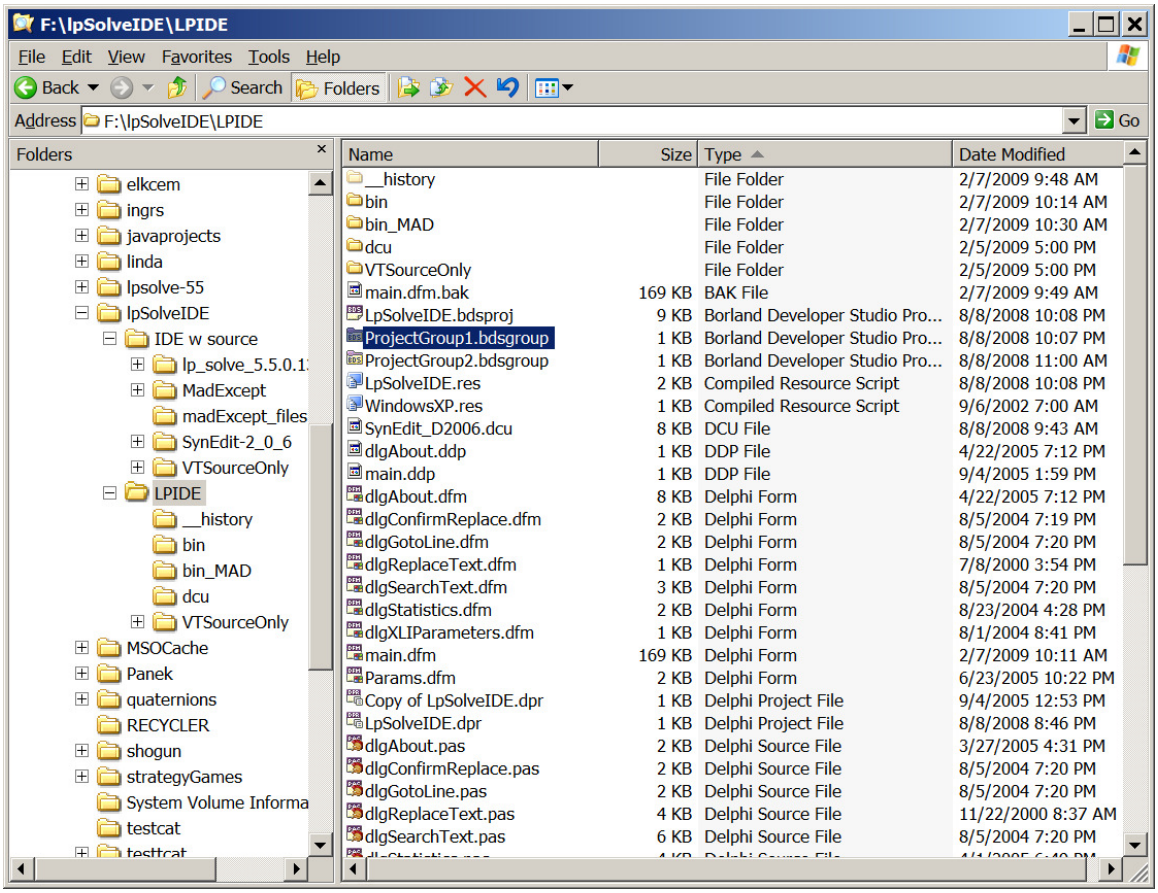
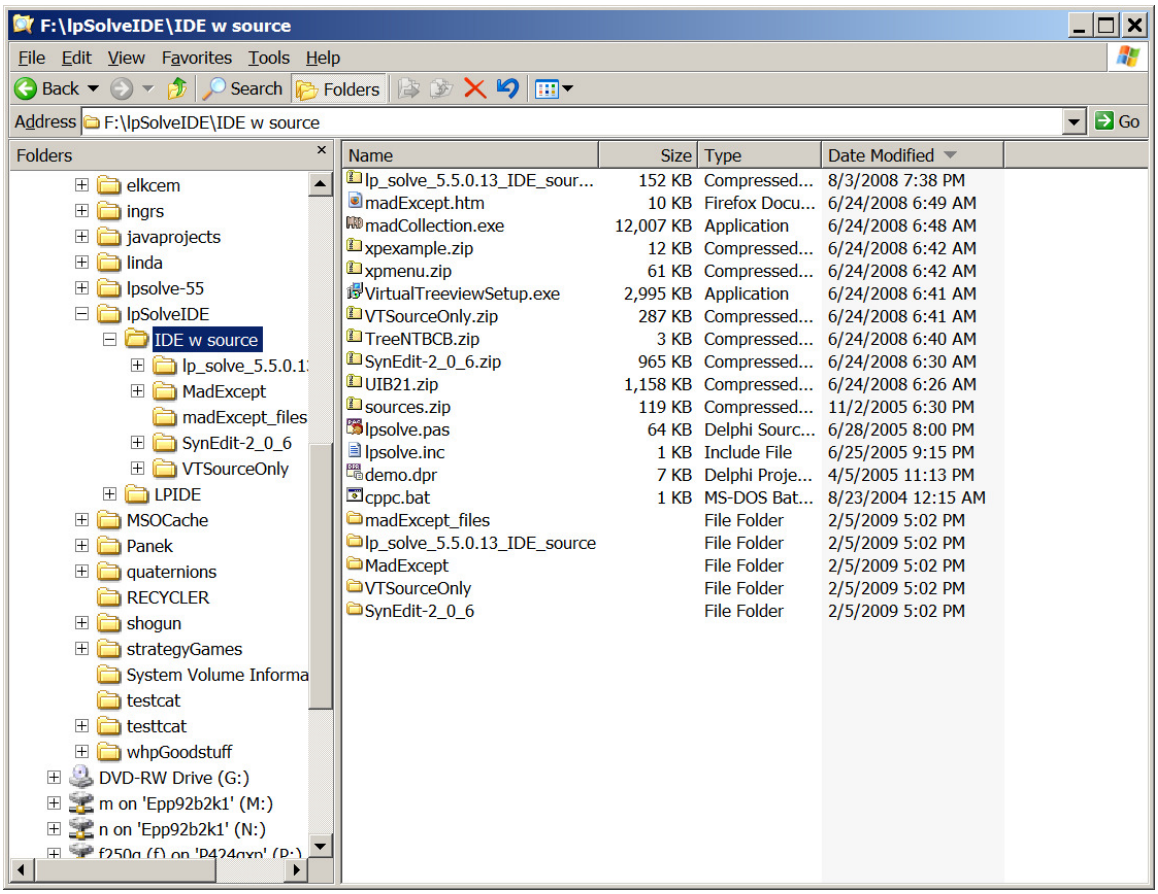
LPsolveIDE

“I succeeded in installing Borland Delphi 2006, but can you tell me how to install the packages SynEdit and TreeView? I have never worked with Delphi and I don't find a description how to install those packages. It would be great if you could provide instruction as you have done in your work document (which are very nice and clear) on how to install these.”

