

This guide will help you add the new VectorDraw Developers Framework (VDF) version 6 ActiveX wrapper in your Visual Studio 6.0 projects, Borland Delphi 6 & 7 and inside HTML pages that can be used with Internet Explorer. Click on the links below to see a "Getting started" guide for the platform that you use :

- [Visual Basic 6](#)
- [Visual C++ 6](#)
- [Borland Delphi 6 & 7](#)
- [Borland Delphi 2006 & 2005](#)
- [HTML](#)
- [Authorizing the VDF Libraries](#)

The vdraw.ocx ActiveX Wrapper is almost similar to the previous VectorDraw Professional 5.x (vdpro.ocx) component and you can also check the help file of this component named **vdpro.chm** (should be installed in your disk with our setup in a folder like : "*C:\Program Files\VectorDraw\VectorDraw Developer Framework*"), the legacy articles of version 5.x (<http://www.vdraw.com/Export/ALLarticles.htm>). There are also very detailed instructions (as text files) on how to migrate your VectorDraw Professional 5.x projects to the new version 6 Wrapper and in some cases (VB 6, VC++ 6) some automatic migration tools that come with the setup of the version 6.

The topics above contain information on how to add the VDF Wrapper ActiveX to an empty project and also some steps to add to this project some basic functionality like open/save/new and zoom.

The VectorDraw version 6 ActiveX wrapper (vdraw.ocx) is made for users that do not want to build their projects in .NET 2.0 developing platform or for users who want a quick upgrade from the old 5.x version to the new 6 version. In new 2.0 .NET projects it is recommended to use the vdFramedControl for more functionality and greater flexibility.

Note: In Windows Vista/Seven/Server2008 ALWAYS run the IDE with right-click and "Run as Administrator" option as Microsoft proposes.

Note:

You can check the **CADBasics.chm** help file that is installed in your disk with VDF setup (in a folder like "*C:\Program Files\VectorDraw\VectorDraw Developer Framework*") to get a general idea regarding CAD programs, and basic CAD terminology (like Line, Layer, Block, Dimension etc)

You can also check our samples that are using the vdraw.ocx that are compressed in a zip file (named samples.zip) in a folder like "*C:\Program Files\VectorDraw\VectorDraw Developer Framework\Migration Instructions*" that comes with VDF setup. In this folder are also detailed **migration instructions** on how to migrate your version 5.x projects to the new 6.x wrapper ActiveX.

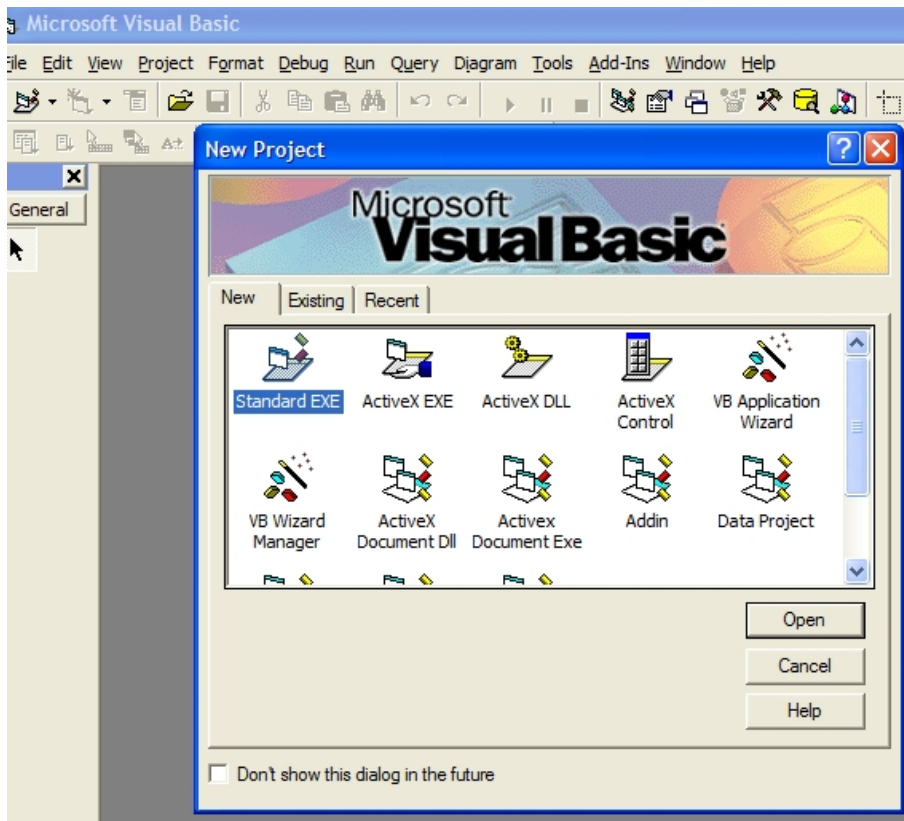
These samples are :

- 3DTutorial
- AreaViewPro
- BlocksTutorial
- CustomLineTypes
- DynamicEntities
- EntitiesTutorial
- ExtendData
- FilterExample
- Generate3DShapes

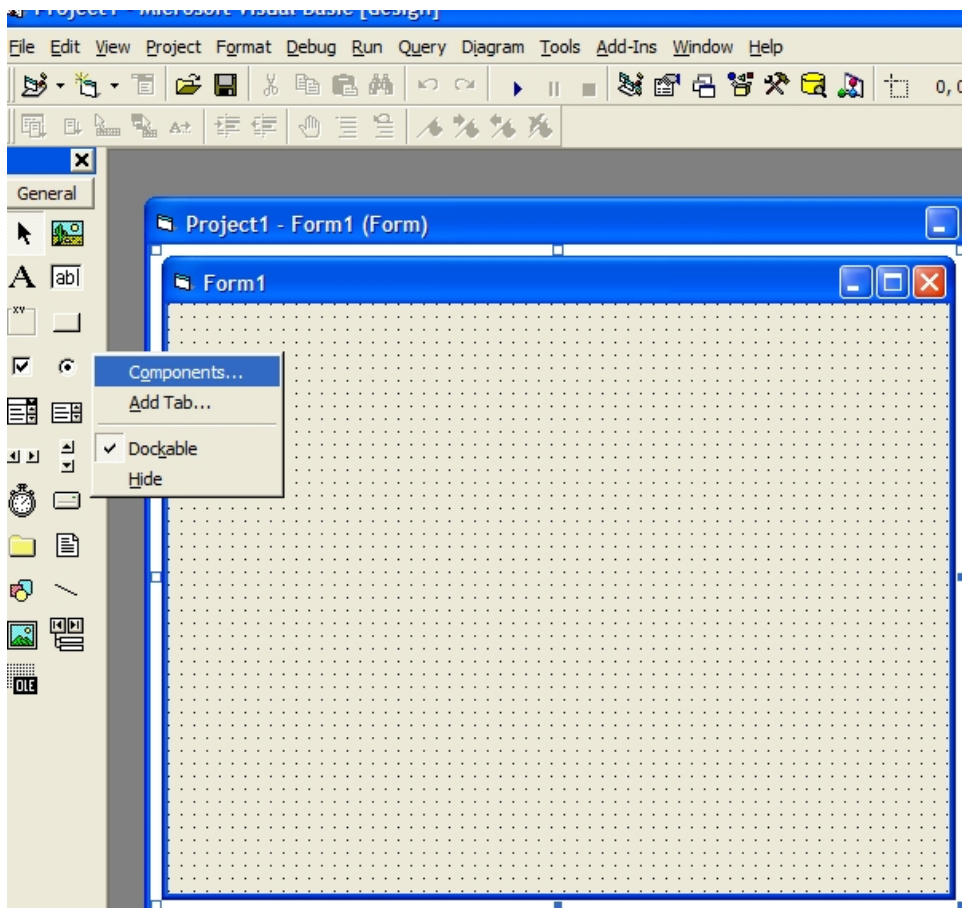
- Grips
- Intersect
- IsInsideAnObject
- LayersTutorial
- Lights & Materials
- MergeDrawings
- OpenTxt
- PolyfaceTutorial
- Print
- TranspRender
- View3D
- ViewportExample
- XProp-Stairs

In order to add the VDF ActiveX wrapper vdraw.ocx in Visual Basic 6 the steps 1 to 5 must be followed:

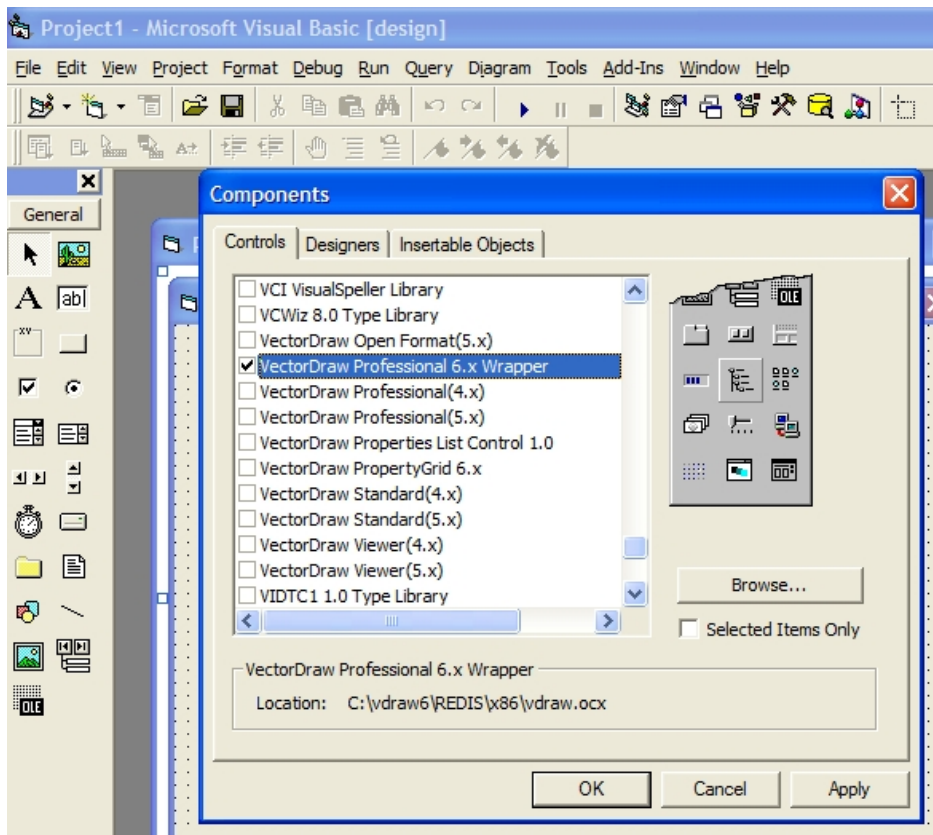
- 1) Open the Visual Basic 6 IDE and choose to create a new project as "Standard EXE"



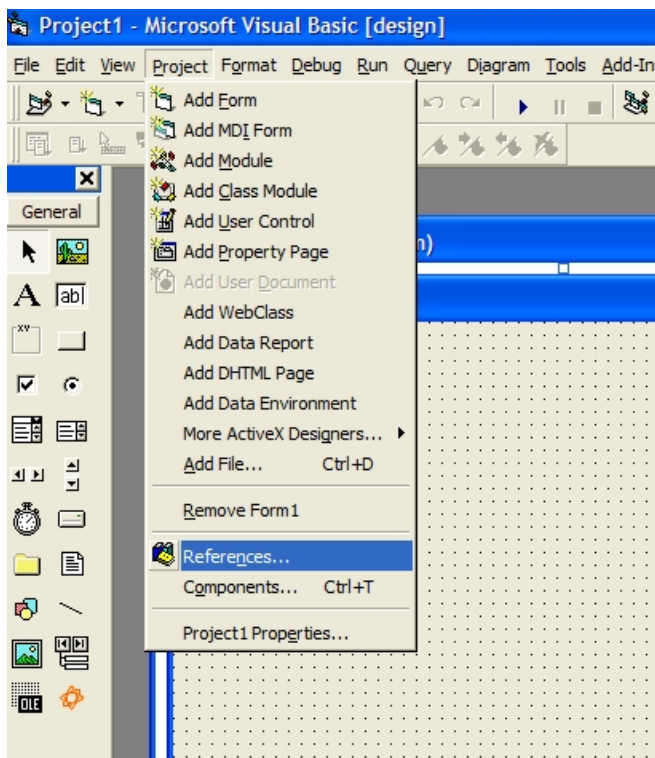
- 2) Right click on the toolbox and in the menu that appears choose "Components..."



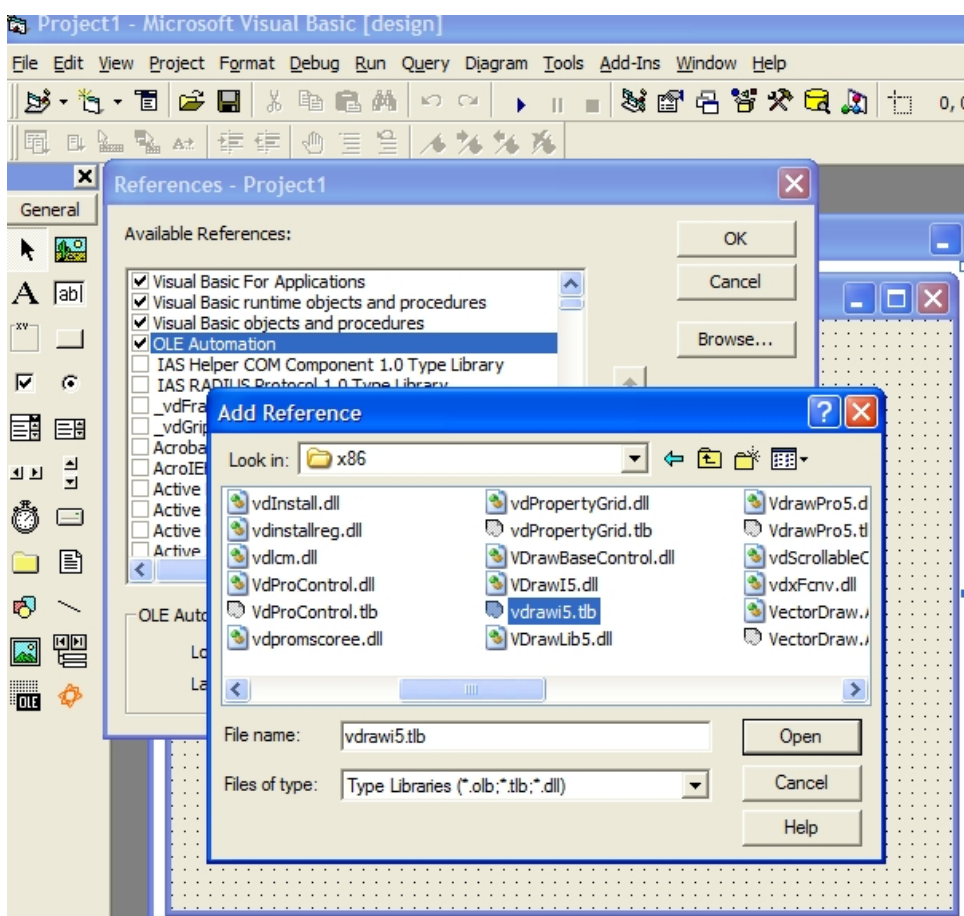
- 3) In the "Components" window scroll down and check the "VectorDraw Professional 6.x Wrapper" and press "Apply" and "OK" buttons. You will see a new orange-colored icon in the toolbox. The component is added to the project but the vdrawi5.tlb should be added also (step 4 and 5).



