Manual Installation of GLScene into Embarcadero RAD Studio

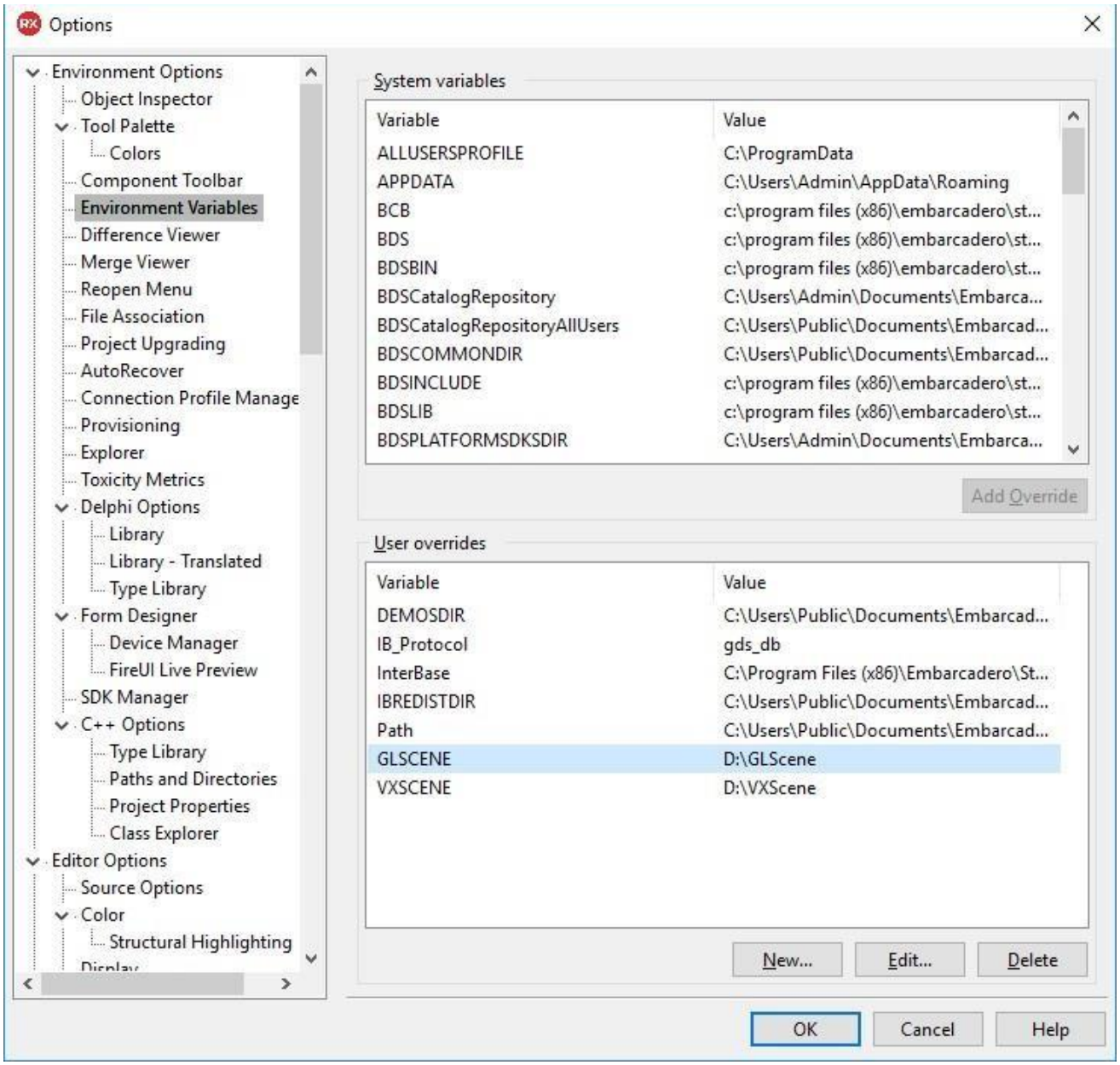
The manual installation of GLScene library packages into Embarcadero RAD Studio to work with Delphi & C++Builder has next 10 steps:

1. Download source codes of GLScene from the URL of repository https://svn.code.sf.net/p/glscene/code/trunk to a SVN directory on your disk, e.g. D:\Library\SVN_GLScene. Use TortoiseSVN client or RAD Studio's embedded subversion control system in menu File | Open From Version Control… to check out the code. You may also get the whole current Snapshot of the trunk from code page http://sourceforge.net/p/glscene/code/HEAD/tree/ or download archive zip files with previous releases of GLScene project at the page http://sourceforge.net/projects/glscene/files/

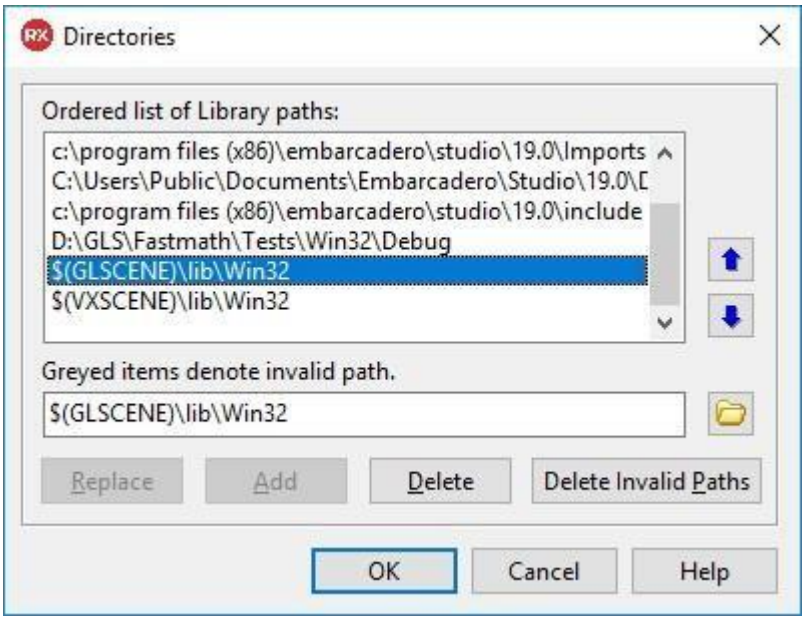
2. Make a copy of the trunk in a separate directory, e.g. in the working directory D:\GLScene, to prevent original sources from occasional changes. You may skip the step if you don't need to update your copy of code from SVN repository further.

3. Run SetupDLLs.bat before installation of packages in directory ..\GLScene\external as administrator to copy third party dynamic libraries into C:\Windows\System32 and C:\Windows\SysWOW64 directories to support 3D sounds (BASS, FMOD, OpenAL), game API (SDL2), nVidia CG shaders and physics (ODE, Newton). In other case you will need to have ones in your application directory while exe file is calling a proper dll.

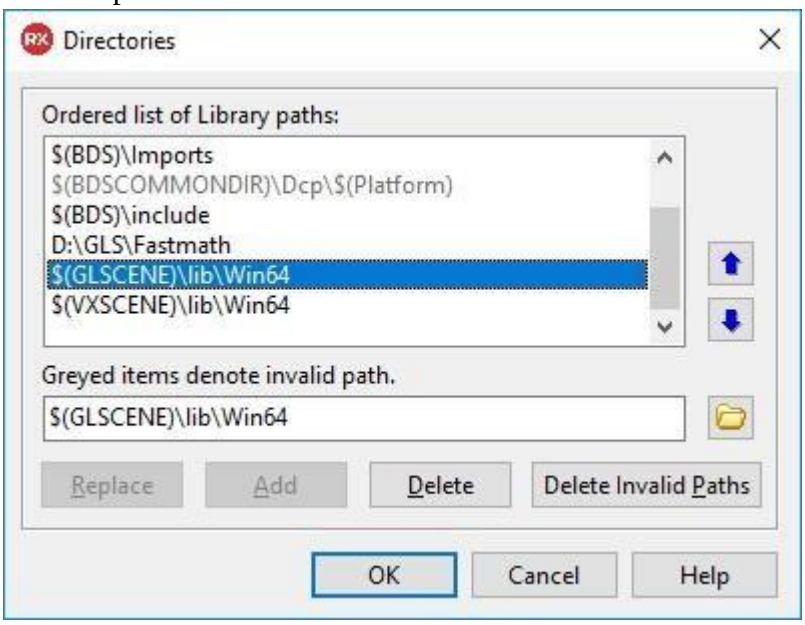
4. When installing GLScene in RAD Studio for the first time it's necessary to create a new environmental variable GLSCENE as shown in the next screenshot:



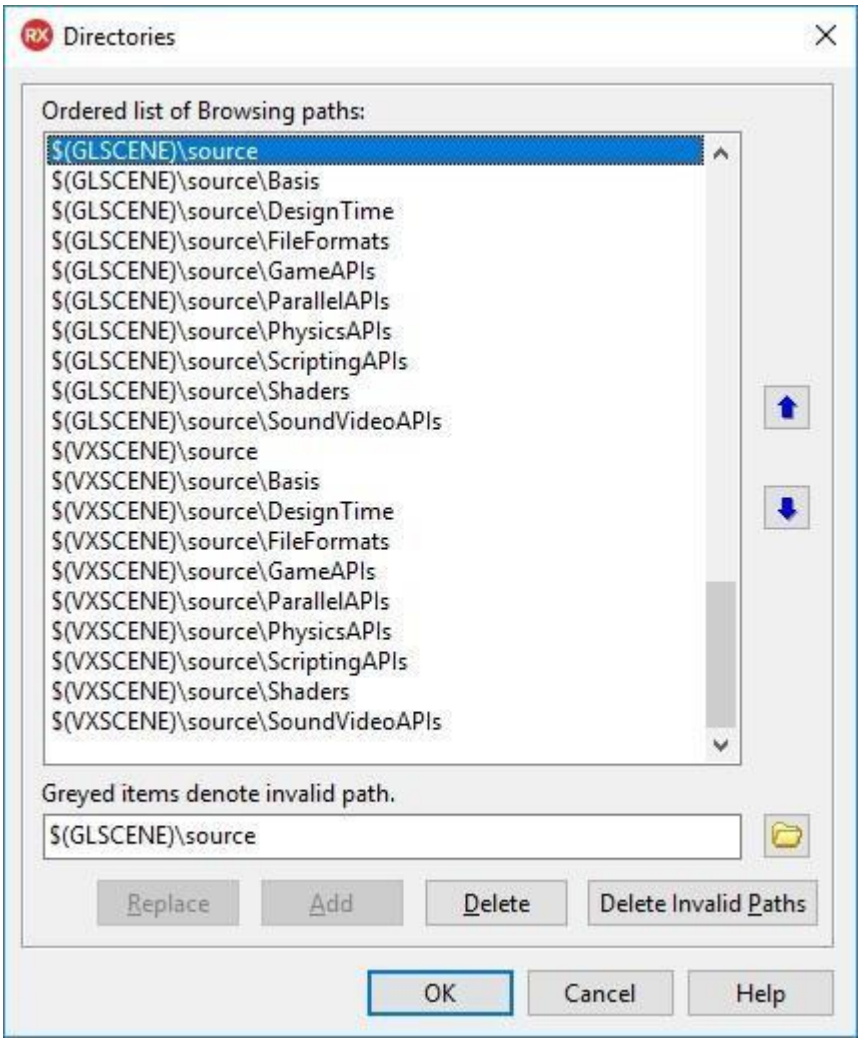
5. Setup Delphi Library Paths in Options dialog. Open Delphi Options Library page and add paths to Dcp files of GLScene for Win32