I need to do this from memory. Here is a screen of my build dir that you can get from my zip link. Delphi was new to me too.

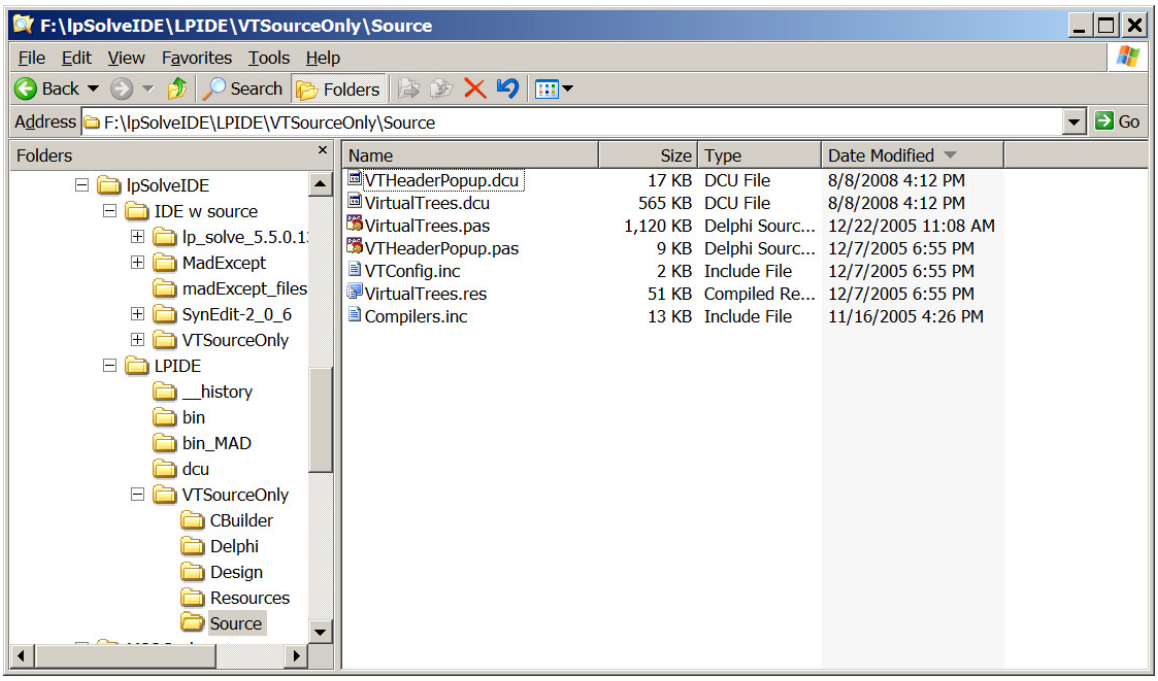


Essentially I went to the sites on the help link from the lpsolveIDE and got the current versions. I placed them in the \IDE w source dir next to the unpacked zip from lp_solve sourceforge. Then I unzipped or installed them.



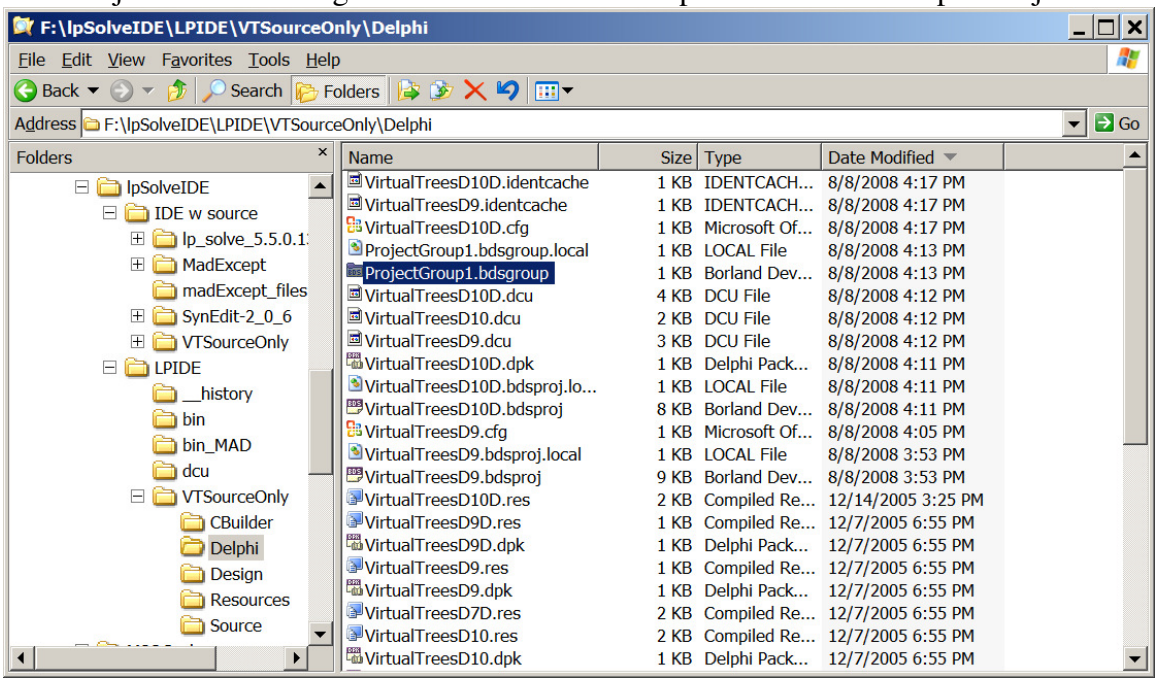
We can see in Project1.bdsgroup, that I compile currently still the source of Synedit to get the component.