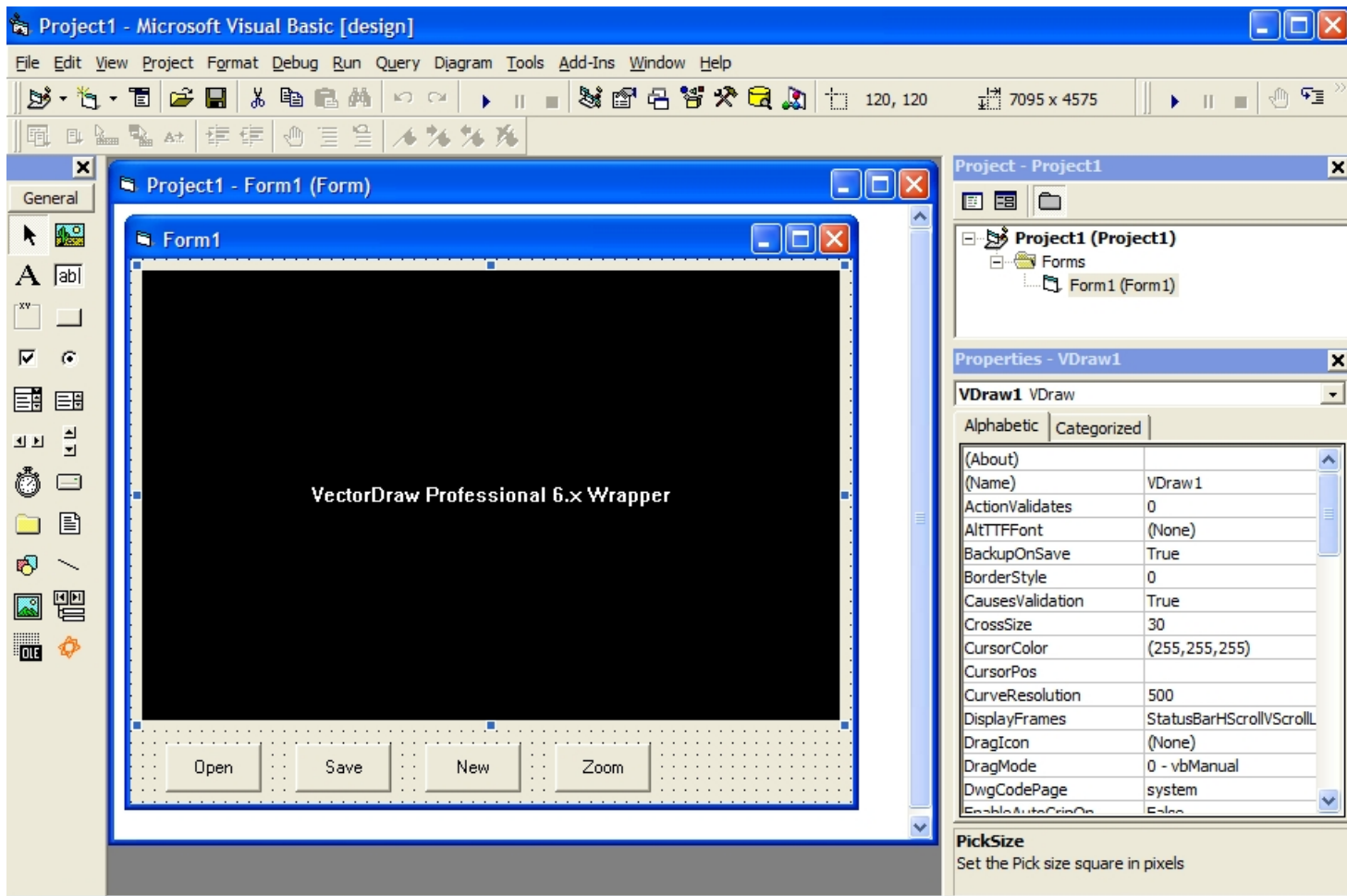
4) In the menu, Click "Project" and then "References"



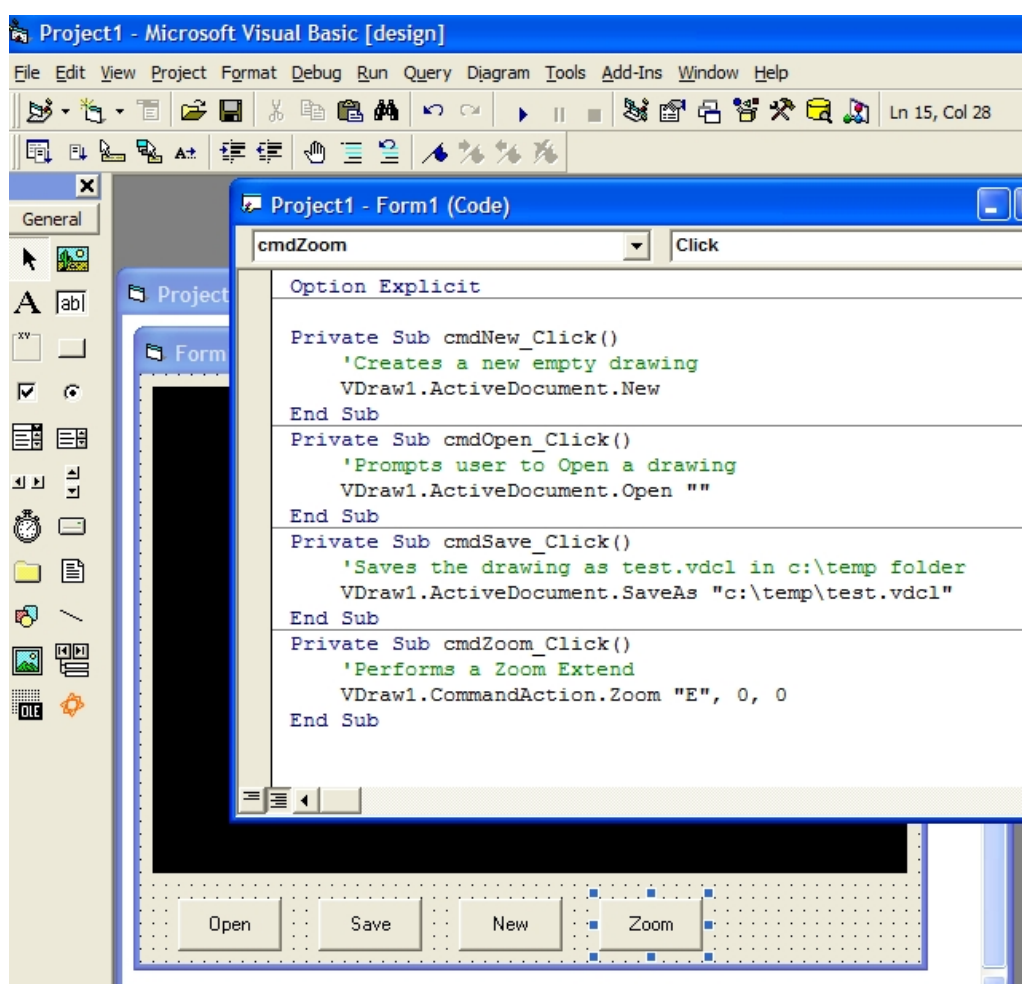
5) In the "References" window click "Browse" button and browse to the directory where the VectorDraw dlls are placed during setup (in a folder like : "C:\Program Files\VectorDraw\Common\60xx\") and select the vdrawi5.tlb



6) Add the VectorDraw Wrapper ActiveX to the form and also 4 buttons that will do some simple functions like Open/Save a drawing. Create a new drawing and Zoom Extends.



7) The code that is added to the button-click is like below :

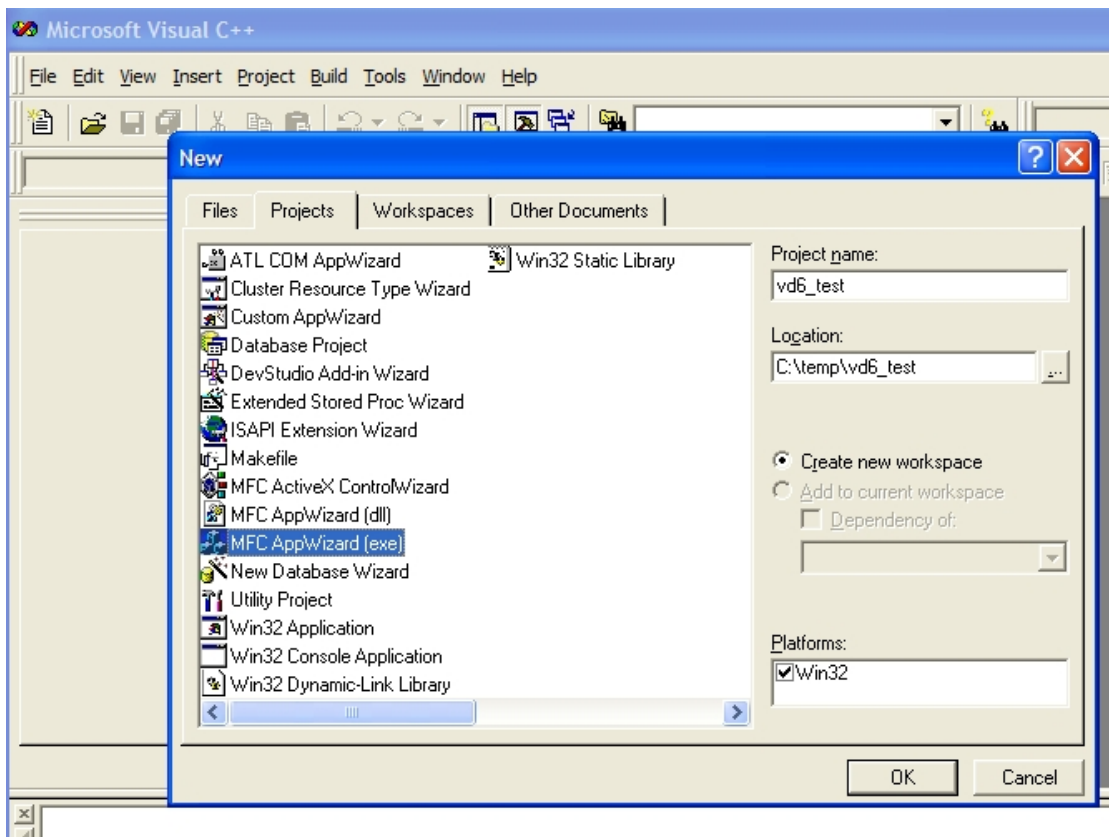


Option Explicit

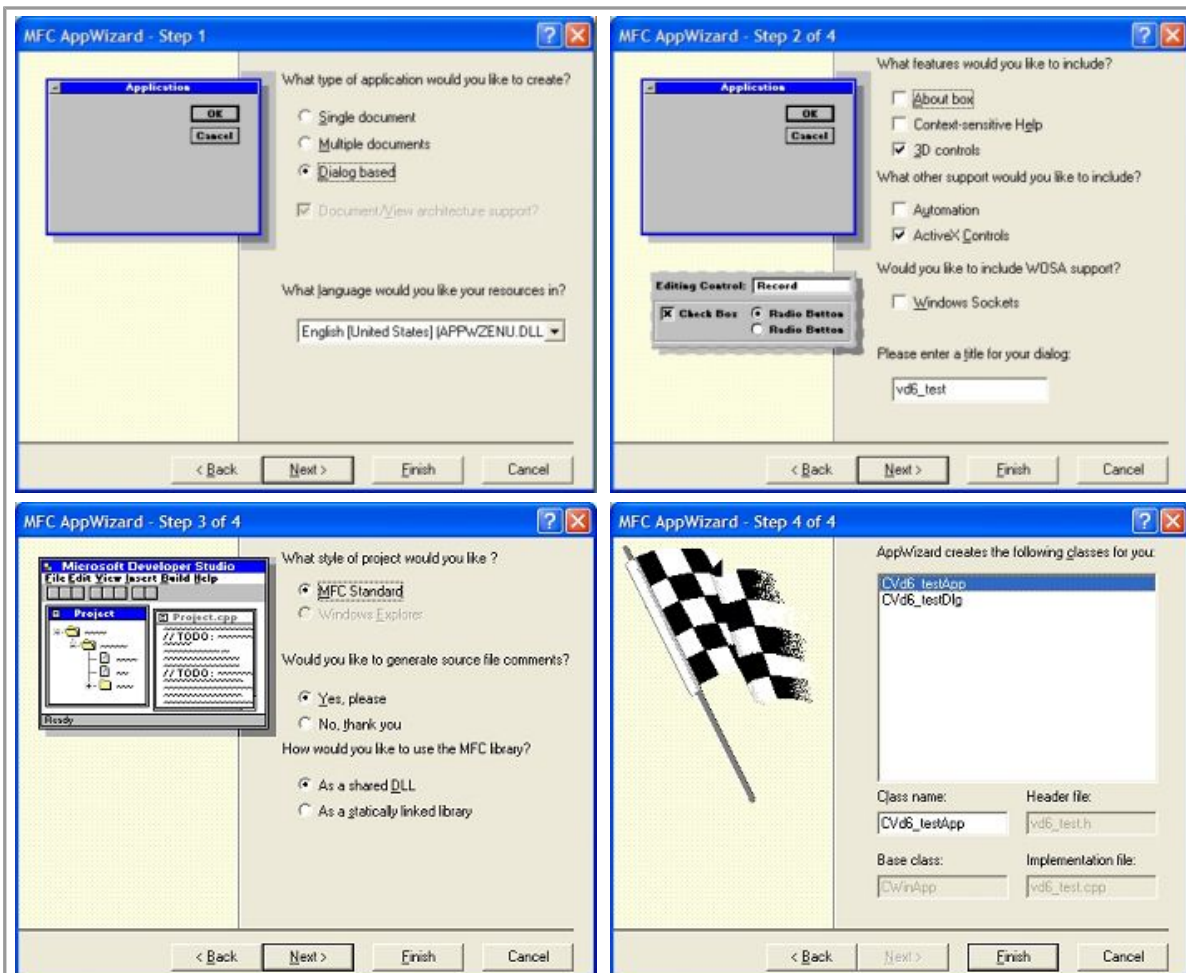
```
Private Sub cmdNew_Click()  
    'Creates a new empty drawing  
    VDraw1.ActiveDocument.New  
End Sub  
Private Sub cmdOpen_Click()  
    'Prompts user to Open a drawing  
    VDraw1.ActiveDocument.Open ""  
End Sub  
Private Sub cmdSave_Click()  
    'Saves the drawing as test.vdcl in c:\temp folder  
    VDraw1.ActiveDocument.SaveAs "c:\temp\test.vdcl"  
End Sub  
Private Sub cmdZoom_Click()  
    'Performs a Zoom Extend  
    VDraw1.CommandAction.Zoom "E", 0, 0  
End Sub
```

In order to add the VDF ActiveX wrapper vdraw.ocx in Visual C++ 6 the steps 1 to 6 must be followed:

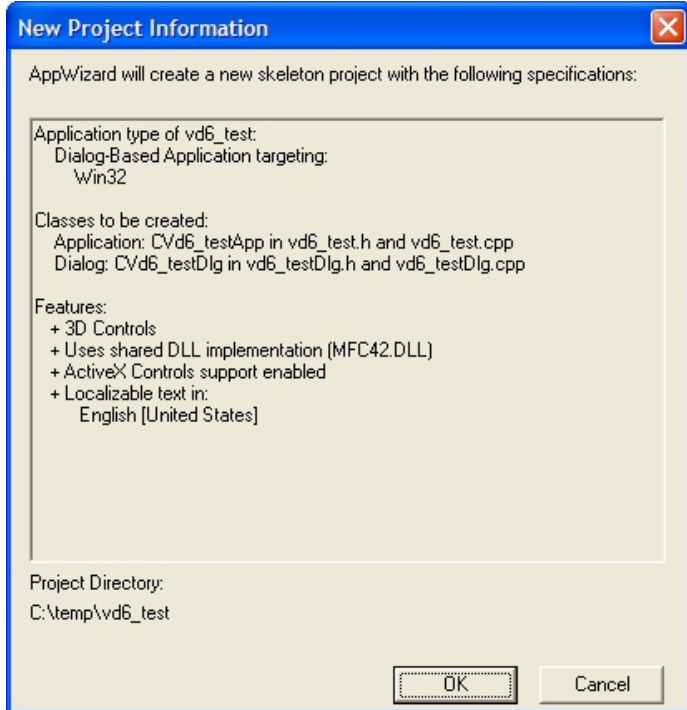
- 1) Open the Visual C++ 6 IDE and choose to create a new project as "MFC AppWizard (exe)". Set also the name and the folder of the application.



