl.h, downloaded 314 times
- 3) Win32GLCtrl.cpp, downloaded 561 times