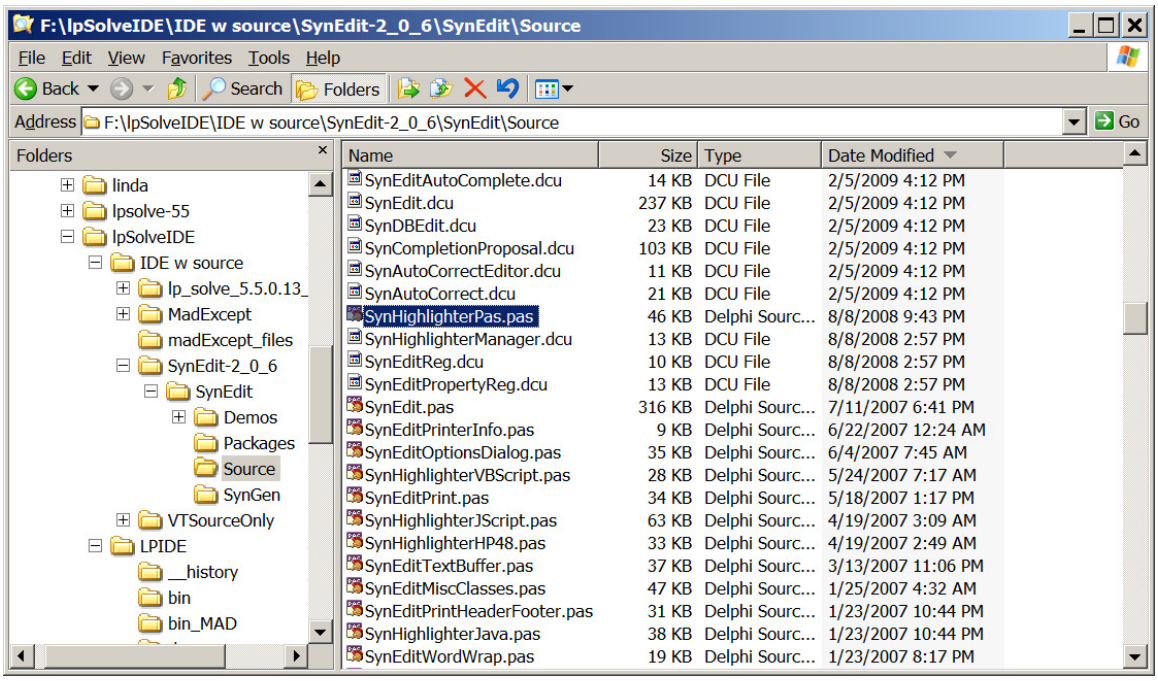
```
<Projects>
  <Projects Name="LpSolveIDE.exe">LpSolveIDE.bdsproj</Projects>
  <Projects Name="SynEdit_R7.bpl">..\IDE w source\SynEdit-
2_0_6\SynEdit\Packages\SynEdit_R7.bdsproj</Projects>
  <Projects Name="Targets">LpSolveIDE.exe SynEdit_R7.bpl</Projects>
</Projects>
```



It looks like I compiled VTsource only in 2008 to get the .dcu components.
Aparently from the Delphi directory file ProjectGroup1.bdsgroup

<Projects Name="VirtualTreesD10D.bpl">VirtualTreesD10D.bdsproj</Projects>
<Projects Name="VirtualTreesD9.bpl">VirtualTreesD9.bdsproj</Projects>
<Projects Name="Targets">VirtualTreesD10D.bpl VirtualTreesD9.bpl</Projects>





As I remembered, I did something to Synedit base file. A diff will find out.

I will guss that I link the one that ends up in
F:\lpSolveIDE\IDE w source\SynEdit-2_0_6\SynEdit\Packages
but I may not know how to tell.
Here is a hint from F:\lpSolveIDE\LPIDE\ LpSolveIDE.bdsproj

```
                </Linker>
                <Directories>
                        <Directories Name="OutputDir">.\bin</Directories>
                        <Directories Name="UnitOutputDir">.\dcu</Directories>
                        <Directories Name="PackageDLLOutputDir"></Directories>
                        <Directories Name="PackageDCPOutputDir"></Directories>
                        <Directories Name="SearchPath"></Directories>
                        <Directories
Name="Packages">vcl;rtl;vclx;indy;inet;xmlrtl;vclie;inetdbbde;inetdbxpress;dbrtl;dsnap;
dsnapcon;vcldb;soaprtl;VclSmp;dbexpress;dbxcds;inetdb;bdertl;vcldbx;webdsnap;websn
ap;adortl;ibxpress;teeui;teedb;tee;dss;visualclx;visualdbclx;vclactnband;vclshlctrls;Intraw
ebDB_50_70;Intraweb_50_70;Rave50CLX;Rave50VCL;dclOfficeXP;SynEdit_R7;Jv
UIBD7R;kbmMWRunD7;kbmMemD7Run</Directories>
                        <Directories Name="Conditionals">madExcept</Directories>
                        <Directories Name="DebugSourceDirs"></Directories>
                        <Directories Name="UsePackages">False</Directories>
                </Directories>
```

I do not see any hint of virtual tree here.
If we check the F:\lpSolveIDE\LPIDE\dcu directory, we find another build script and some leftovers from 2008. The 2008 stuff was the older synedit
contains

LPSynedit in 'LPSynedit.pas',
SynEdit in '..\..\IDE w source\SynEdit-2_0_6\SynEdit\Source\SynEdit.pas';
Agan, I cannot tell if this is used or only hanging around.

But VirtualTreesReg.dcu is here so it could be resolved by the linker. Its date stamp matches the compile date in F:\lpSolveIDE\LPIDE\VTSourceOnly\Delphi.

As I found in the previous note MadExcept installer hooks itself into the Delphi IDE (almost) and I think its components come from some reference in the registry event though I cant use the IDE wizard to set its controls.

The remaining too referenced by the lpsolveIDE is XPMenu.