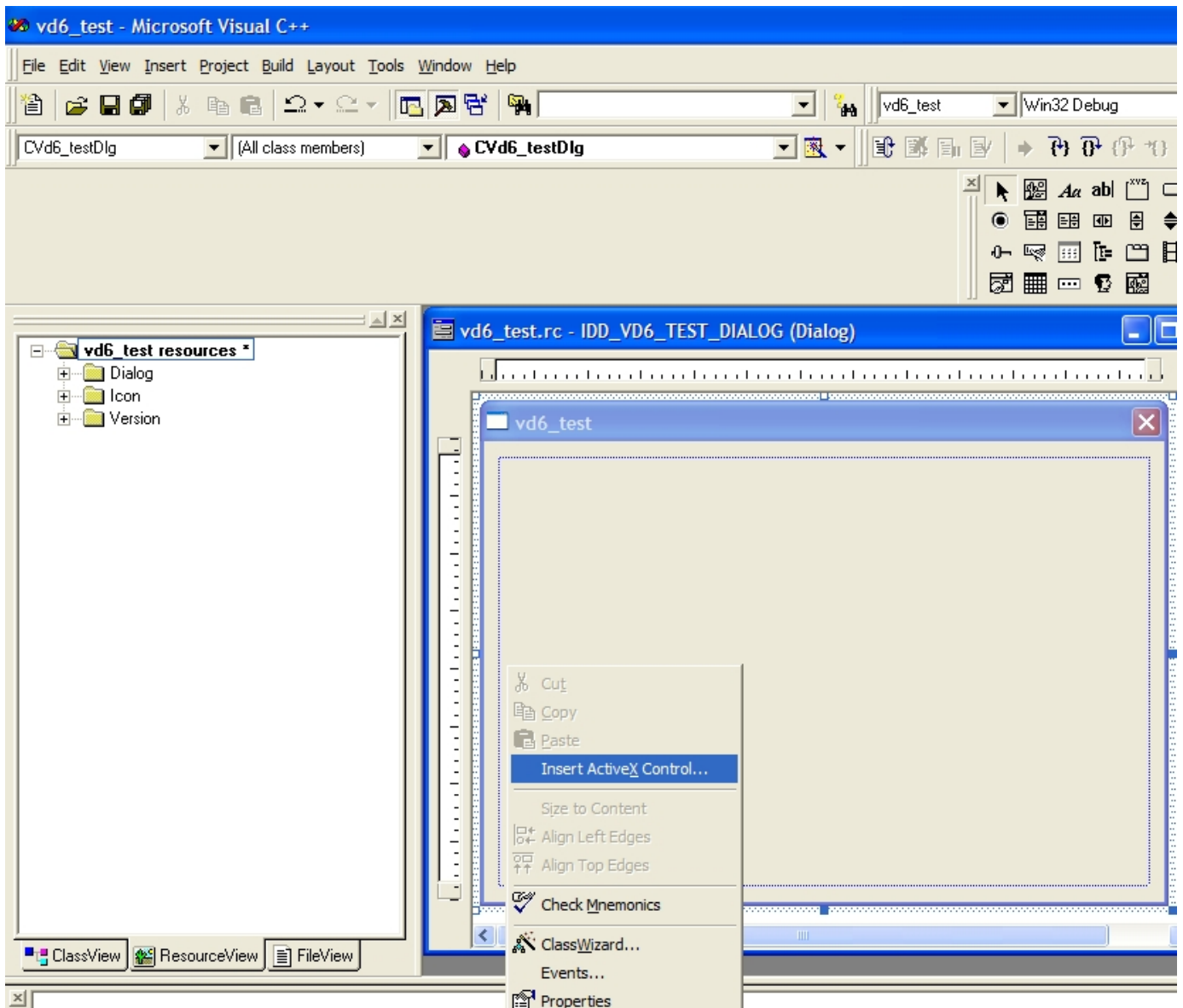
- 2) In the MFC AppWizard dialog follow the steps like below :



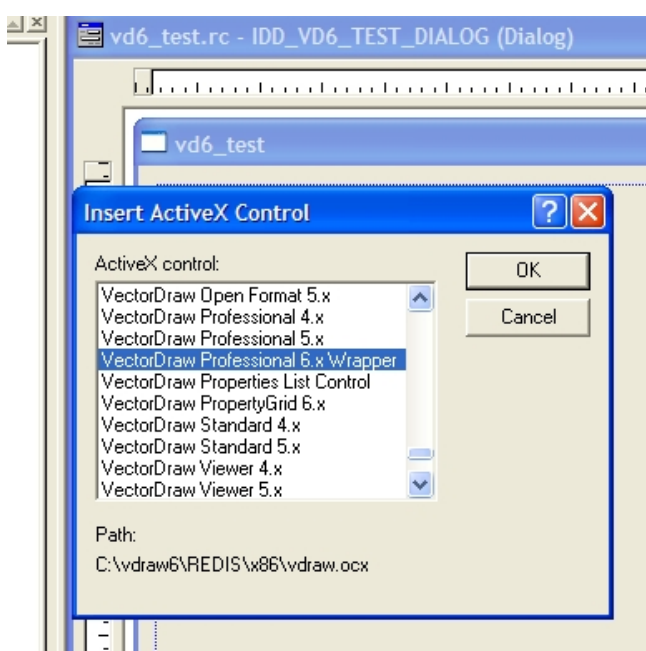
And in the confirmation dialog click "OK"



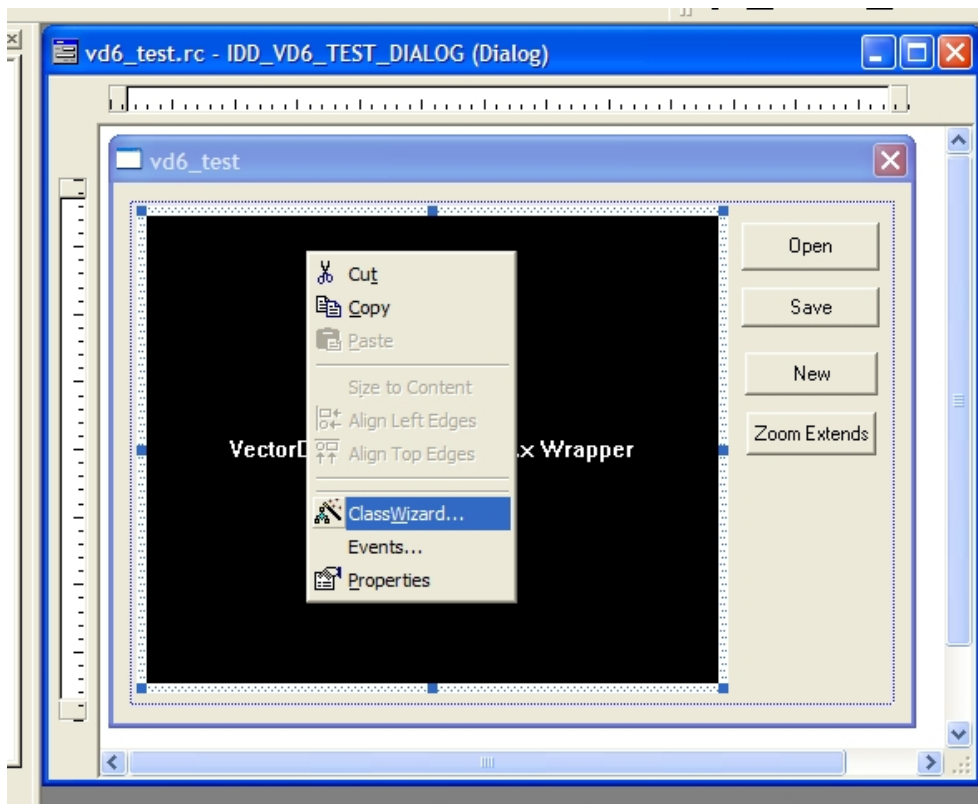
3) A form (in design mode) should appear with 2 buttons ("OK" & "Cancel") and a Label ("ToDo"). Delete the 2 buttons and the label and right click in the form. In the menu that appears click "Insert ActiveX Control..."



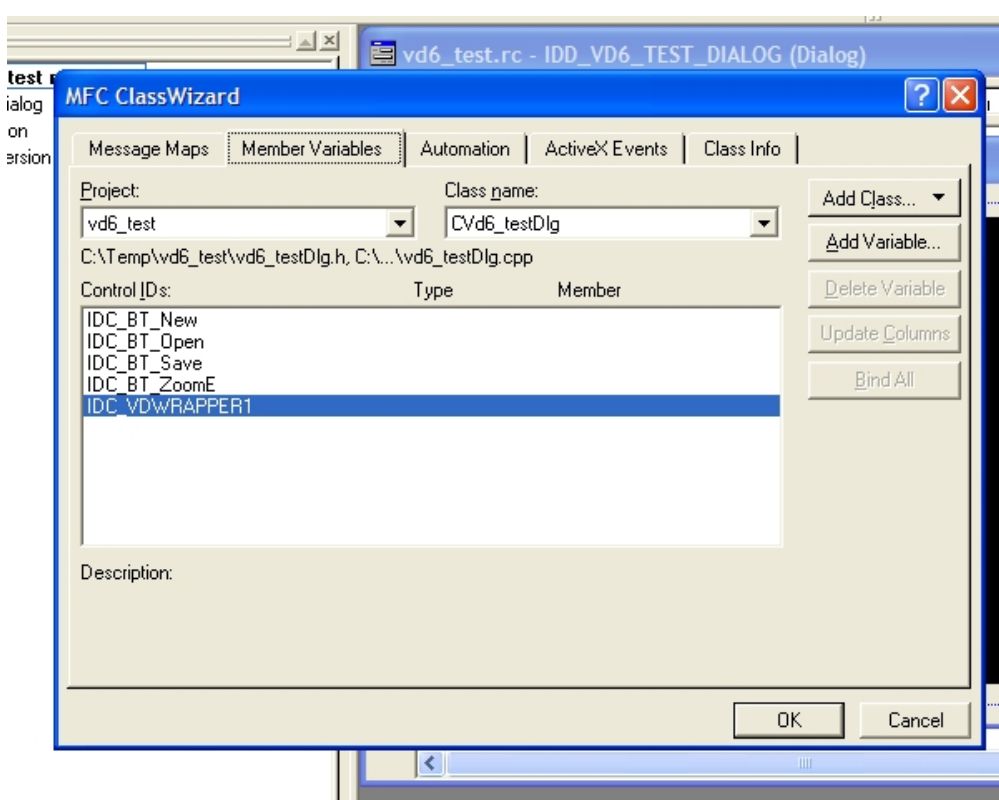
4) In "Insert ActiveX Control" window that appears, scroll down and highlight the "VectorDraw Professional 6.x Wrapper", and click "OK" button.



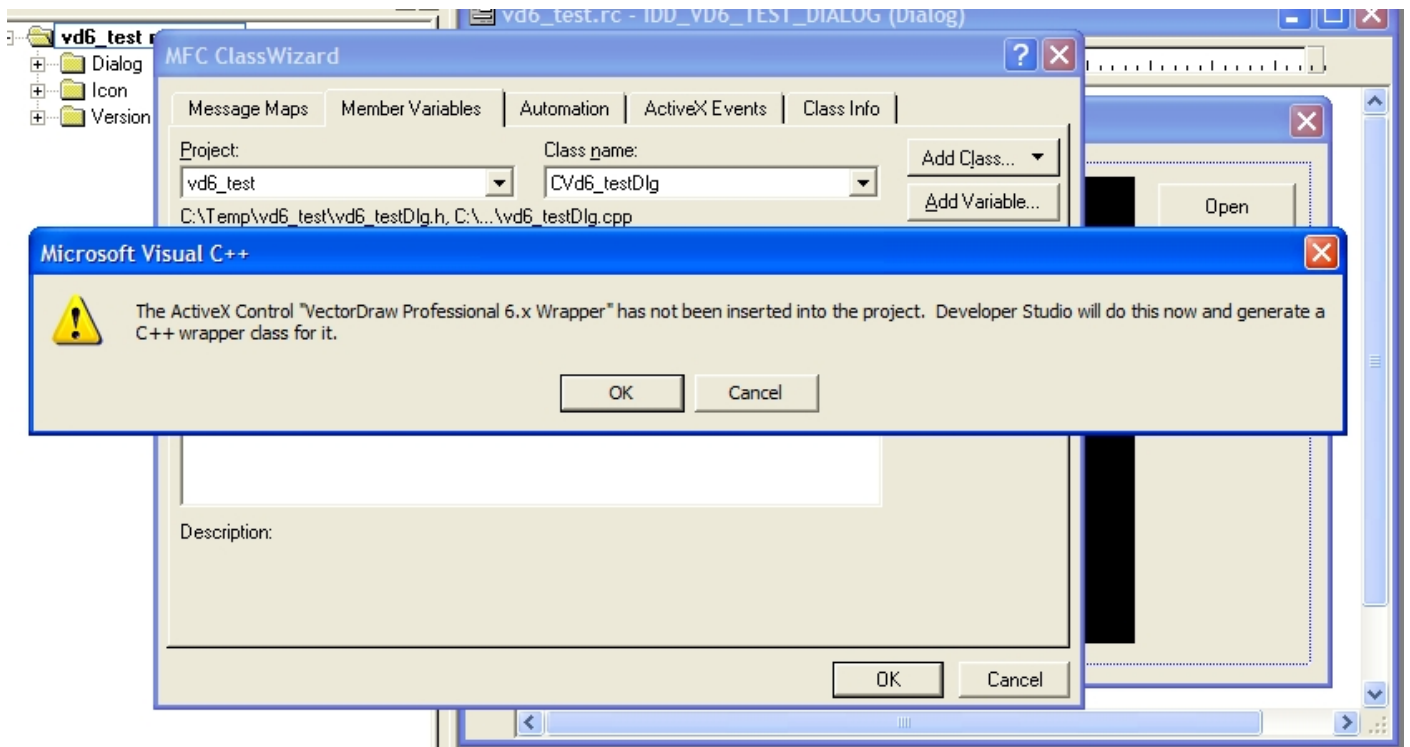
5) The VectorDraw Version 6 Wrapper component is added to the form. Add also 4 buttons. Right click on the vdraw control and in the menu that appears choose "ClassWizard..."



6) In the "MFC ClassWizard" dialog that appears next, click on the "Member Variables" Tab and in the list of the "Control IDs" double-click the VectorDraw Wrapper.