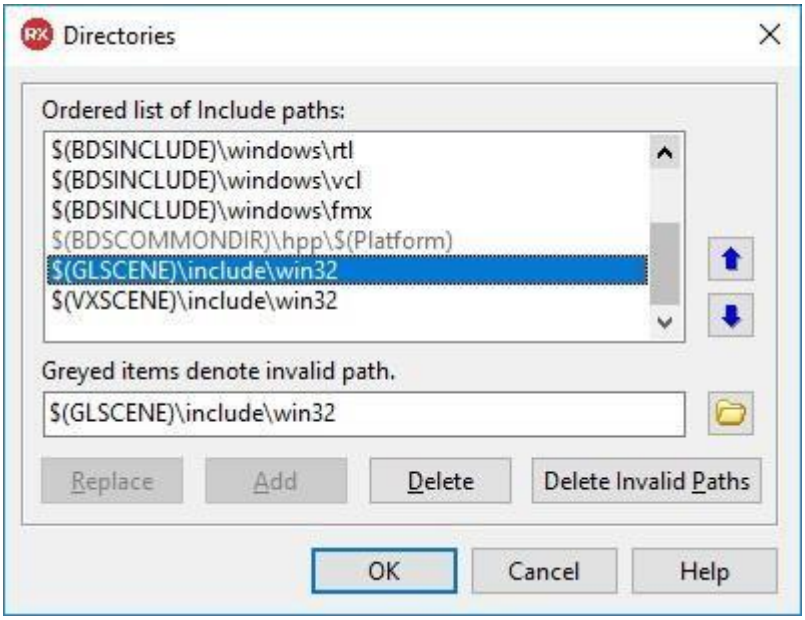
and to Dcp files of GLScene for Win64



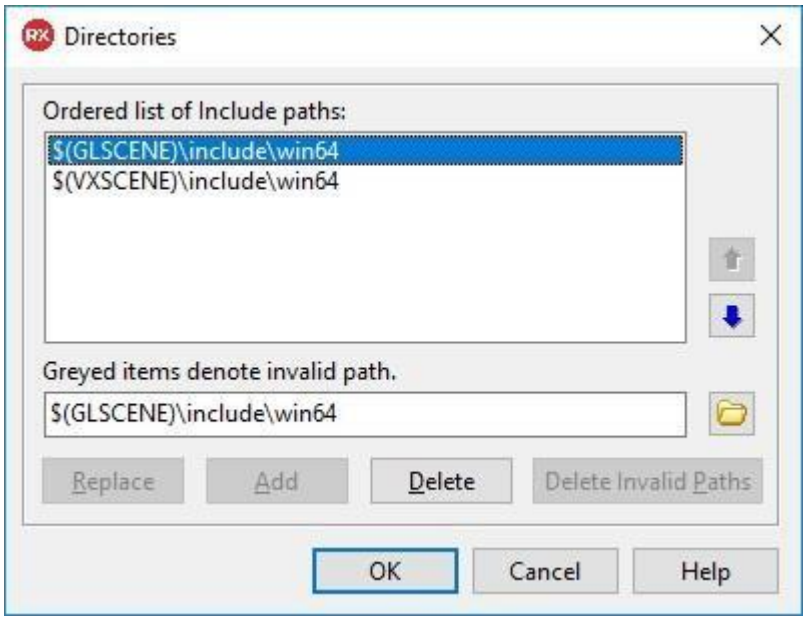
Specifies the directories where the Code Editor looks for unit files when it cannot find an identifier on the project search path or source path:



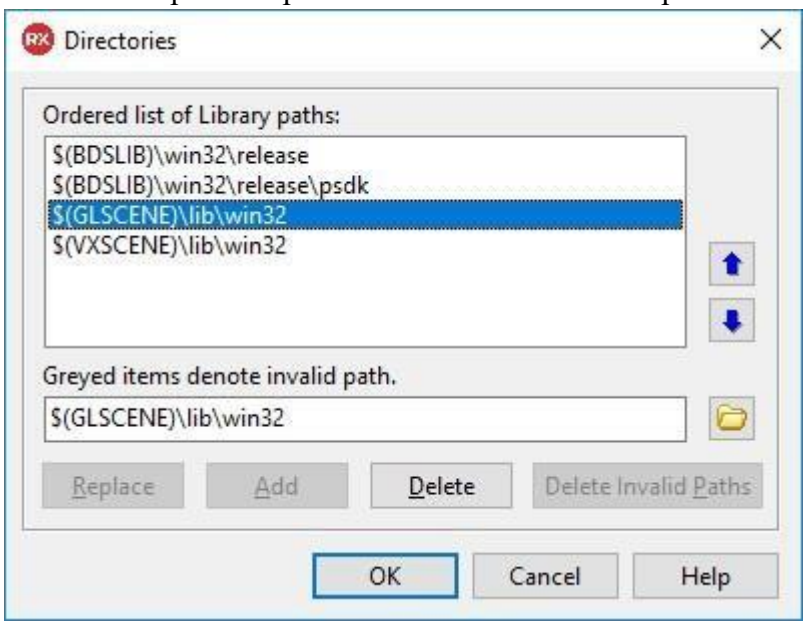
6. Setup C++ Options for C++ Compiler to include HPP files. Open Cpp Options dialog for Paths and Directories and add paths in “System include path” to GLScene’s headers for Win32:



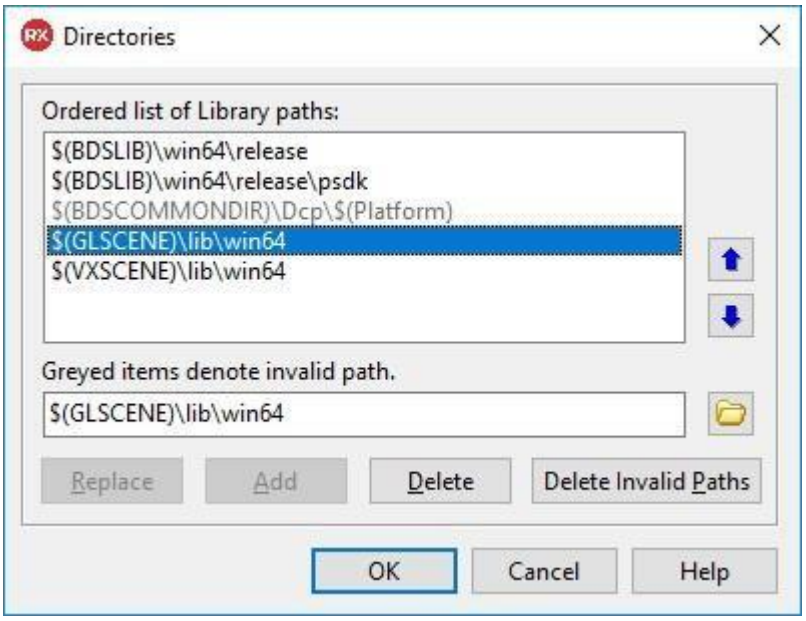
and for Win64 headers:



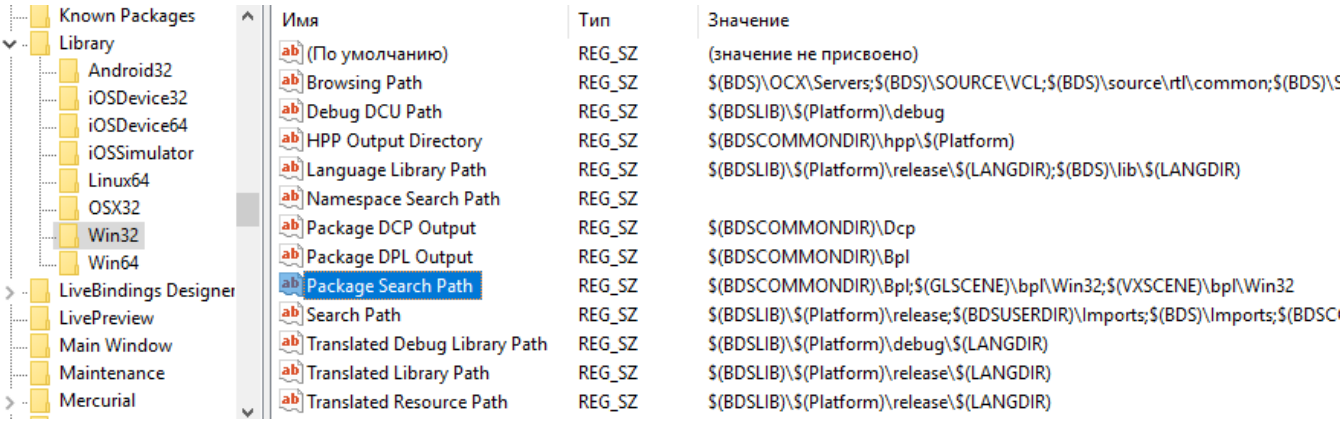
7. Setup C++ Options for libraries files. Add paths in “Library paths” to lib/bpi files for Win32:



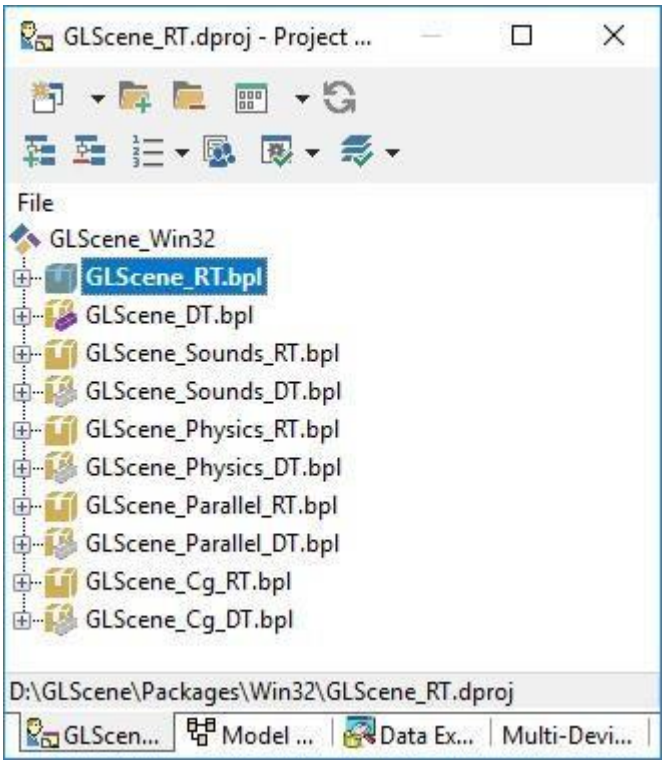
and to lib/bpi files for Win64:



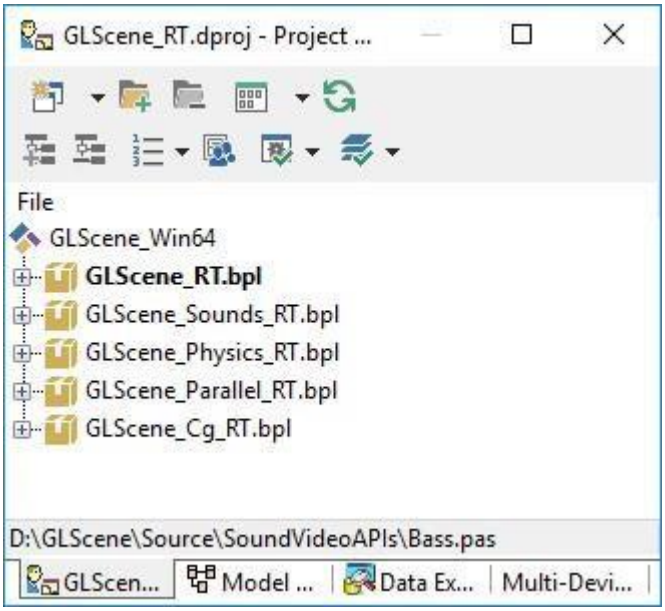
8. Check that in Win10 Registry for HKEY_CURRENT_USER\Software\Embarcader\BDS\19.0\Library there are $(GLSCENE)\bpl\Win32 and $(GLSCENE)\bpl\Win64 paths.