> To compile, you need some open source third party components:
>
> Synedit: http://synedit.sourceforge.net/
> VirtualTreeView: http://www.delphi-gems.com/VirtualTreeview
> XPMenu: http://www.shagrouni.com/english/software/xpmenu.html
> madexecpt: http://www.madshi.net/
>
> You also need to install these components:
> - lpobject.pas
> - LPSynedit.pas

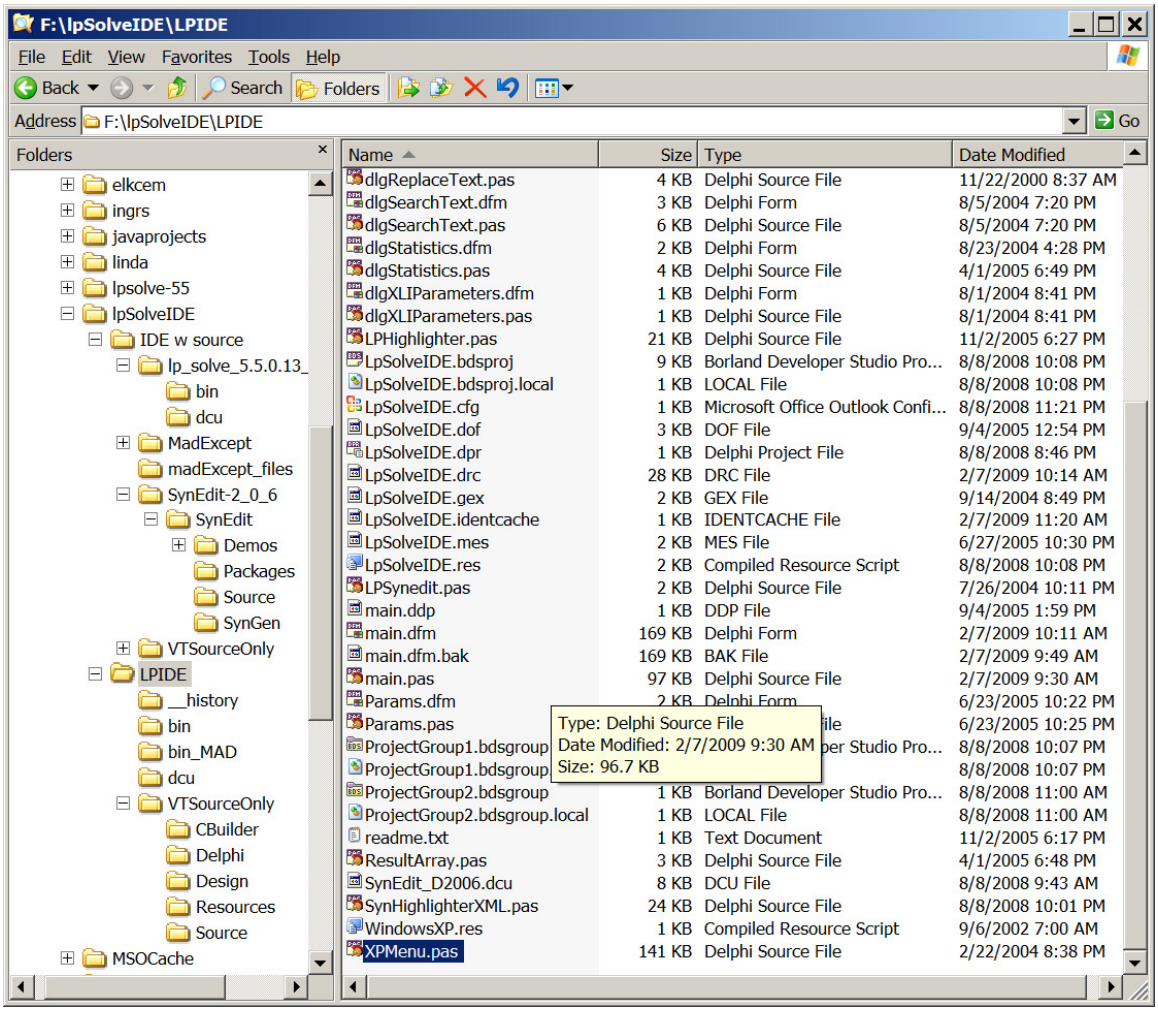
This is actually hanging around in the base lpsolveIDEzip source I think, and therefore just compiled with the rest, I believe. I suspect it references WindowsXP.res to get the icons. Maybe not, but I am pretty sure I did not do this:
http://www.shagrouni.com/english/software/xpusage.html
says there should be a XPMENU.DCR lying around somewhere.

Installation

- A. Unzip the files: XPMENU.PAS and XPMENU.DCR Into the same directory.
- B. From Delphi menu, Select File| New: Package.
- C. Press Add, and browse to add the unit XPMENU.PAS.
- D. Press Install.
- E. The component is now installed in a new 'XP' page.
- F. Save the package.

If you have a previous version installed:

- Replace the old files (xpmenu.pas and xpmenu.dcr) with the new one, open the package and recompile.
- If you encounter any problems remove all the compiled units .dcu, .bpl, .dcp (try to locate them also in 'C:\Program Files\Borland\DelphiX\Projects\Bpl' and 'C:\Program Files\Borland\DelphiX\lib'), then install pre-compiled units again.