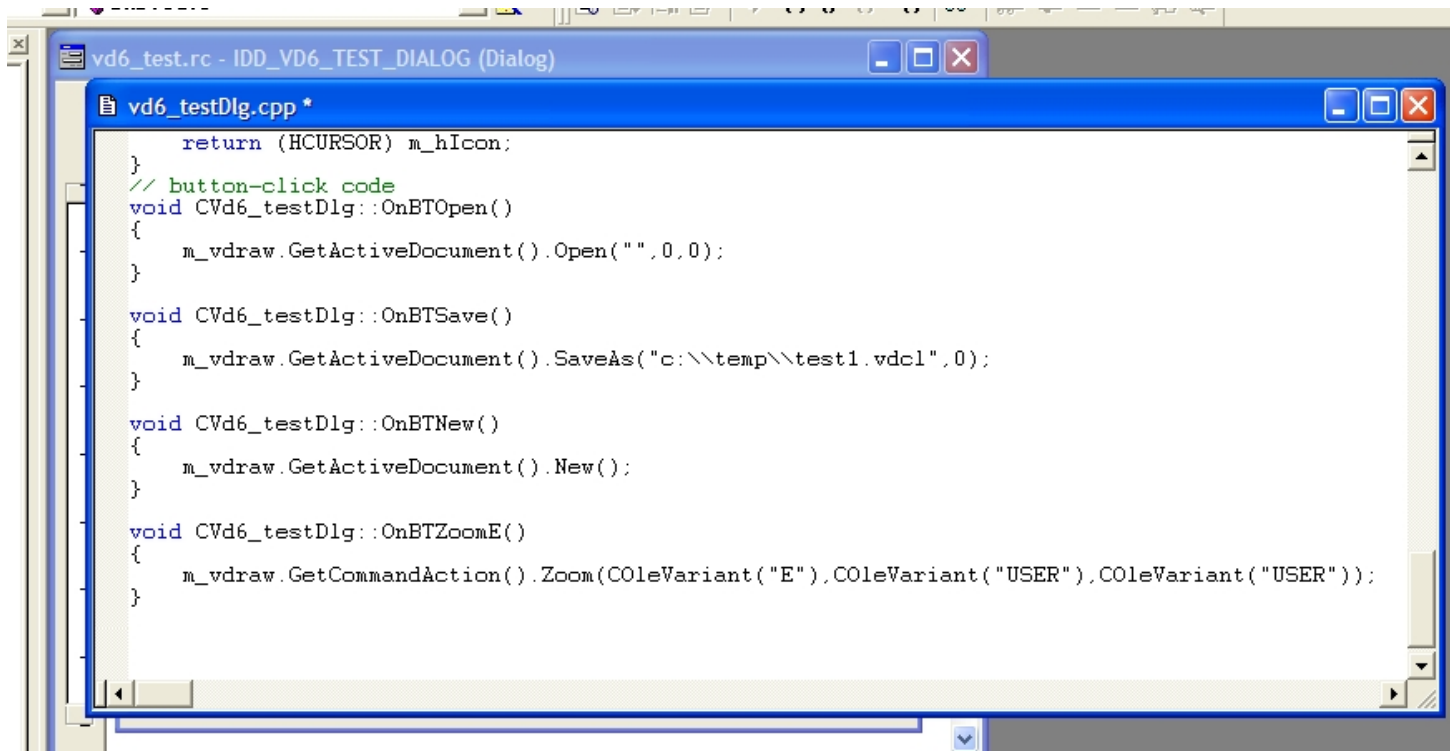


and click the "OK" button in the new dialog that appears:



In the Confirm Classes dialog just click the "OK" Button:

and the following code to the button-click is like below :



The screenshot shows a Visual Studio window titled "vd6_test.rc - IDD_VD6_TEST_DIALOG (Dialog)". The active editor is "vd6_testDlg.cpp *". The code in the editor is as follows:

```
        return (HCURSOR) m_hIcon;
    }
    // button-click code
void CVd6_testDlg::OnBTOpen()
{
    m_vdraw.GetActiveDocument().Open("",0,0);
}

void CVd6_testDlg::OnBTSave()
{
    m_vdraw.GetActiveDocument().SaveAs("c:\\temp\\test1.vdcl",0);
}

void CVd6_testDlg::OnBTNew()
{
    m_vdraw.GetActiveDocument().New();
}

void CVd6_testDlg::OnBTZoomE()
{
    m_vdraw.GetCommandAction().Zoom(ColeVariant("E"),ColeVariant("USER"),ColeVariant("USER"));
}
```

```
#include "vddocument.h"
#include "vdcommand.h"

void CVd6_testDlg::OnBTOpen()
{
    m_vdraw.GetActiveDocument().Open("",0,0);
}

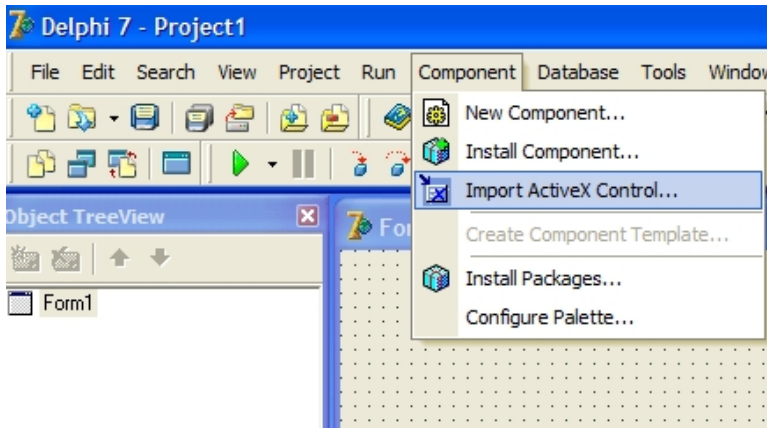
void CVd6_testDlg::OnBTSave()
{
    m_vdraw.GetActiveDocument().SaveAs("c:\\temp\\test1.vdcl",0);
}

void CVd6_testDlg::OnBTNew()
{
    m_vdraw.GetActiveDocument().New();
}

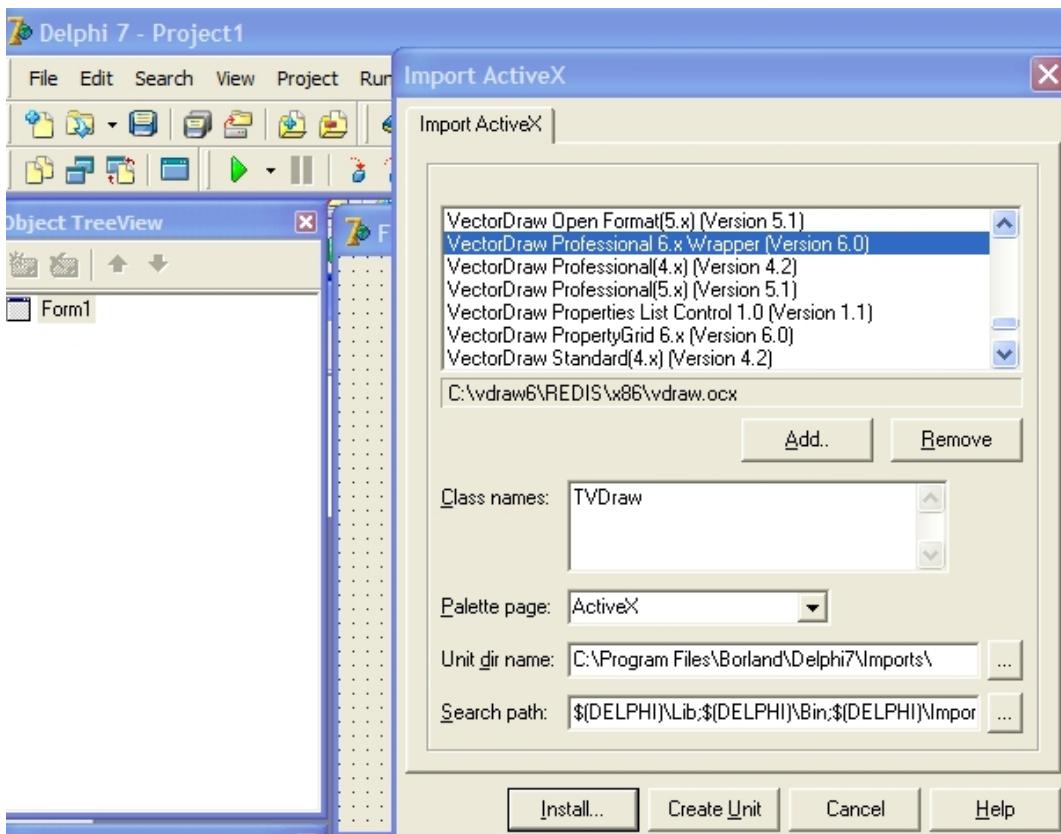
void CVd6_testDlg::OnBTZoomE()
{
    m_vdraw.GetCommandAction().Zoom(ColeVariant("E"),ColeVariant("USER"),ColeVariant("USER"));
}
```

In order to add the VDF ActiveX wrapper vdraw.ocx in Delphi 6 and 7, the steps 1 to 6 must be followed:

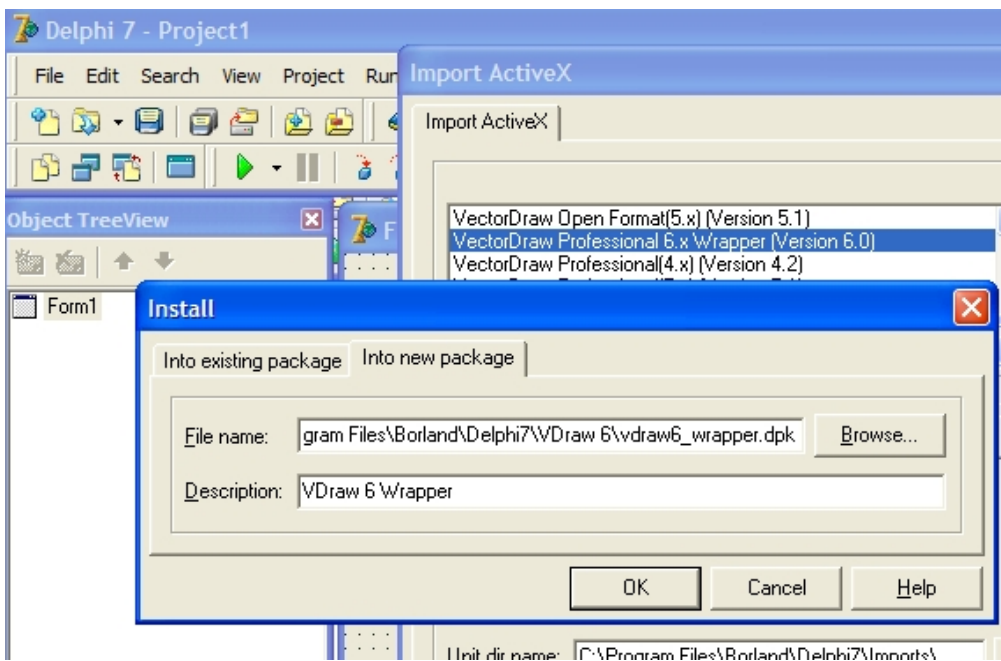
- 1) Open the Delphi IDE and in the Component menu click "Import ActiveX Control..."



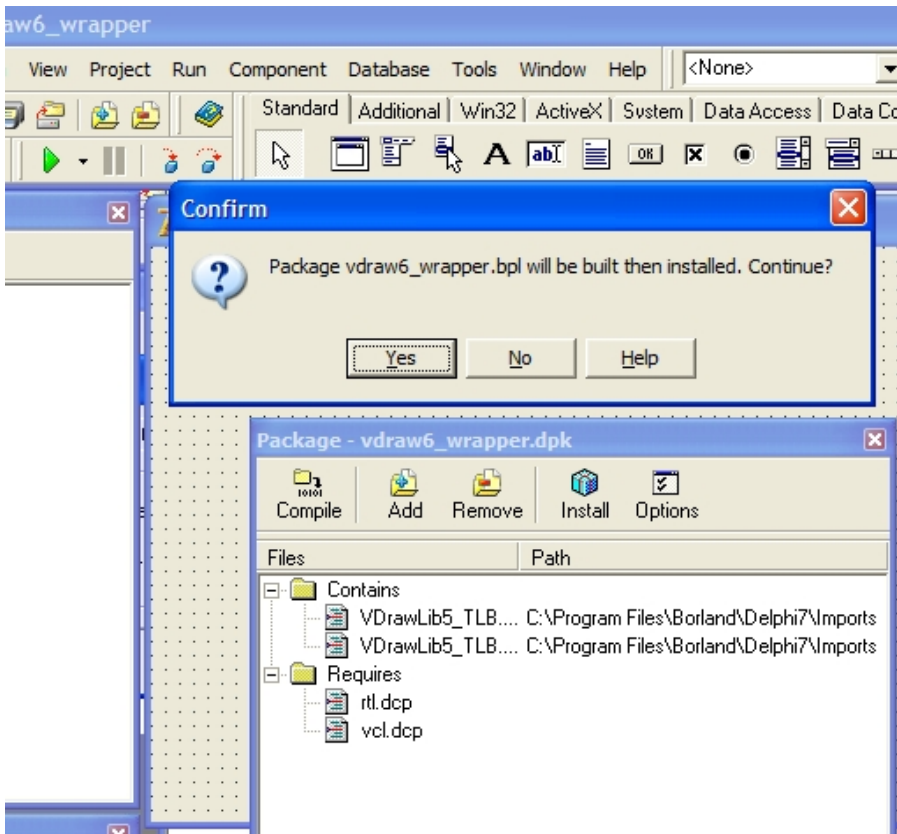
- 2) In the Import ActiveX Dialog scroll down and highlight "VectorDraw Professional 6.x Wrapper (version 6.0)" and click "Install..." button



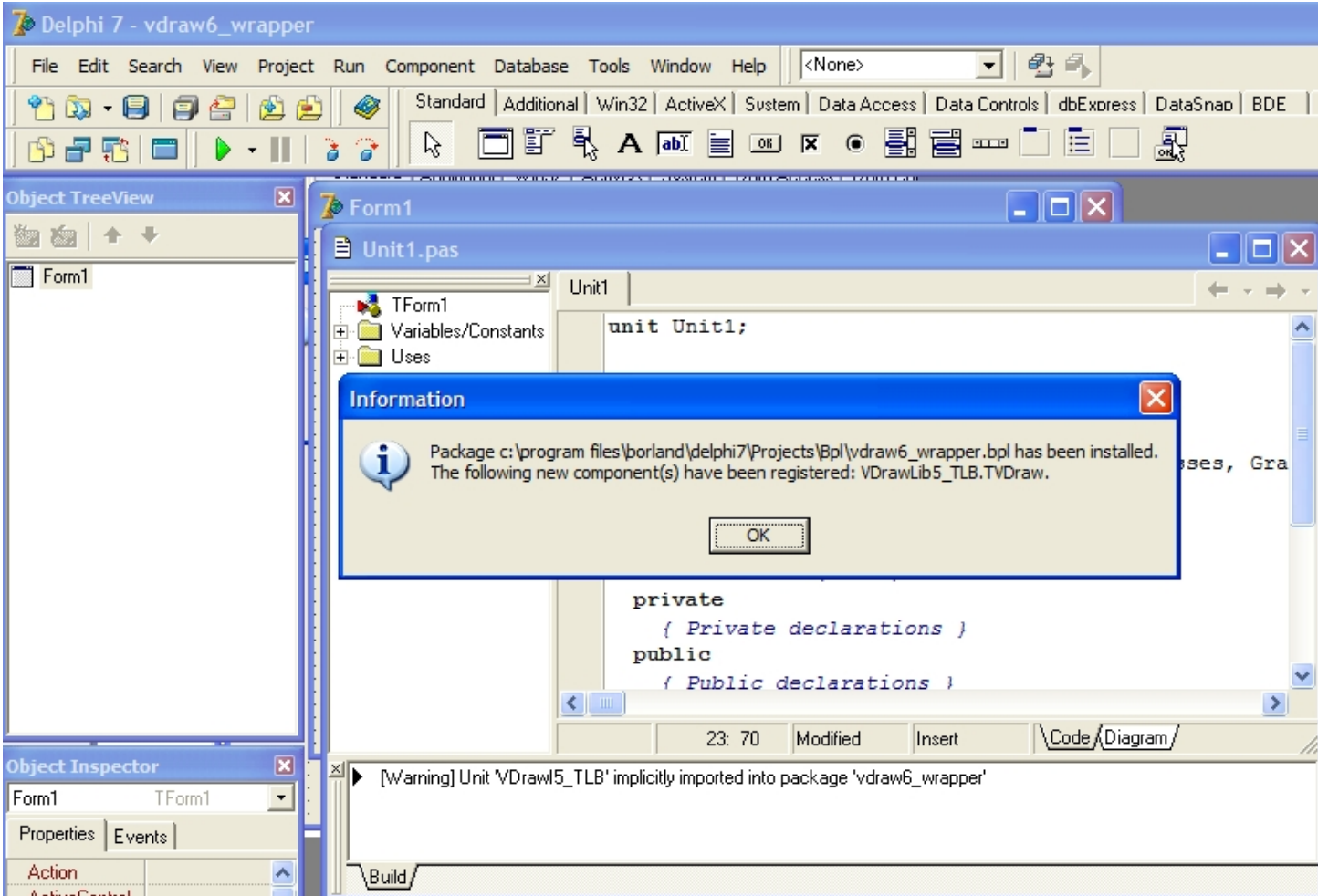
- 3) In the "Install" window click on the "Into new package" Tab and choose a filename, location, a Description and click "OK" button