9. Open the GLScene_Win32.groupproj in your directory $(GLSCENE)\Packages\ using menu item File|Open Project…(Ctrl+F11). In Project Manager window you will find the next list of projects with *.bpl extensions:

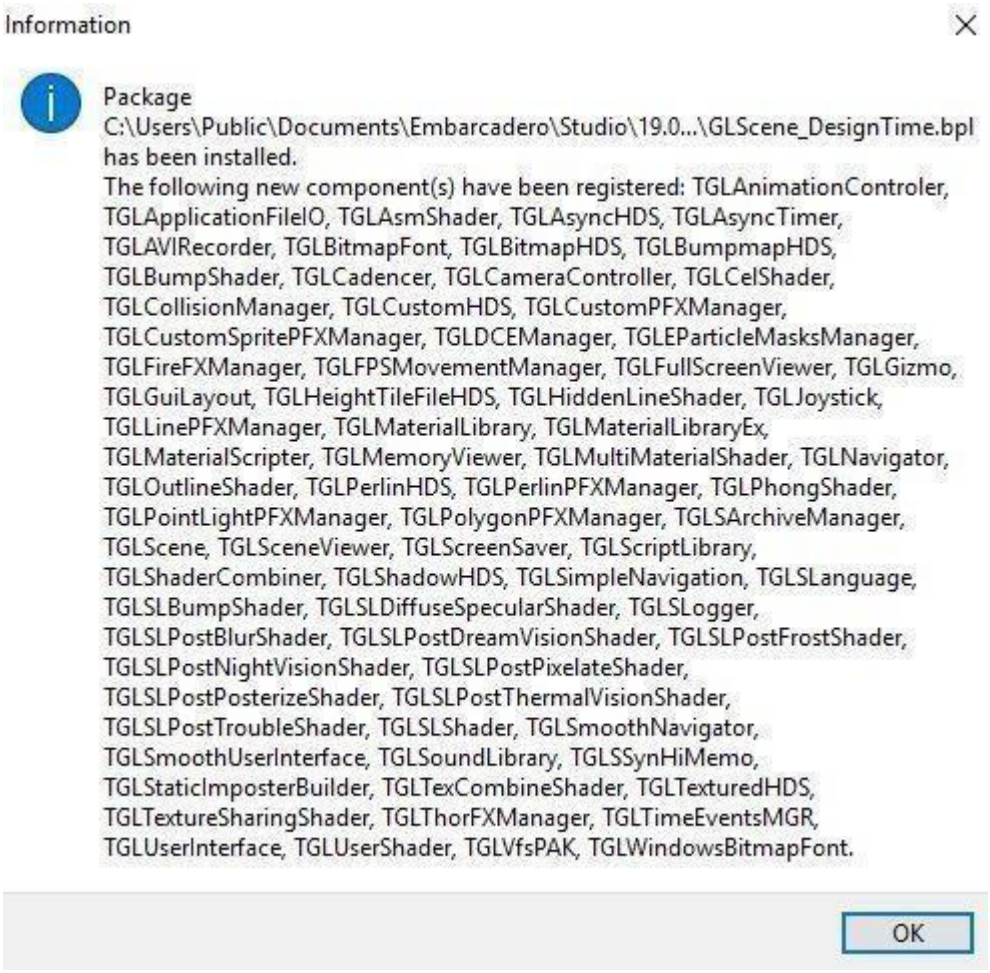


and for GLScene_Win64.groupproj:



and compile GLScene's packages for Win32/Win64 using "Compile All From Here"

10. Install components by choosing every DT (DesignTime) package in GLScene_Win32 group to RAD Studio component palette. Then for GLScene_DT.bpl you should get an information as shown below



After installation you can run demos for Delphi & C++Builder from $(GLSCENE)\Samples directory.