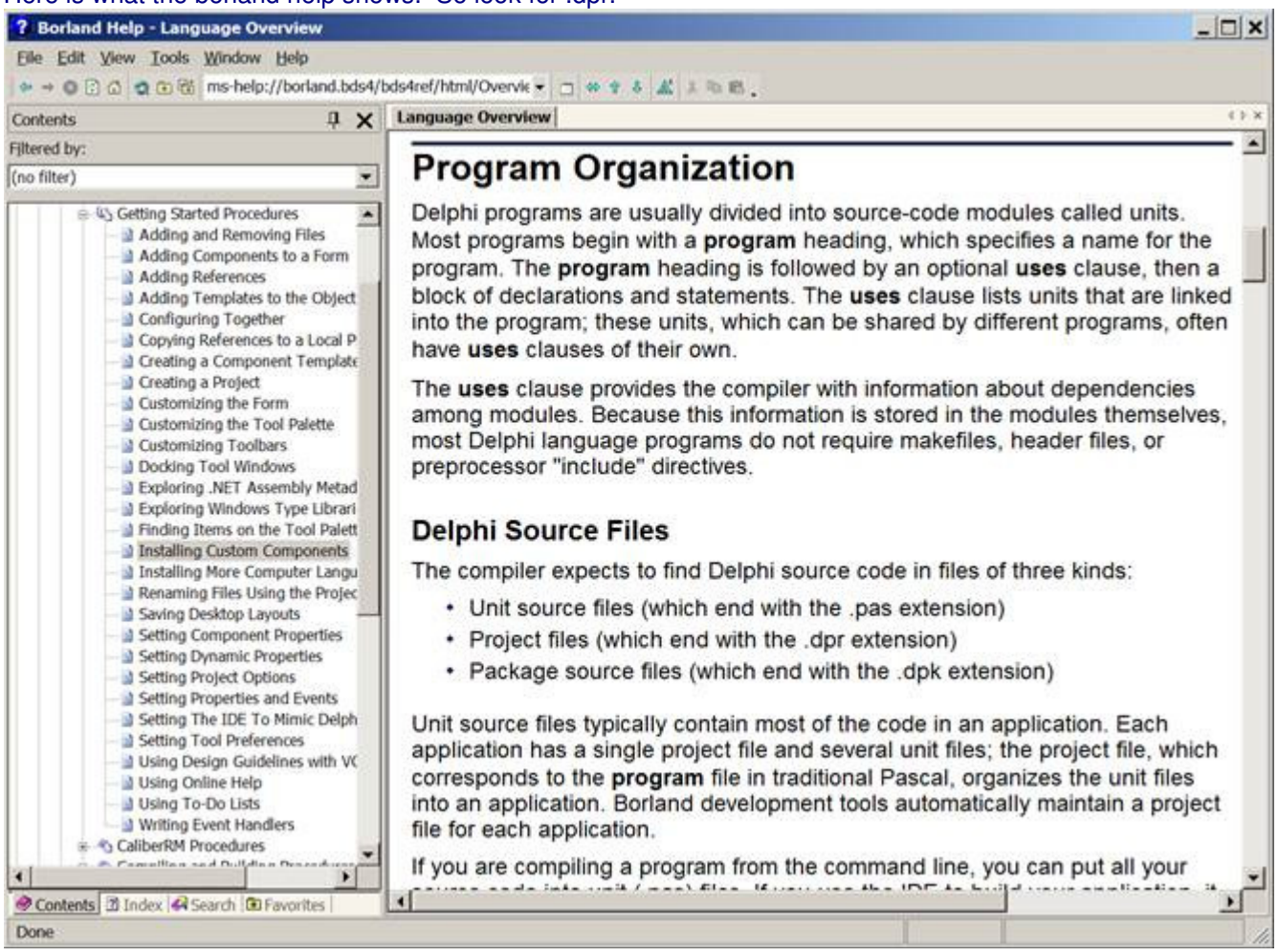


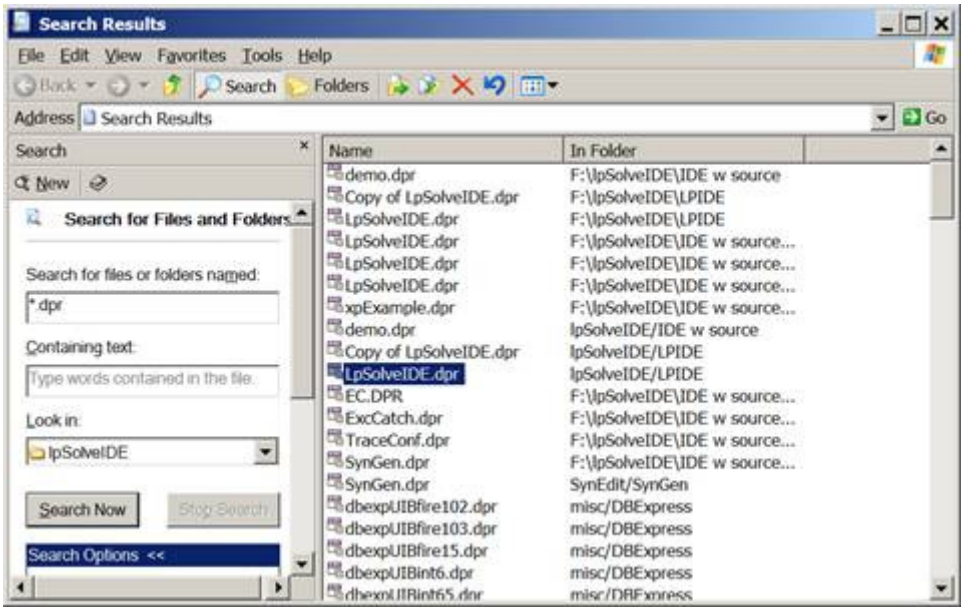
That is about all I know. Sorry I never cleaned up the directories. You can tell I have a disorganized learning style and that I rely on a very good memory.

William

Peter,
Maybe your question wa more general.
How does Delphi resolve the Uses clause in main.pas?
Structurally it is like a header include for C libraries. But where does it look?
I do not know. The XPmenu hinted sbout C program files \ Borland … but there is nothing from synedit or vtrees there.

Here is what the borland help shows. So look for .dpr.





I will bet on LPSolveIDE.dpr.
My guess is that it looks first in the project subdirectory dcu for usesname.dcu to extract the header (interface) definitions directly from the UNIT object file x.dcu (Delphi compiled unit?)

Yes I kept a copy, my new one knows I dropped MADtools recently
Compare: (<)F:\lpSolveIDE\LPIDE\Copy of LpSolveIDE.dpr (955 bytes)
  with: (>)F:\lpSolveIDE\LPIDE\LpSolveIDE.dpr (848 bytes)

```
5,8c5
<   madListHardware,
<   madListProcesses,
<   madListModules,
<   madExcept,
---
>
26c23
<   madExcept.DetectConsole := false;
---
>
```

This does not really mention SynEdit or VirtualTrees,which are in the interface uses section of main.

```
unit main;
{$R WindowsXP.res}
interface

uses
  Windows, Messages, SysUtils, Variants, Classes, Graphics, Controls, Forms,
  Dialogs, ExtCtrls, StdCtrls, ComCtrls, Menus, SynEdit, ToolWin,
  ActnList, ImgList, IniFiles, Grids, clipbrd,
  XPMenu, VirtualTrees,  ResultArray, lpsolve, lpobject,

  SynEditTypes, LPHighlighter, LPSynEdit,
  SynEditSearch, SynMemo,
  SynEditRegexSearch, SynEditHighlighter, SynHighlighterXML,
  SynEditMiscClasses, SynEditExport, SynExportHTML,
```

```
  SynExportRTF, SynExportTeX, SynEditPlugins, SynMacroRecorder
;//MAD    , madExceptVcl, madexcept;

Type
…
```