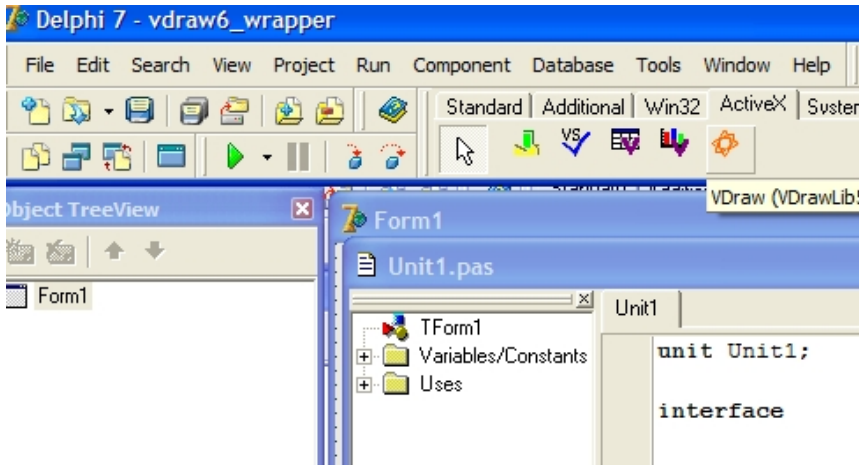
4) In the Confirm dialog click "Yes"



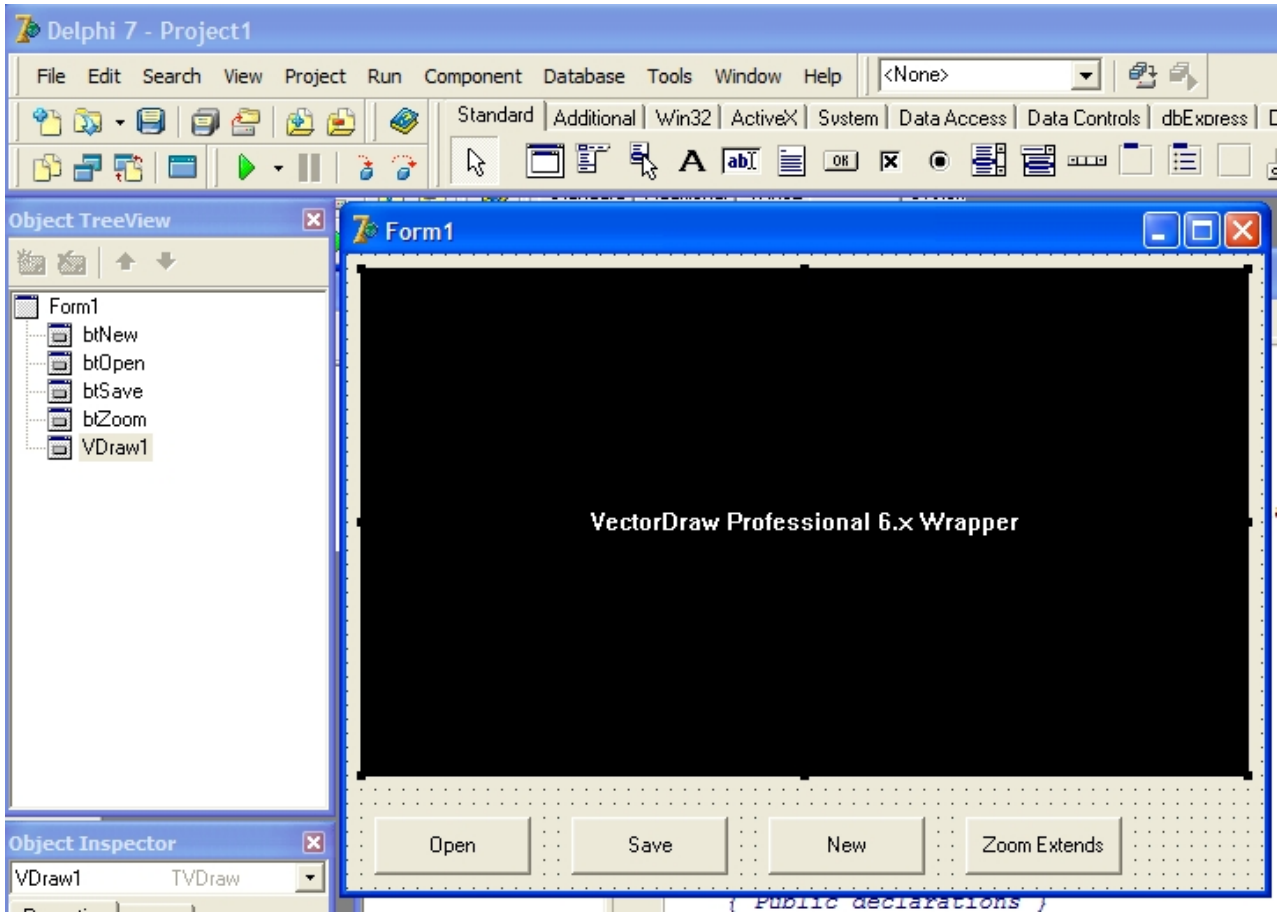
5) Delphi will show a confirmation dialog. Also note that there is a warning that another unit is imported to the package. This is VDraw15.tlb, ignore the warning



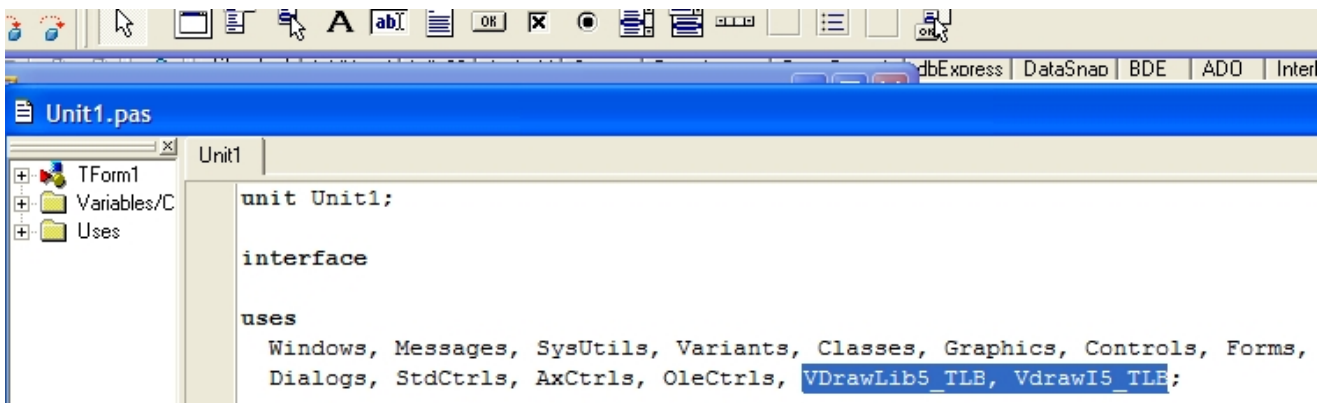
6) In the ActiveX toolbox you will see a new orange icon for the vdraw.ocx. The installation of the VectorDraw 6.0 Wrapper component is finished. Now close the Delphi IDE and choose "Yes" when you asked for saving the changes to the package project (vdraw6_wrapper).



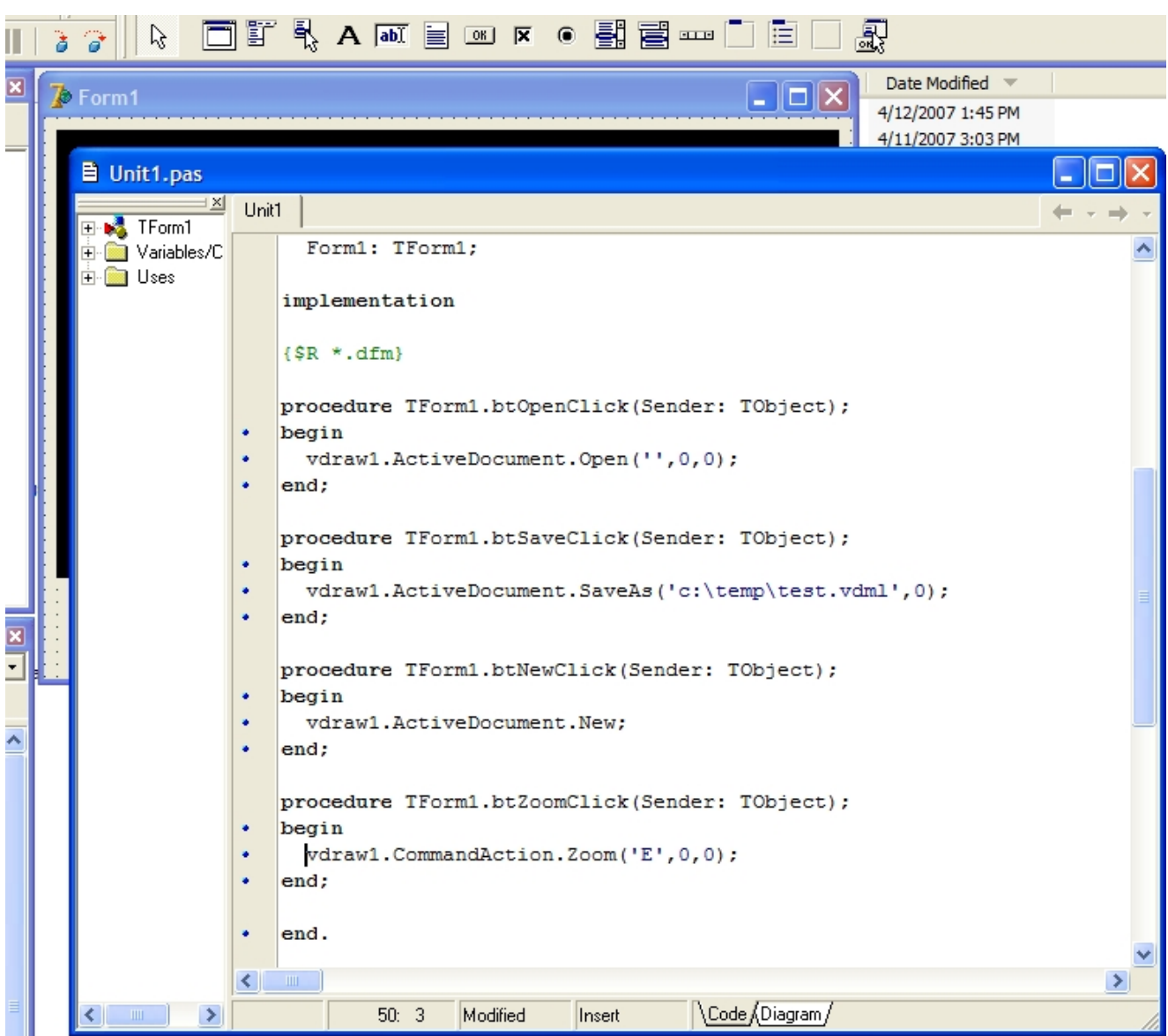
7) Lets make a new very simple basic project. Run the Delphi IDE again and in the empty form add a VectorDraw 6.0 Wrapper ActiveX and 4 buttons.



8) In the "USES" add the **VDrawLib5_TLB** (is the vdraw.ocx) and the **VDrawI5_TLB**.



9) The code that is added to the button-click is like below :



```

procedure TForm1.btOpenClick(Sender: TObject);
begin
vdraw1.ActiveDocument.Open('',0,0);
end;

```

```

procedure TForm1.btSaveClick(Sender: TObject);
begin
vdraw1.ActiveDocument.SaveAs('c:\temp\test.vdml',0);
end;

```

```

procedure TForm1.btNewClick(Sender: TObject);
begin
vdraw1.ActiveDocument.New;
end;

```

```

procedure TForm1.btZoomClick(Sender: TObject);
begin
vdraw1.CommandAction.Zoom('E',0,0);
end;

```

If you have registered the VDF component as a customer (not "evaluation") and you get "evaluation" messages from your application in your test machine then try to build a very small sample like the above and test it in your test machine. If you get the "evaluation message again then you might need to remove VDF (vdraw.ocx) from Delphi and re-add it following the procedure above (steps 1 - 5)

In order to remove the VDF (vdraw.ocx) component from Delphi follow the steps below :

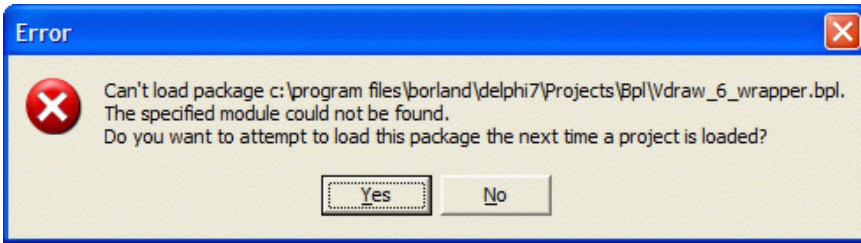
- 1) Backup your Delphi projects
- 2) Find and delete these files :

```

VDrawLib5_TLB.dcu
VDrawI5_TLB.dcu
Vdraw6_wrapper.cfg
Vdraw6_wrapper.dof
Vdraw6_wrapper.dcp
Vdraw6_wrapper.bpl
Vdraw6_wrapper.dcu
Vdraw6_wrapper.dpk
VDrawLib5_TLB.pas
VDrawLib5_TLB.dcr
VDrawI5_TLB.pas
VDrawI5_TLB.dcr
Vdraw6_wrapper.res

```

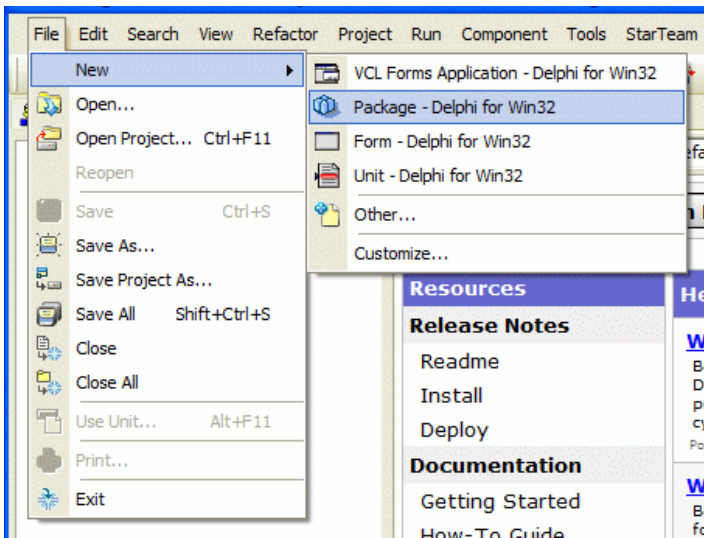
- 3) Open Delphi 7 and you will get this message :



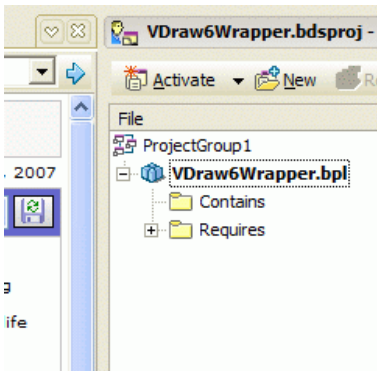
Click on "NO" button and the component will be removed from Delphi.

