

---

Subject: Get OpenGL Version

Posted by [BlackEric](#) on Thu, 29 Sep 2022 06:48:24 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

```
unit Unit1;
```

```
interface
```

```
uses
```

```
Windows, Messages, SysUtils, Variants, Classes, Graphics, Controls, Forms,  
Dialogs, OpenGL, StdCtrls, ExtCtrls;
```

```
type
```

```
TForm1 = class(TForm)  
    Memo1: TMemo;  
    Panel1: TPanel;  
    Button1: TButton;  
    procedure Button1Click(Sender: TObject);  
    procedure FormCreate(Sender: TObject);  
    procedure FormDestroy(Sender: TObject);  
    procedure FormPaint(Sender: TObject);
```

```
private
```

```
{ Private declarations }  
glContext: HGLRC;  
glDC: HDC;  
errorCode: GLenum;  
openGLReady: Boolean;
```

```
public
```

```
{ Public declarations }  
end;
```

```
var
```

```
Form1: TForm1;
```

```
implementation
```

```
{ $R *.dfm }
```

```
procedure TForm1.Button1Click(Sender: TObject);
```

```
begin
```

```
    Memo1.Lines.Clear;
```

```
    Memo1.Lines.Add('OpenGL vendor: ' + glGetString(GL_VENDOR));
```

```
    Memo1.Lines.Add('OpenGL renderer: ' + glGetString(GL_RENDERER));
```

```
    Memo1.Lines.Add('OpenGL version: ' + glGetString(GL_VERSION));
```

```

Memo1.Lines.Add('Supported OpenGL extensions: ' + glGetString(GL_EXTENSIONS));
end;

procedure TForm1.FormCreate(Sender: TObject);
var
  pfd: TPixelFormatDescriptor;
  FormatIndex: integer;
begin
  fillchar(pfd, SizeOf(pfd), 0);
  with pfd do
  begin
    nSize := SizeOf(pfd);
    nVersion := 1; { The current version of the descriptor is 1 }
    dwFlags := PFD_DRAW_TO_WINDOW or PFD_SUPPORT_OPENGL;
    iPixelFormat := PFD_TYPE_RGBA;
    cColorBits := 24; { support 24-bit color }
    cDepthBits := 32; { depth of z-axis }
    iLayerType := PFD_MAIN_PLANE;
  end; { with }
  glDC := getDC(handle);
  FormatIndex := ChoosePixelFormat(glDC, @pfd);
  if FormatIndex = 0 then
    raise Exception.Create('ChoosePixelFormat failed ' + IntToStr(GetLastError)
    );
  if not SetPixelFormat(glDC, FormatIndex, @pfd) then
    raise Exception.Create('SetPixelFormat failed ' + IntToStr(GetLastError));
  glContext := wglCreateContext(glDC);
  if glContext = 0 then
    raise Exception.Create('wglCreateContext failed ' + IntToStr(GetLastError));
  if not wglMakeCurrent(glDC, glContext) then
    raise Exception.Create('wglMakeCurrent failed ' + IntToStr(GetLastError));
  openGLReady := true;

end;

procedure TForm1.FormDestroy(Sender: TObject);
begin
  wglMakeCurrent(Canvas.handle, 0);
  wglDeleteContext(glContext);
end;

procedure TForm1.FormPaint(Sender: TObject);
begin
  { if not openGLReady then
  exit;
  //background
  glClearColor(0.1,0.4,0.0,0.0);
  glClear(GL_COLOR_BUFFER_BIT);

```

```
//error checking
errorCode:=glGetError;
if errorCode<>GL_NO_ERROR then
raise Exception.Create('Error in Paint'#13+gluErrorString(errorCode));
glFlush; }
end;

end.
```

---