Maybe they instead descent out of the .dpr list

```
program LpSolveIDE;
{$APPTYPE CONSOLE}

uses

  Forms,
  SysUtils,
  Windows,
  main in 'main.pas' {MainForm},
  LPHighlighter in 'LPHighlighter.pas',
  dlgSearchText in 'dlgSearchText.pas' {TextSearchDialog},
  dlgReplaceText in 'dlgReplaceText.pas' {TextReplaceDialog},
  dlgConfirmReplace in 'dlgConfirmReplace.pas' {ConfirmReplaceDialog},
  dlgGotoLine in 'dlgGotoLine.pas' {GotoLineForm},
  dlgStatistics in 'dlgStatistics.pas' {StatisticsForm},
  dlgAbout in 'dlgAbout.pas' {AboutForm},
  ResultArray in 'ResultArray.pas',
  Params in 'Params.pas' {ParamForm};

{$R *.res}

begin

  Application.Initialize;
  Application.HelpFile := '';
  Application.CreateForm(TMainForm, MainForm);
  if (ParamCount > 0) then
    if FileExists(ParamStr(1)) then
      MainForm.OpenFile(ParamStr(1));
  Application.Run;
end.
```

Here is lpHighliter interface

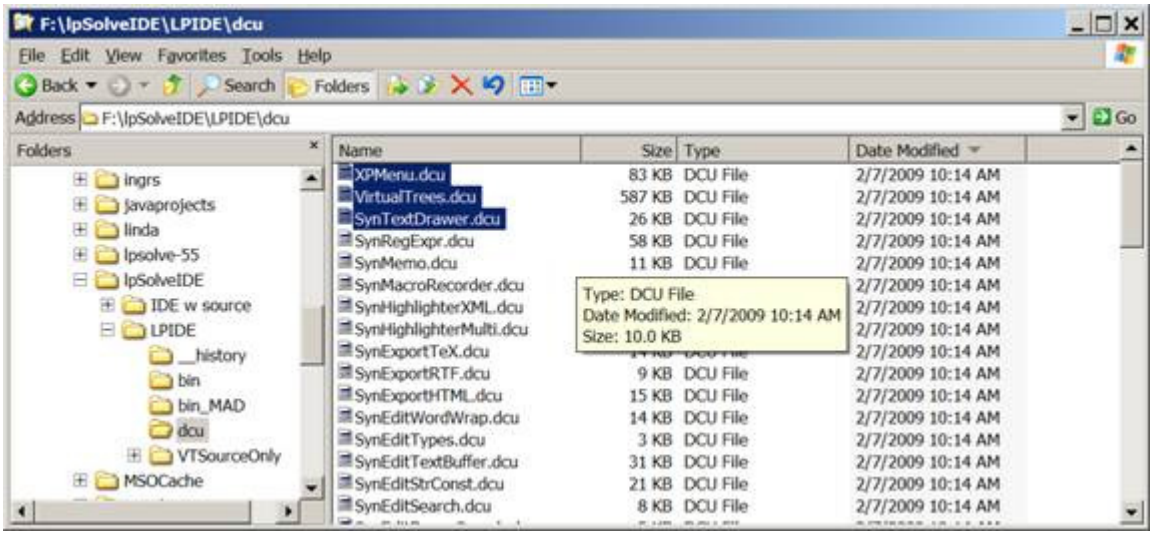
```
unit LPHighlighter;

{$I SynEdit.inc}

interface

uses
  Windows,
  Graphics,
  SynEditTypes,
  SynEditHighlighter,
  SysUtils,
  Classes,
  lpobject;
```

and I still do not find anything for VirtualTrees
So except that it seems to get compiled still from the build on feb2009, I do not know how it is found.



F:\lpSolveIDE\LPIDE\ LpSolveIDE.dof remembers the
A project options (.dof) file contains compiler and linker settings, search path information, version information, and so forth. Each project has an associated project options file with the same name as the project (.dpr) file. Usually, the options in this file are set from Project Options dialog.
In particular it has this which probably tells it to resolve units here

```
[HistoryLists\hlSearchPath]
Count=1
Item0=C:\Program Files\Borland\Delphi6\Source\Vcl
[HistoryLists\hlUnitOutputDirectory]
Count=1
Item0=.\dcu
[HistoryLists\hlOutputDirectorry]
Count=1
Item0=..\bin
```

And this which you will want to change if you take over the project.

```
[Version Info]
IncludeVerInfo=1
AutoIncBuild=0
MajorVer=5
MinorVer=5
Release=0
Build=0
Debug=0
PreRelease=0
Special=0
Private=0
DLL=0
Locale=1036
CodePage=1252
[Version Info Keys]
CompanyName=progdigy.com
FileDescription=LPSolve IDE
FileVersion=5.5.0.0
InternalName=
```

LegalCopyright=
LegalTrademarks=
OriginalFilename=
ProductName=LPSolve iDE
ProductVersion=5.1.0.0
Comments=

William

From: Peter Notebaert [mailto:_peno_@telenet.be]
Sent: Sunday, February 08, 2009 11:48 AM
To: pattonwh@comcast.net
Subject: Re: LPsolveIDE build tree.

Thank you William,

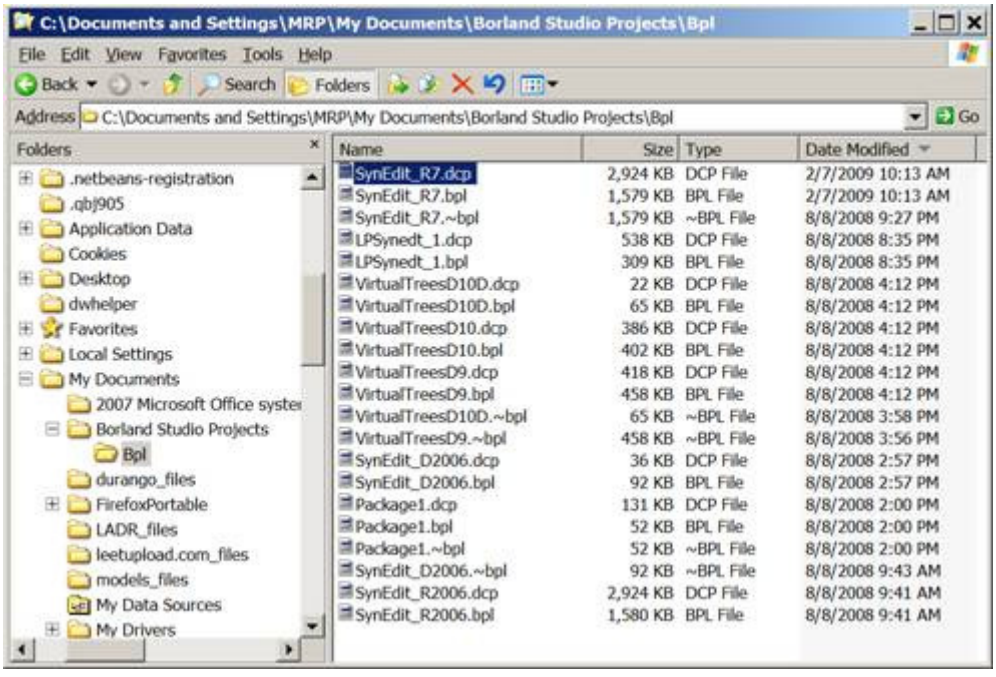
I succeeded in installing Borland Delphi 2006, but can you tell me how to install the packages SynEdit and TreeView? I have never worked with Delphi and I don't find a description how to install those packages. It would be great if you could provide instruction as you have done in your work document (which are very nice and clear) on how to install these.