In order to add the VDF ActiveX wrapper vdraw.ocx in Delphi 2006 and 2005, the steps 1 to 14 must be followed:

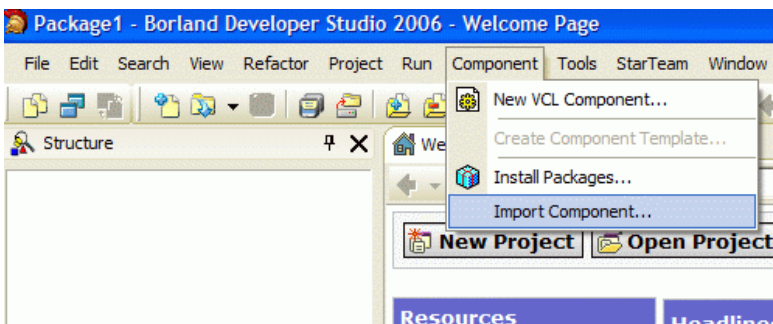
- 1) Open the Delphi IDE and in the File -> New menu click "Package - Delphi 32..."



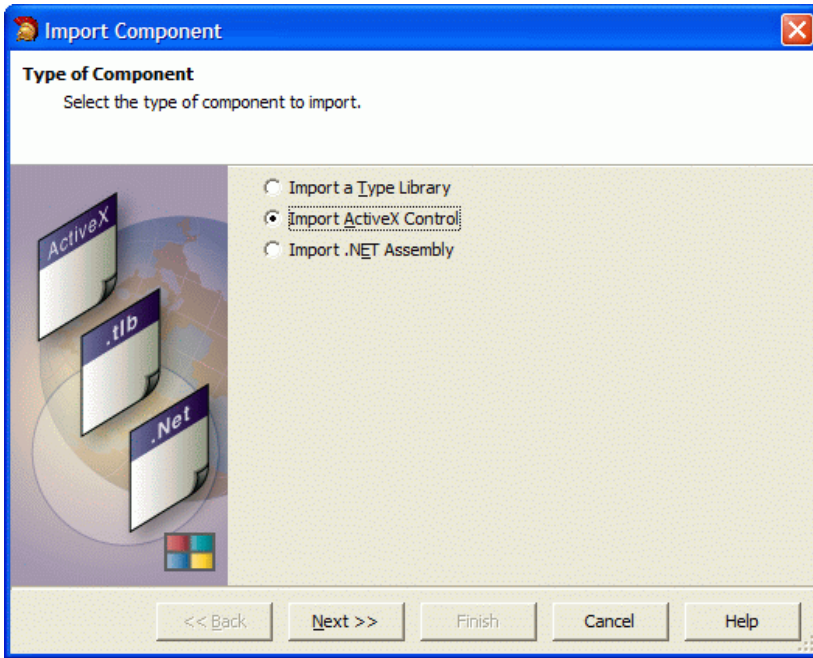
- 2) Rename the default Package1 name to VDraw6Wrapper.bpl



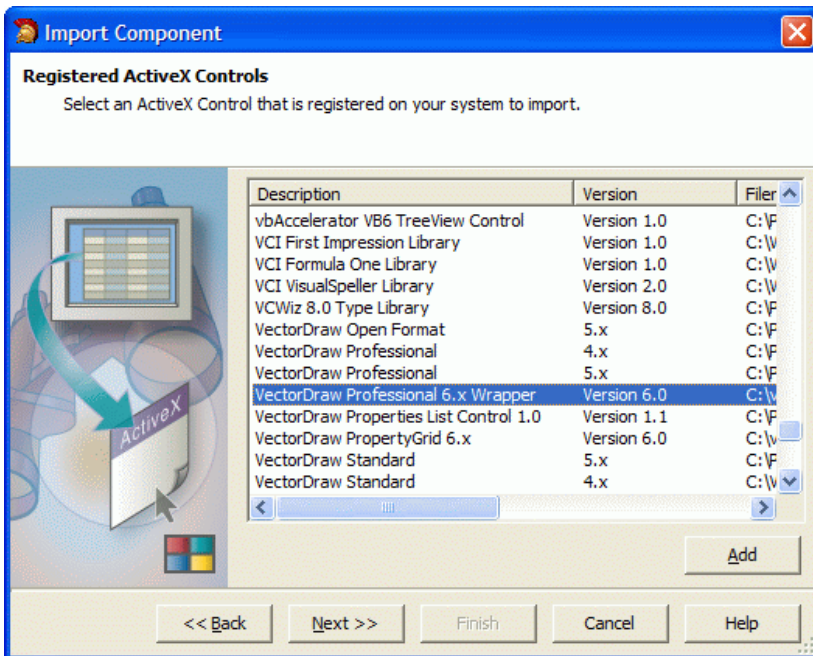
- 3) In the Component menu click "Import Component..."



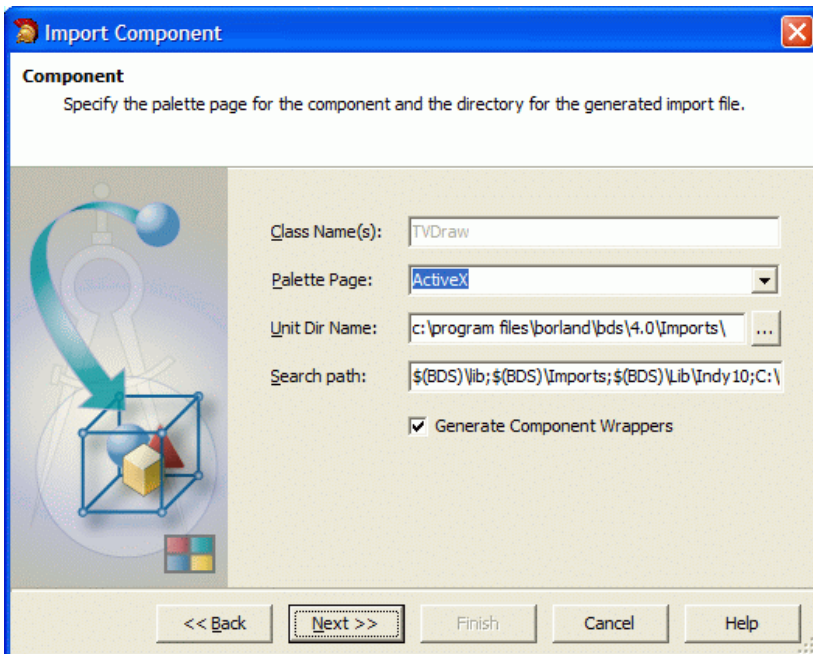
- 4) In the new form that appears select "Import ActiveX Control" and click Next



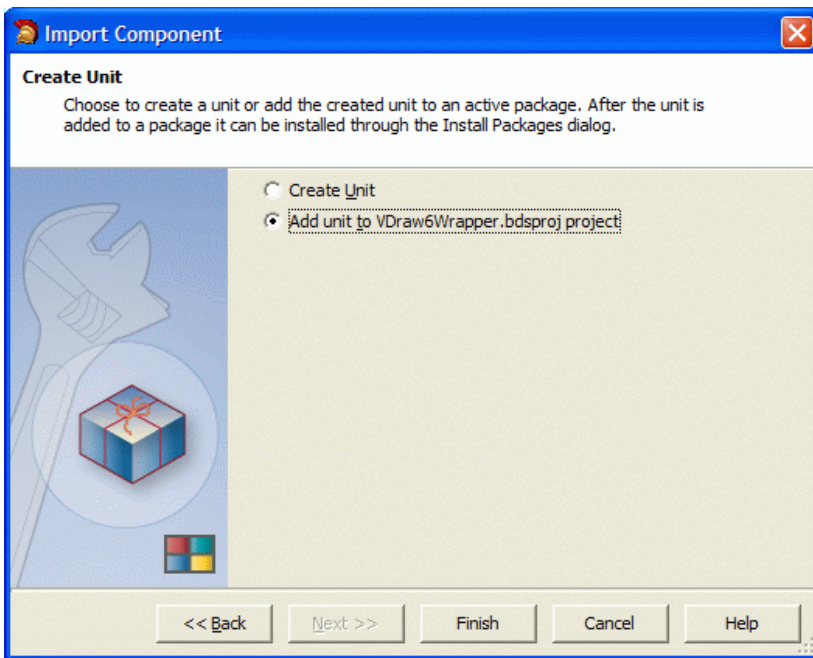
5) Scroll Down and highlight "VectorDraw Professional 6.x Wrapper" and click next



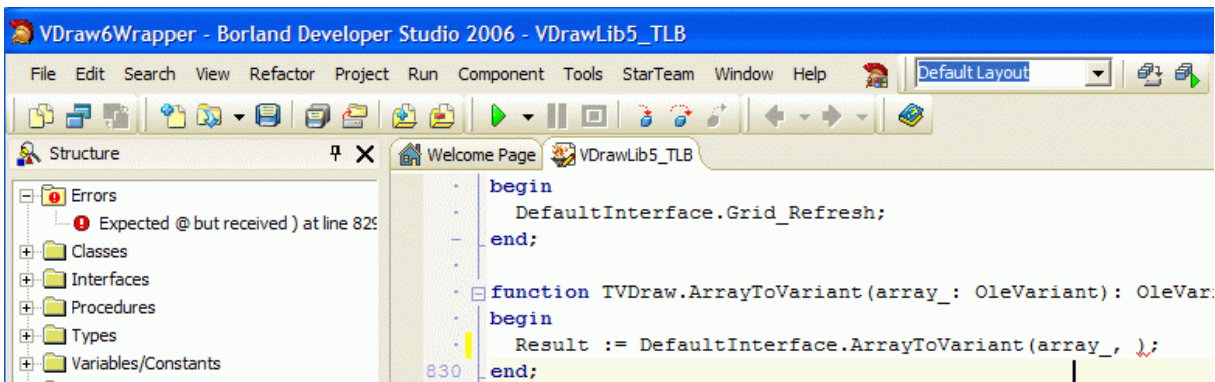
6) Click Next on the next screen



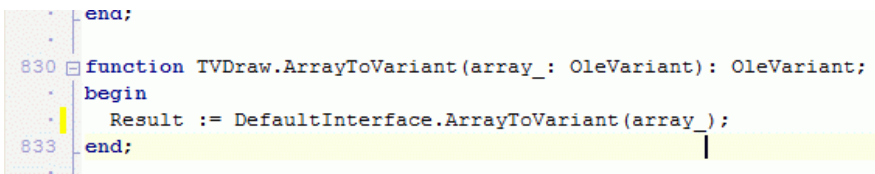
7) Select "Add Unit to...." and click Finish



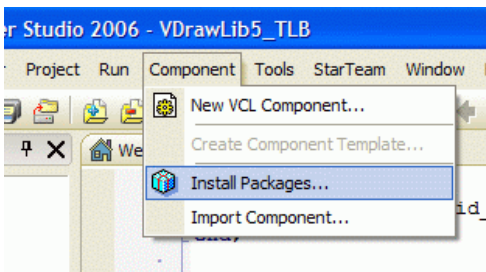
8) You might see the Error below:



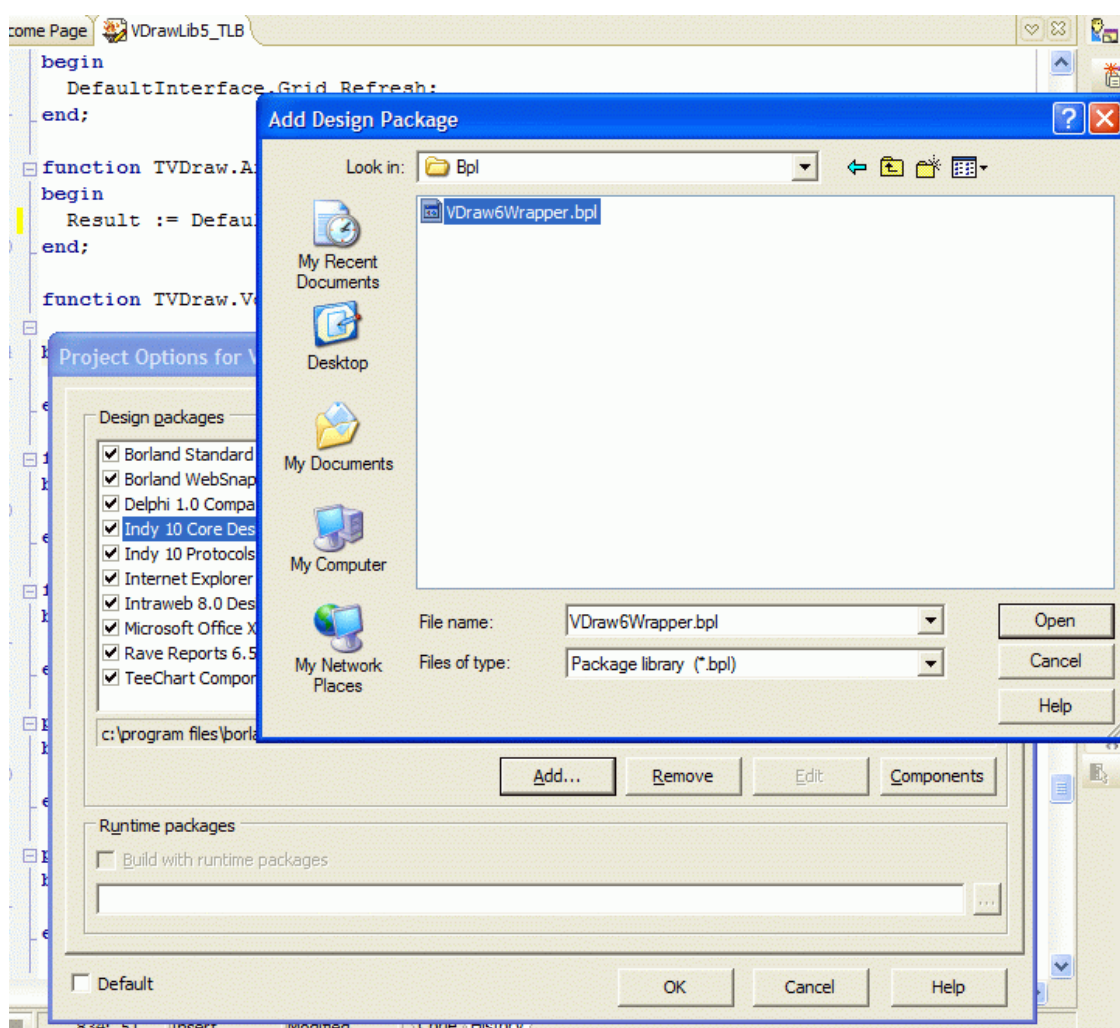
Just delete the comma like below:



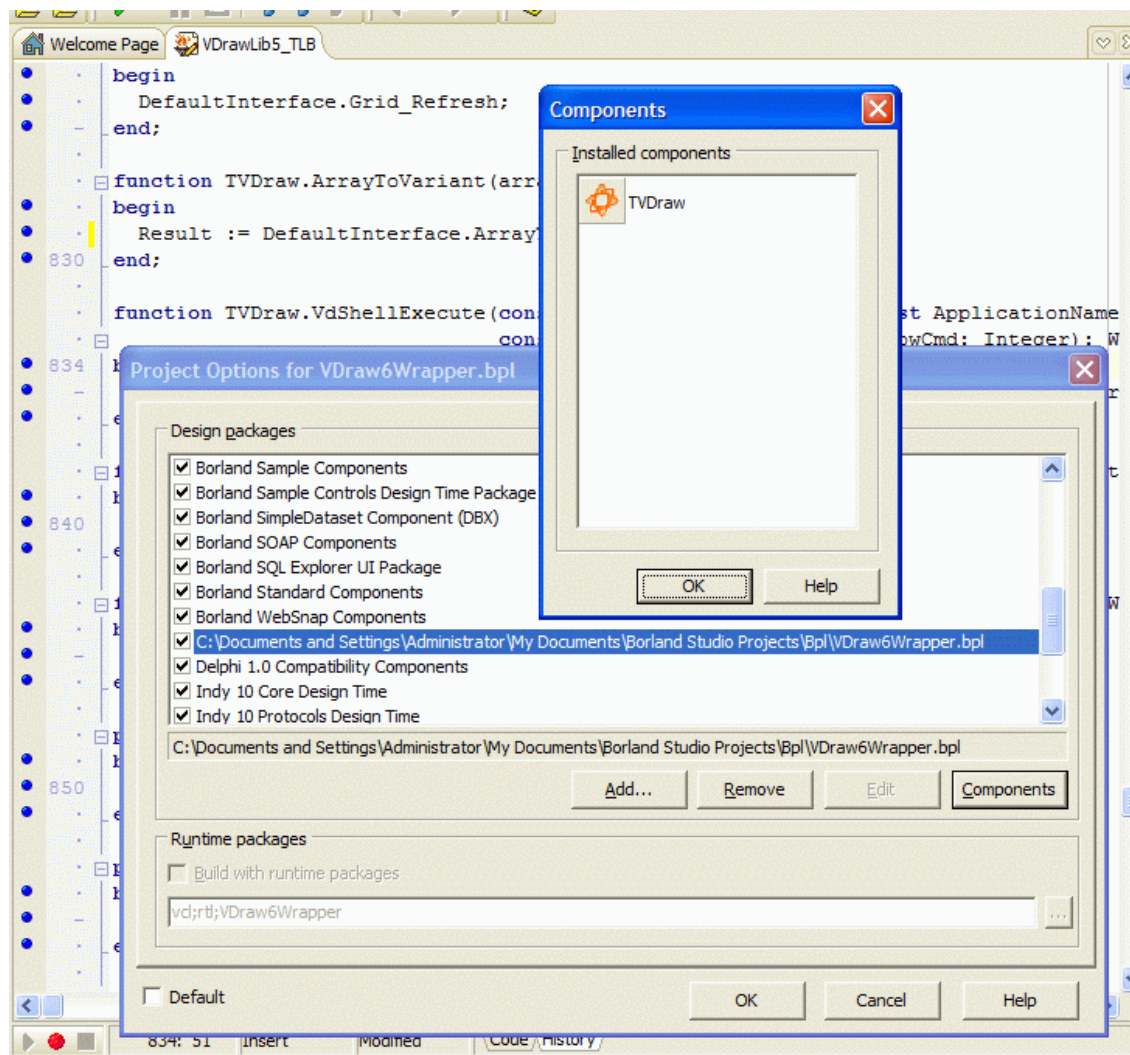
9) Save the package and then click Component menu and "Install Packages..."



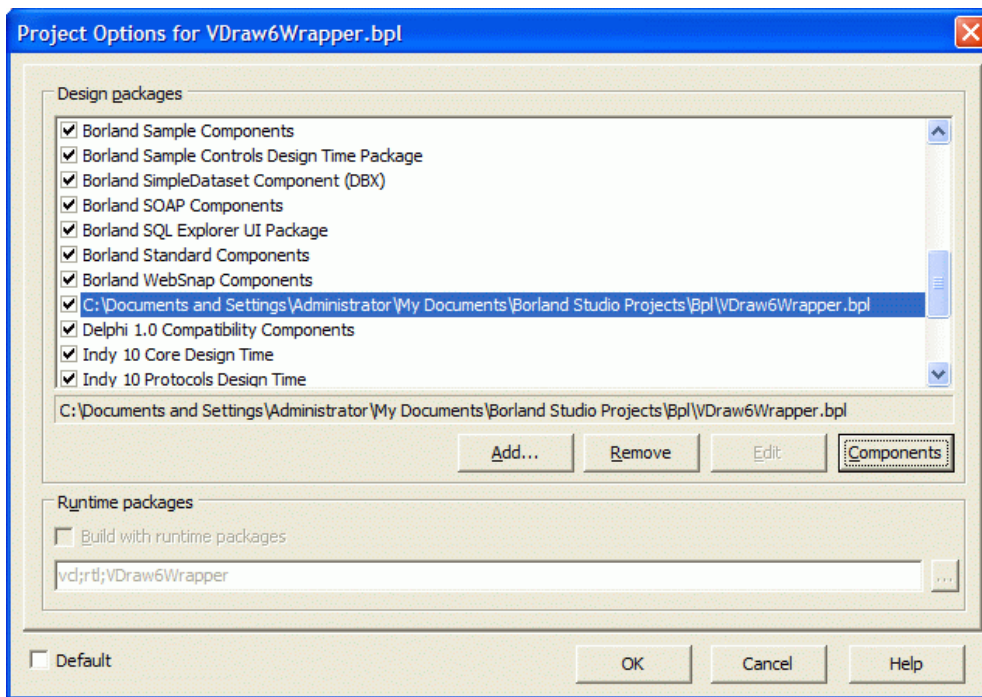
10) In the new form that appears click "Add..." browse to the folder where you saved the package and select the package you previously created, and click "Open"



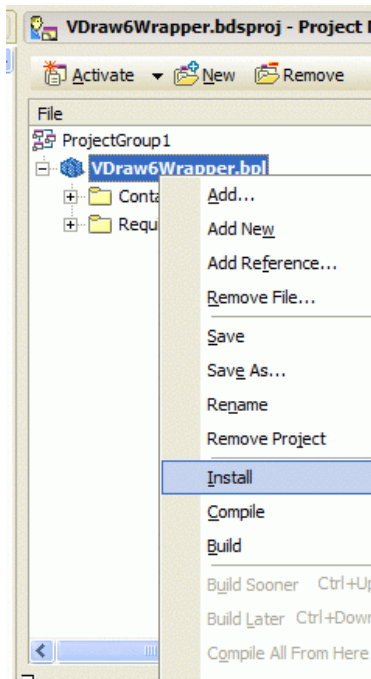
11) The "TVDraw" component must appear



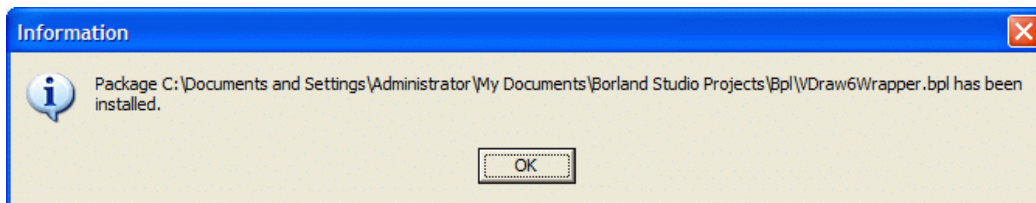
12) Click "OK" button.



13) In the Project Manager right click on the "VDraw6Wrapper" package and in the menu that appears click "Install"



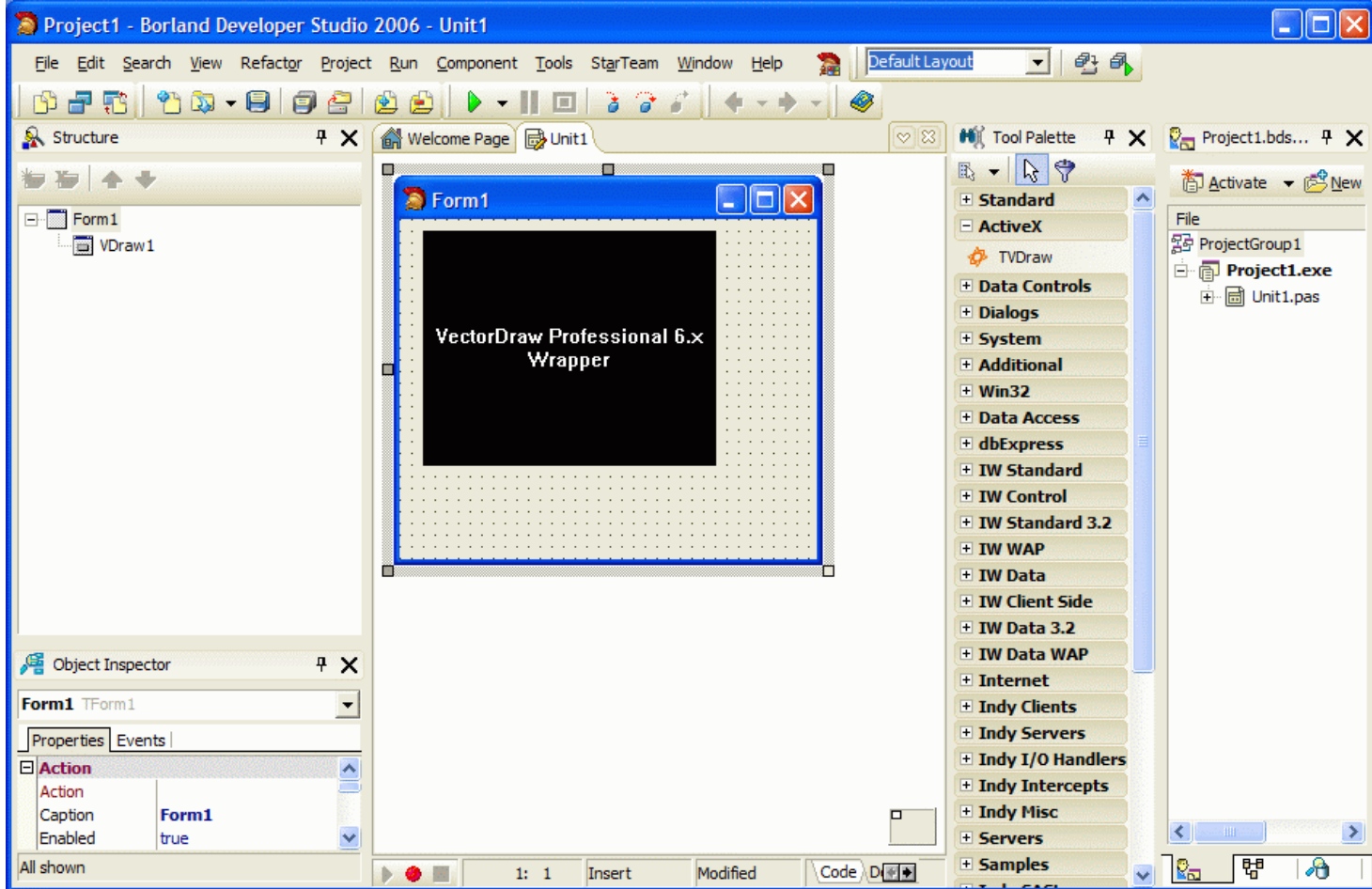
14) This information window should appear. Click OK.



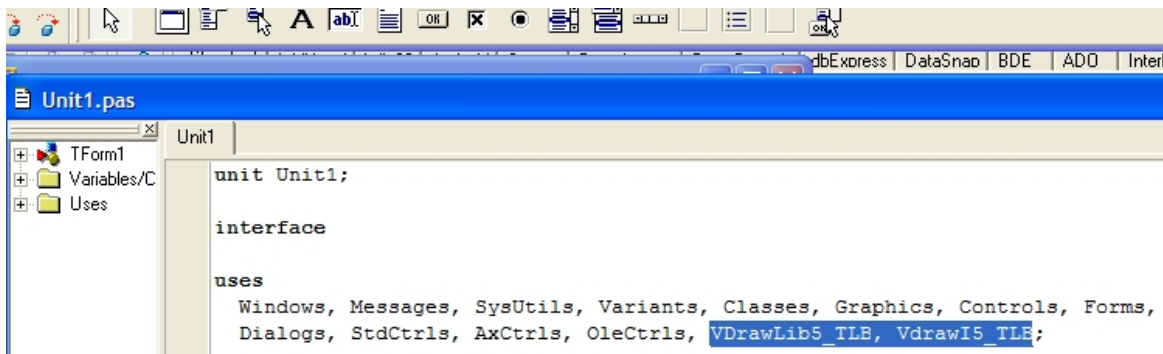
That' it. The VectorDraw component is installed in Delphi 2006/2005.

A Sample Project

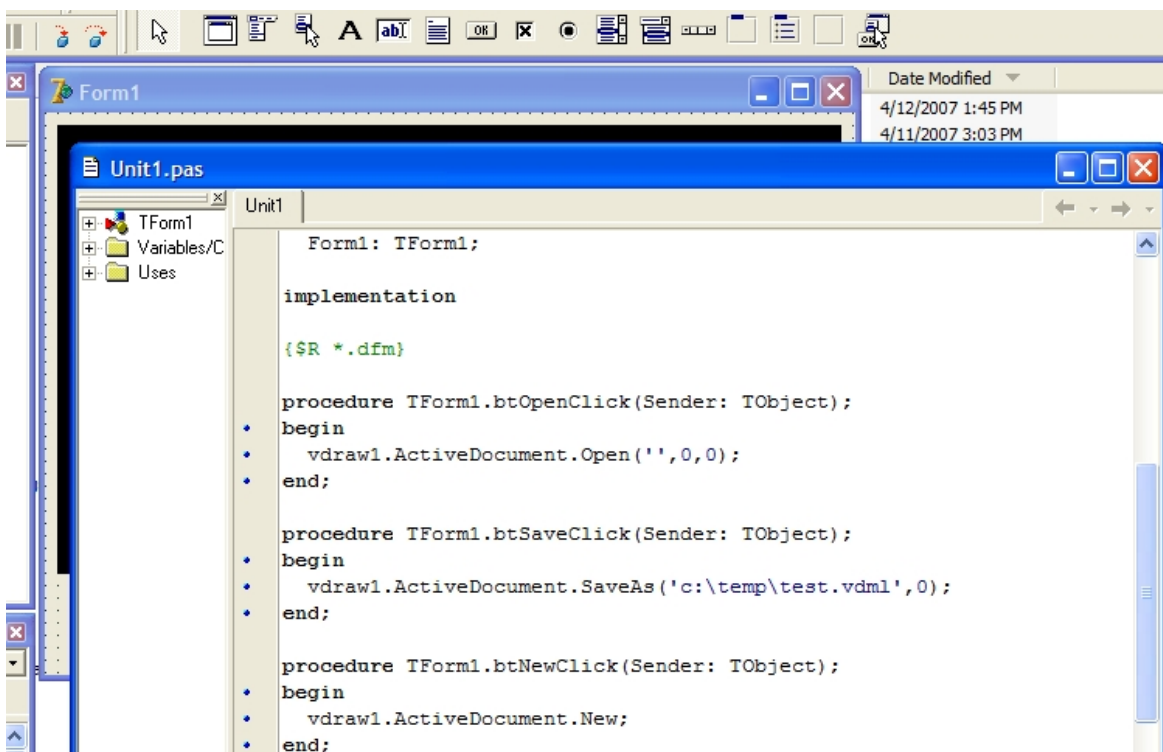
Now you can create a new Delphi project (VCL) and in a form add the VectorDraw Component (TVDraw).

