Subject: Layout and Paint event processing
Posted by masu on Fri, 22 Feb 2008 11:08:34 GMT
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Hi,

I have a problem with attached program, in which I overwrite a ctrl Paint method as well as its
Layout method.
What I am trying to achieve is that when the TopWindow is resized I process the Layout event first
and afterwords the Paint event.
But this is only working as expected if I call Layout function explicitly inside Paint function.

So my question is: What is the event sequence?

Example package is attached.

WinXP, Mingw 3.4.2

Matthias

```
File Attachments
1) Example04.zip, downloaded 320 times
```

Subject: Re: Layout and Paint event processing
Posted by mrjt on Fri, 22 Feb 2008 11:56:54 GMT
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Your example works perfectly (MSVC). Layout is called, followed by GLPaint, so I'm not sure what
the problem is?

Subject: Re: Layout and Paint event processing
Posted by masu on Fri, 22 Feb 2008 12:06:34 GMT
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Are you able to see the points, 'cause I only see the black background?

Matthias

Subject: Re: Layout and Paint event processing
Posted by Oblivion on Fri, 22 Feb 2008 12:39:35 GMT
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You are right I Use MSVC too, but can't see dots unless I de-comment the Layout() line in the
GLPaint in your example

In Win32GLCtrl.cpp, line 92:

```
LRESULT GLCtrl::WindowProc(UINT message, WPARAM wParam, LPARAM lParam)
{
 if(message == WM_PAINT && hDC && hRC) {
  wglMakeCurrent(hDC, hRC);
  GLPaint();
  SwapBuffers(hDC);
  wglMakeCurrent(NULL, NULL);
  PAINTSTRUCT ps;
  BeginPaint(GetHWND(), &ps);
  EndPaint(GetHWND(), &ps);
  return 0;
 }
 return DHCtrl::WindowProc(message, wParam, lParam);
}
```

It seems that Layout() is called AFTER GLPaint(). I'm not sure if this is intentional or a bug.

Subject: Re: Layout and Paint event processing
Posted by mrjt on Fri, 22 Feb 2008 12:51:12 GMT
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Sorry, my mistake.

The problem is that the rendering context isn't being made current before Layout is called, so your projection matrix calls have no effect.

If you change it like so:
```
void Layout()
{
    wglMakeCurrent(GLCtrl::GetDC(), GLCtrl::GetHGLRC());

    ....Projection stuff

    wglMakeCurrent(NULL, NULL);
}
```
it almost fixes the problem, but you need to force a call to Layout AFTER the window has openned as well (Layout is normally called before). So add the following function:
```
void State(int reason)
{
    GLCtrl::State(reason);
    Layout();
}
```

This should really all be done by GLCtrl (with a GLLayout function).

James

Subject: Re: Layout and Paint event processing
Posted by masu on Fri, 22 Feb 2008 15:53:50 GMT
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Thank you both, I have modified GLCtrl to switch context before calling Layout and also to call Layout after Open.

Matthias