Peter

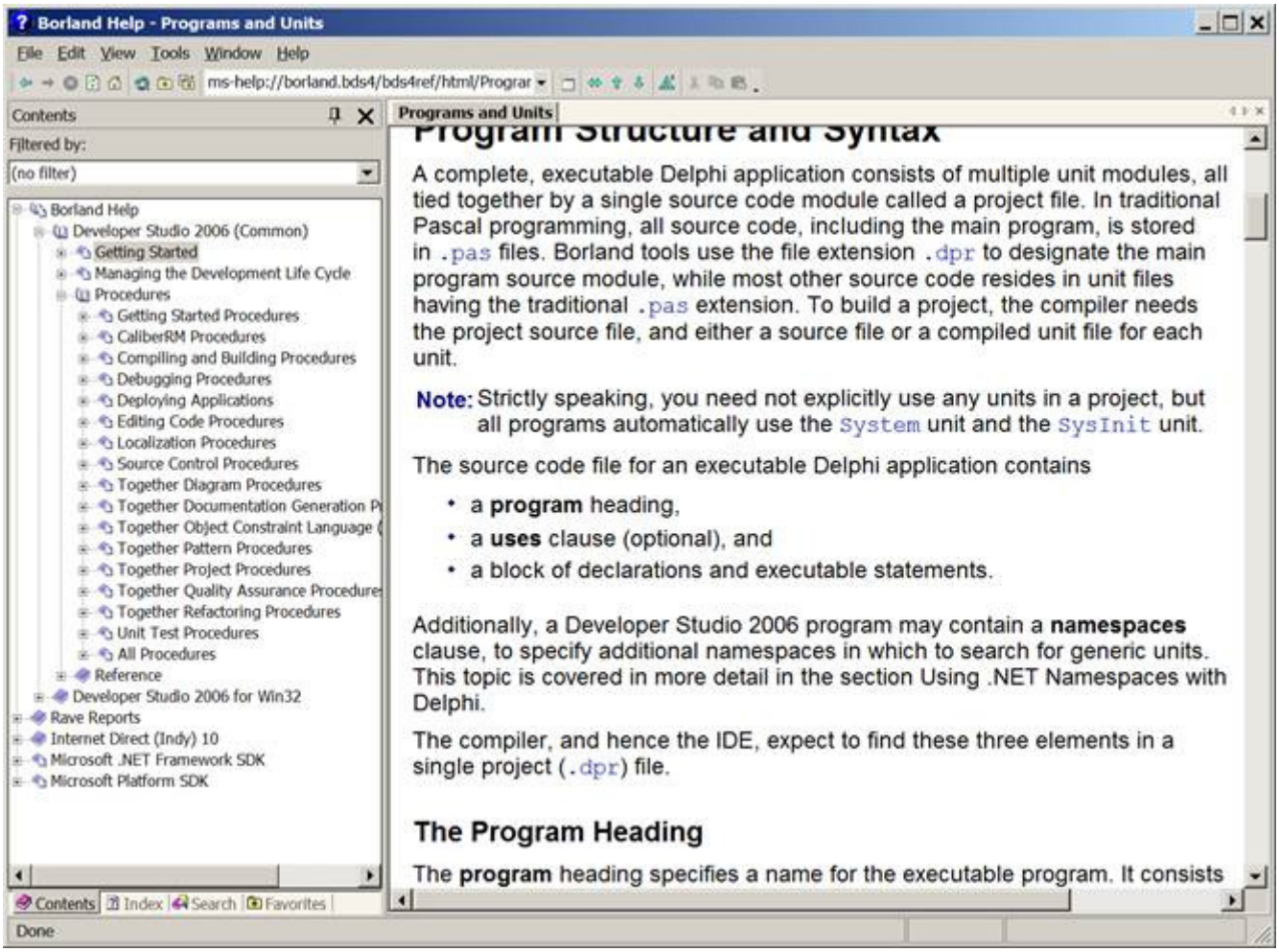
Another follow up.
F:\lpSolveIDE\LPIDE\VTSourceOnly\Delphi\VirtualTreesD10D.cfg
Has this hint in it.

-LE"C:\Documents and Settings\MRP\My Documents\Borland Studio Projects\Bpl"
-LN"C:\Documents and Settings\MRP\My Documents\Borland Studio Projects\Bpl"

There I find this:



This seems a little different than the other help.