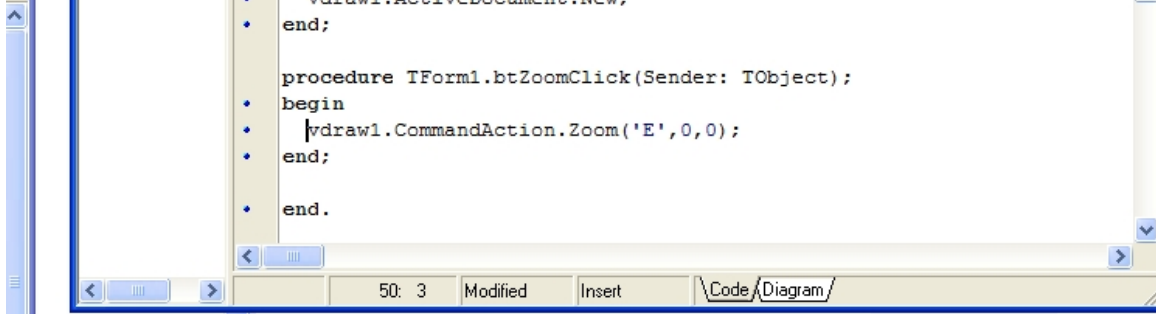


In the "USES" add the **VDrawLib5_TLB** (is the vdraw.ocx) and the **VDrawI5_TLB**. Add to the form 4 buttons.



and add the code below to the buttons click:





```
procedure TForm1.btOpenClick(Sender: TObject);  
begin  
vdraw1.ActiveDocument.Open('',0,0);  
end;  
  
procedure TForm1.btSaveClick(Sender: TObject);  
begin  
vdraw1.ActiveDocument.SaveAs('c:\temp\test.vdml',0);  
end;  
  
procedure TForm1.btNewClick(Sender: TObject);  
begin  
vdraw1.ActiveDocument.New;  
end;  
  
procedure TForm1.btZoomClick(Sender: TObject);  
begin  
vdraw1.CommandAction.Zoom('E',0,0);  
end;
```

If you have registered the VDF component as a customer (not "evaluation") and you get "evaluation" messages from your application in your test machine then try to build a very small sample like the above and test it in your test machine. If you get the "evaluation" message again then you might need to remove VDF (vdraw.ocx) from Delphi and re-add it following the procedure above (steps 1 - 14)

In order to remove the VDF (vdraw.ocx) component from Delphi follow the steps below :

- 1) Backup your Delphi projects
- 2) Find and delete these files :

- VDraw6Wrapper.identcache
- VDraw6Wrapper.dpk
- VDraw6Wrapper.bdsproj.local
- VDraw6Wrapper.bdsproj
- VDraw6Wrapper.cfg
- VDraw6Wrapper.res
- VDrawLib5_TLB.dcu
- VDrawI5_TLB.dcu
- VDrawLib5_TLB.pas
- VDrawLib5_TLB.dcr
- VDrawI5_TLB.pas
- VDrawI5_TLB.dcr

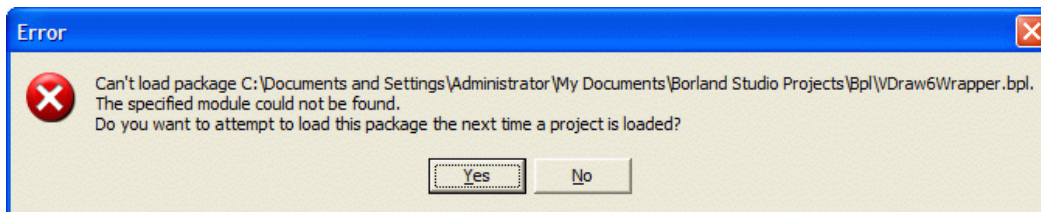
(Should be in a folder like C:\Program Files\Borland\BDS\4.0\Imports)

and these files:

- VDraw6Wrapper.dcu
- VDraw6Wrapper.dcp
- VDraw6Wrapper.bpl

(Should be in a folder like C:\Documents and Settings\[username]\My Documents\Borland Studio Projects & \Bpl)

- 3) Open Delphi 2006/2005 and you will get this message :



Click on "NO" button and the component will be removed from Delphi.

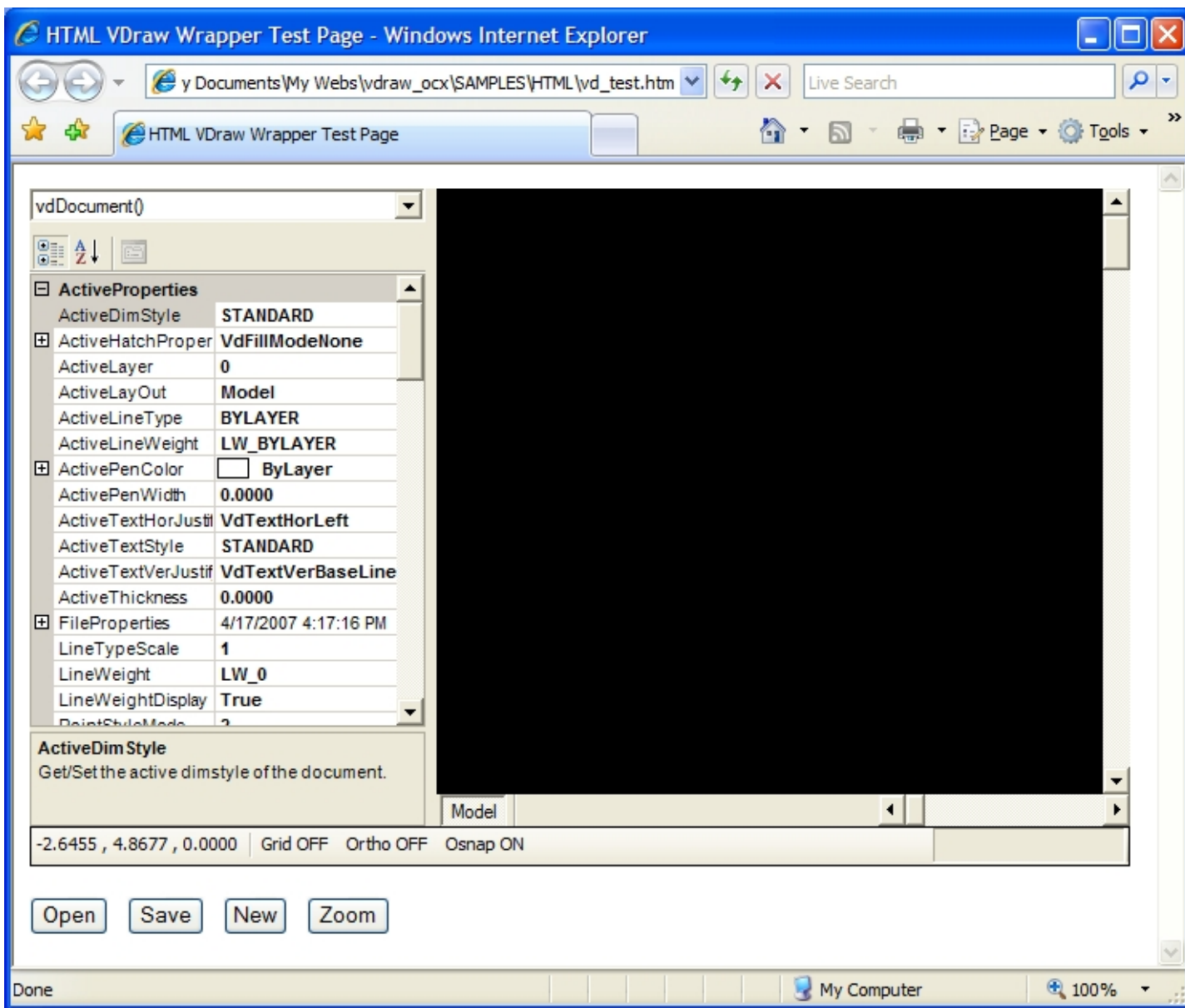
In order to add the VDF ActiveX wrapper vdraw.ocx in a web project (HTML) within Internet Explorer the steps below must be followed:

1) Create a new HTML page and open it with your editor (The FrontPage 2000 is used in this example, but you can also use a simple text editor like Notepad). Then add this object with the specific ClassID :

```
...
<OBJECT classid="clsid:50585480-E1F3-432A-A9D6-C694EDC9A12D" id="VDraw" width="99%" height="90%"
    codeBase="http://my.server.url/folder/vdf.cab#version=-1,-1,-1,-1" VIEWASTEXT>
<param name="_Version" value="393216">
<param name="_ExtentX" value="31803">
<param name="_ExtentY" value="19764">
<param name="_StockProps" value="0">
<param name="CursorColor" value="(255,255,255)">
<param name="RubberBandColor" value="(0,0,0)">
<param name="FreezeDrawEntityEvents" value="-1">
<param name="BorderStyleEx" value="0">
<param name="BackupOnSave" value="-1">
<param name="EnableURLs" value="-1">
<param name="EnableToolTips" value="-1">
<param name="CurveResolution" value="500">
<param name="PenCaps" value="0">
<param name="ActionValidates" value="0">
<param name="VdrawRes" value>
<param name="DwgCodePage" value="system">
<param name="StatusBarOptionSnap" value="0">
<param name="GripSize" value="5">
<param name="UndoMode" value="-1">
<param name="MousePointer" value="-1">
<param name="StatusBarOptionOsnap" value="-1">
<param name="StatusBarOptionOrtho" value="-1">
<param name="StatusBarOptionGrid" value="-1">
<param name="EnableProgressBar" value="-1">
<param name="PropFileName" value>
<param name="LicVal" value="_CONTACT_OUR_TEAM_">
<param name="StatusBar" value="-1">
<param name="ScrollBar" value="3">
<param name="CrossSize" value="30">
<param name="PickSize" value="15">
<param name="GripColor" value="(0,0,255)">
<param name="OSnapColor" value="(255,255,0)">
<param name="OSnapSize" value="0">
<param name="ShowWCSAxis" value="0">
<param name="WMFSaveSize" value="640">
<param name="StatusBarPaper" value="0">
<param name="StatusBarMenu" value="0">
<param name="EnableAutoGripOn" value="0">
<param name="DisplayFrames" value="47">
<param name="Grid_Font" value="Arial"></object>
...
```

This classID is unique and it is for the VectorDraw Professional 6.x Wrapper ActiveX (vdraw.ocx). The **codeBase** = "<http://my.server.url/folder/vdf.cab#version=-1,-1,-1,-1>" is for defining the url where the CAB file is placed in your web server. This CAB is provided by us, and will be downloaded and installed in machines that do not have the VectorDraw Dev. Framework installed. This CAB file will install all the necessary files in the "client" machine. The **<param name="LicVal" value="_CONTACT_OUR_TEAM_">** is used to set the LicVal value for the web server. This LicVal key is a specific licensing key for the web server and depends on its URL.

2) You should also add the LPK file which contains the developing license that you have. The LPK file is generated in the VectorDraw authorized development machine using the **LPK_tool.exe** (License Package Authoring Tool) that can be [obtained from Microsoft](#). Run the lpk_tool.exe, scroll down the "Available controls" list, select VectorDraw Professional 6.x Wrapper and then click "Add ->" button. The control should now be in the right list (Controls is license package list) and then click "Save & Exit" button. Choose the filename and the location of the lpk file to be created.



6) The whole HTML code in this page should be :

```

<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=windows-1252">
<meta name="ProgId" content="FrontPage.Editor.Document">
<title>HTML VDraw Wrapper Test Page</title>
<script language="vbscript">
Sub New_onClick()
'Creates a new empty drawing
VDraw.ActiveDocument.New
End Sub

Sub Open_onClick()
'Prompts user to Open a local drawing
VDraw.ActiveDocument.Open ""
End Sub

Sub Save_onClick()
'Saves the drawing as test.vdcl in c:\temp folder
VDraw.ActiveDocument.SaveAs "c:\temp\test.vdcl"
End Sub

Sub Zoom_onClick()
'Performs a Zoom Extend
VDraw.CommandAction.Zoom "E", 0, 0
End Sub
</script>
</head>
<body>
<p><OBJECT classid=clsid:5220cb21-c88d-11cf-b347-00aa00a28331 VIEWASTEXT> <PARAM NAME="LPKPath" VALUE="vdraw6.lpk">
</OBJECT>
<OBJECT classid="clsid:50585480-E1F3-432A-A9D6-C694EDC9A12D" id="VDraw" width="99%" height="90%"
codeBase="http://my.server.url/folder/vdf.cab#version=-1,-1,-1,-1" VIEWASTEXT>
<param name="_Version" value="393216">
<param name="_ExtentX" value="25109">
<param name="_ExtentY" value="14367">
<param name="_StockProps" value="0">
<param name="CursorColor" value="(255,255,255)">
<param name="RubberBandColor" value="(0,0,0)">

```

```
<param name="FreezeDrawEntityEvents" value="-1">
<param name="BorderStyleEx" value="0">
<param name="BackupOnSave" value="-1">
<param name="EnableURLs" value="-1">
<param name="EnableToolTips" value="-1">
<param name="CurveResolution" value="500">
<param name="PenCaps" value="0">
<param name="ActionValidates" value="0">
<param name="VdrawRes" value>
<param name="DwgCodePage" value="system">
<param name="StatusBarOptionSnap" value="0">
<param name="GripSize" value="5">
<param name="UndoMode" value="-1">
<param name="MousePointer" value="-1">
<param name="StatusBarOptionOsnap" value="-1">
<param name="StatusBarOptionOrtho" value="-1">
<param name="StatusBarOptionGrid" value="-1">
<param name="EnableProgressBar" value="-1">
<param name="PropFileName" value>
<param name="StatusBar" value="-1">
<param name="ScrollBar" value="3">
<param name="CrossSize" value="30">
<param name="PickSize" value="15">
<param name="GripColor" value="(0,0,255)">
<param name="OSnapColor" value="(255,255,0)">
<param name="OSnapSize" value="0">
<param name="ShowWCSAxis" value="0">
<param name="WMFSaveSize" value="640">
<param name="StatusBarPaper" value="0">
<param name="StatusBarMenu" value="0">
<param name="EnableAutoGripOn" value="0">
<param name="DisplayFrames" value="47">
<param name="Grid_Font" value="Arial">
<param name="LicVAL" value="_Contact_our_Team_">
</object>
</p>
<p><input type="button" value="Open" name="Open" onclick="Open_onclick"> &nbsp;&nbsp;&nbsp;<input type="button" value="Save"
name="Save" onclick="Save_onclick"> &nbsp;&nbsp;&nbsp;
<input type="button" value="New" name="New" onclick="Save_onclick"> &nbsp;&nbsp;&nbsp;<input type="button" value="Zoom"
name="Zoom" onclick="Zoom_onclick"></p>
</body>
</html>
```

Register VDF in you Development machine

Licensing the VDF in your machine - vdraw.ocx

If you are a customer and not an evaluator then in order to be able to use the VDF libraries (like vdFramedControl) and VectorDraw Professional 6.x Wrapper (vdraw.ocx) in your development platform you should license/register it. This is done by using your Serial number of the version6 that is provided with the purchase of the libraries and the vdAuthorizeApp.exe utility. You machine should be also connected to the internet.

Run the vdAuthorizeApp.exe utility as administrator or as a user with administrative rights in your Development machine and type your VDF serial (case sensitive) and click the "Authorize" button. Check the "Result" window.

VectorDraw Authorization

Serial:

The Serial was given to you from sales@vdraw.com
Copy paste the serial as was given.
Press the Authorize button in order to activate the component.
Note that this machine should be online when the authorize-unauthorize button is pressed.
If you change/Format your hard disk you should unauthorize the component before.
To Unauthorize the component type the serial and press Unauthorize button.
To Unauthorize the component you should also be connected to the internet.

Result:

If you like to install and authorize the libraries in another machine like a presentation laptop PC then you should Unauthorize your development machine and Authorize it again on the laptop. You cannot have multiple machines authorized simultaneously with the same license. If you don't have access to the Internet or you having troubles with this procedure then contact our sales department including the result you get.

NOTE: in Windows Vista/Seven/Server2008 operating systems and due to UAC, you should ALWAYS run the vdAuthorizeApp.exe with right-click and "Run as Administrator" option.