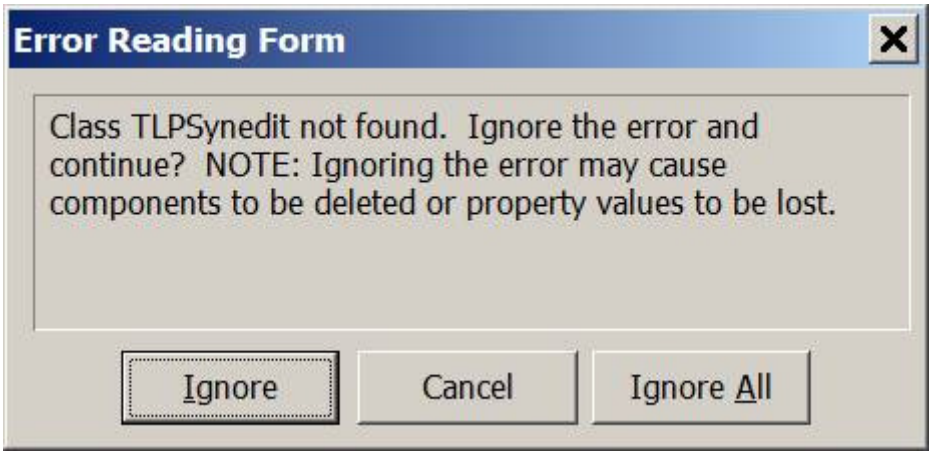


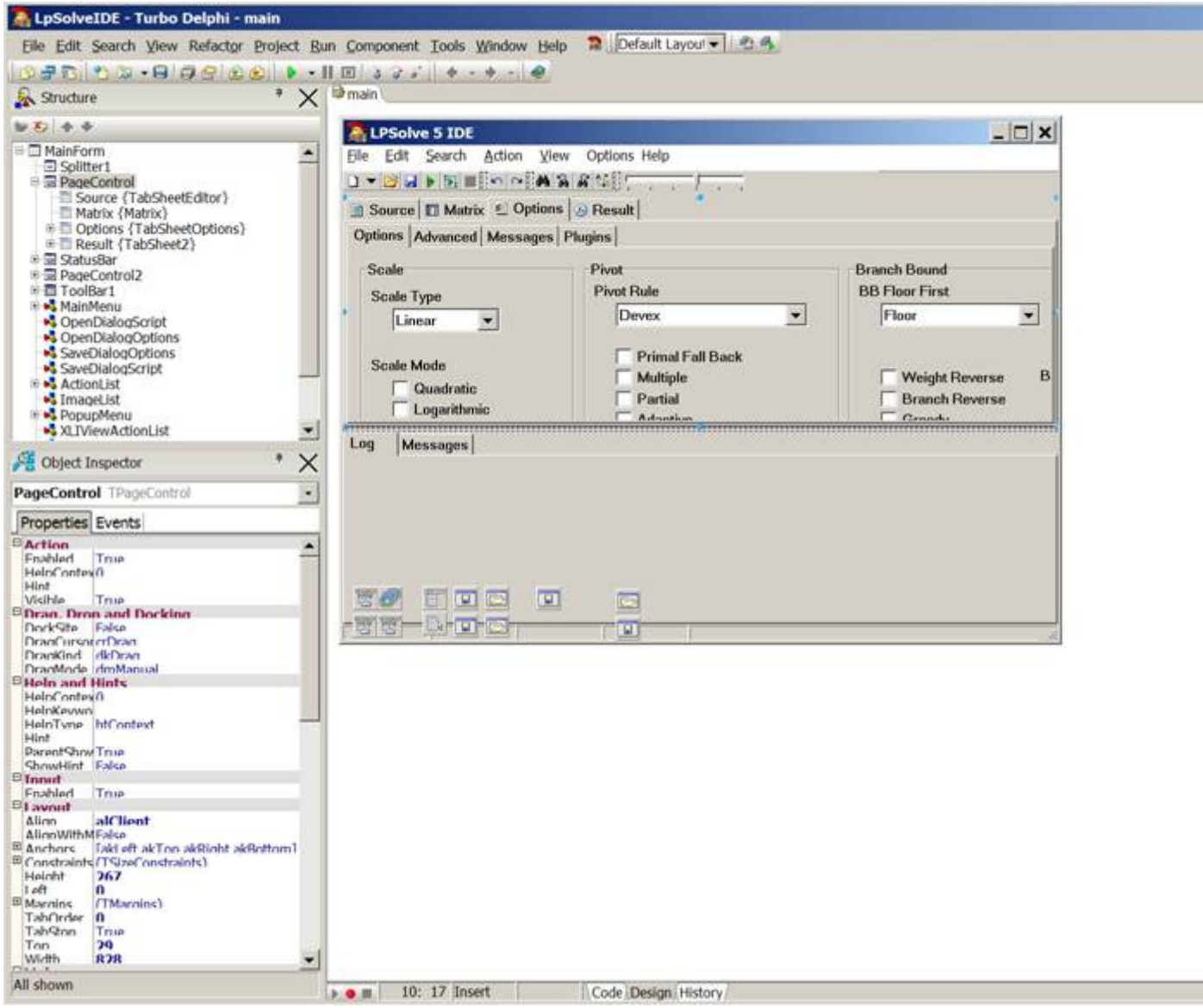
It is kind of a mystery. I guess it worked for me because I compiled each part separately initially.
But had the dcu directory set as the target of the x.dcu object files.

Good Luck

William

Peter,
One more note, Ckick ignore all on the TLPSynedit warning wheb starting ProjectGroup1.bdsgroup and you end up in the forms designer view .




LpSolveIDE - Turbo Delphi - main
File Edit Search View Refactor Project Run Component Tools Window Help
Default Layout
Structure
main
MainForm
Splitter1
PageControl
Source {TabSheetEditor}
Matrix {Matrix}
Options {TabSheetOptions}
Result {TabSheet2}
StatusBar
PageControl2
ToolBar1
MainMenu
OpenDialogScript
OpenDialogOptions
SaveDialogOptions
SaveDialogScript
ActionList
ImageList
PopupMenu
XLIViewActionList
Object Inspector
PageControl TPageControl
Properties Events
All shown
LPSolve 5 IDE
File Edit Search Action View Options Help
Source Matrix Options Result
Options Advanced Messages Plugins
Scale
Scale Type
Linear
Scale Mode
Quadratic
Logarithmic
Pivot
Pivot Rule
Devex
Primal Fall Back
Multiple
Partial
Branch Bound
BB Floor First
Floor
Weight Reverse
Branch Reverse
Log
Messages
10: 17 Insert
Code Design History

Peter,

I have managed some success with Turbo Delphi.
Attached are files changed to work with the LargaddressAware test dll.
I did not have enough memory to bother setting the 3gig bit. But I did verify that
The current IDE fails with this dll and the revised IDE succeeds.
So I think I fixed the pass via files issue.

In addition I finished connecting the Parameter file stubs. I removed MadExcept.
I attach the changed files and a summary as a zip.

The next following email attaches a test directory(3 meg) with the exe and a few test files.
The file gandtandb_24.lp will fault if GUB is checked. This shows the failure mode without MaddExcept.

I did not test with zimpl or XML xli. I do not think I have any XML sample.

I think that next month I will struggle with FreePascal. It has the promise of a 64bit version and linux.
But first Win32 to see how much is supported compatibly.

I captured a XPmenu link and zip from Wayback. The site disappeared in 2007, The zip including link page is attached. Maybe you should put it into the source package.

William