

The Developers Group Masterclass

Delphi 2009 Development Essentials

with Bob Swart on November 17th & 18th

at the Village Hall (Parish Reading Room), Upavon, Wiltshire SN9 6EB

The masterclass focuses on the Delphi 2009 enhancements and new features compared to Delphi 2007. Even if you've never made the step from Delphi 7 to 2005, 2006 or 2007, this masterclass is the ideal place to step up and join the new wave of the first release of Delphi from CodeGear as part of Embarcadero instead of Borland.

If you attend the class, you'll also get the Bob Swart Training & Consultancy comprehensive courseware material (password-protected PDF file, downloadable from Bob's site), on which he bases his teaching, which goes into even more detail and also includes the enhancements and new features in Delphi 2009 compared to Delphi 7.

Monday, November 17th is Delphi 2009 IDE, RTL and Unicode day.

On this day, you see several examples of enhancements that can make you more productive with the Delphi IDE. You also learn how to apply the new compiler and language enhancements (like generics and anonymous methods) in the most effective way, including stuff that's already in Delphi 2009 but barely documented (if at all).

Finally, by the end of this first day, you will no longer be a stranger to Unicode, and you will be able to determine whether or not this is a welcome addition to your toolbox. Last but not least, you will have seen how to translate your Delphi projects to produce multi-language executables.

See over for the full agenda.

Tuesday, November 18th is VCL, COM & Databases/DataSnap Development Essentials day.

On this day, you get an overview of the VCL enhancements, the new COM wizards and RIDL files, as well as database and especially DataSnap architecture changes.

When this day is over, you will have learned how to squeeze the most out of the VCL components that have been added and/or enhanced in Delphi 2009. Including the Ribbon controls that will in theory allow you to create a Word 2007 clone (although the license from Microsoft will forbid you to do so, but that's another story that will also be addressed at the masterclass). Another welcome enhancement can be found in the COM area where binary Type Libraries are no longer the direct result of the Type Library Editor, but an intermediate .ridl file is used in between (RIDL stands for Restricted Interface Definition Language), which has several benefits that will be demonstrated and explained.

Finally, you will have seen that DataSnap no longer relies on COM, but is now based on an open architecture with lots of options for future extensions. Those of you with existing remote data modules can relax: you will also learn how to use these in the new DataSnap framework.

See over for the full agenda.

Things You'll Need to Know

Cost and booking

The price for members is £175 + VAT for one day or £300 + VAT for both. (Non-members please contact us.) All places must be booked and paid for in advance. Please book as soon as you can - bookings are open NOW - and make sure that we have payment by bank transfer, cheque or credit card no later than Wednesday 12th November.

The price includes refreshments, lunch and the pdf download of Bob's notes. It does not include drinks at the pub, your evening meal or accommodation if you're staying overnight, or your taxi.

If you haven't already taken advantage of QBS's discount on an advance purchase of your Delphi 2009 upgrade, you will be eligible for a 10% discount.

Getting here, food, accommodation, parking etc - ask if you need more info

Upavon is at the crossroads of the A342 (Andover to Devizes) and A345 Swindon to Salisbury.

The hall is on the A342 between Andover (East) and Devizes (West), near the river bridge, just to the East of the junction of the A345 between Salisbury (South) and Swindon (North).

Regrettably getting here by public transport isn't easy and it's generally easier to drive. **Parking** is at the Ship Inn in the High Street (A345) just round the corner from the hall. Our lunches and dinners are at the Ship too - they don't provide accommodation but

Accommodation very close to the hall is available at Upavon Manor (isabelbgreen@hotmail.com or 01980 635115) and the Antelope Inn (01980 630206). There are other b&bs a very brief drive or walk across the fields away - ask if you need more information.

Please also ask if you need **train information and for us to book you taxis** (booking is essential) from and to local stations (Paddington to Pewsey infrequent trains + taxi 10 minutes/£12, or Waterloo to Andover about every half hour + taxi 40 minutes/£30).

Please remember that **phones** must be switched off during the classes (signal is poor here anyway) and you won't have internet access at the hall or (most probably) at your accommodation. The classes are not hands-on and, if you bring a laptop, there won't be anywhere for you to plug it in.

Monday November 17th Agenda - Delphi 2009 IDE, RTL and Unicode

09:30 Registration, tea/coffee and calories

10:00 **Delphi 2009 IDE**

We start the morning with an introduction to Delphi 2009, with the focus on IDE changes (compared to Delphi 7 and 2007) and enhancements. We cover them all, starting with the general Options, Project Options and Project Manager, showing how to create and manage Build Configurations in an easier way than before (including warnings that can be turned into errors), as well as the new Class Explorer, Import Component Wizard and some debugger enhancements.

11:20 Tea/coffee and more calories

11:35 **Language Enhancements: Generics, Anonymous Methods**

After the first break, we continue with the major language enhancements that have been implemented in Delphi 2009 (the courseware manual will also present an overview of the language enhancements introduced since Delphi version 7) including of course generics (the major new feature of Delphi 2009), anonymous methods, as well as the combination of the two (see also my article in the Sept/Oct Magazine) and the goodies that can be found in the Generics.Defaults and Generics.Collections units.

12:50 Lunch at the pub

14:00 **Language Enhancements: Unicode Strings**

After lunch, we dive deep into Unicode, starting with an explanation of what Unicode is, which encodings are most relevant (UTF-8 and UTF-16) and how the new String in Delphi 2009 implements all this. At the end of this section, you will know everything you need to know about payloads, code points, and even code pages as we compare UnicodeStrings as well as AnsiStrings (as well as the old COM-based WideString) and see what the benefits and costs are of using either of these.

15:20 Tea/coffee and yet more calories

15:35 **Language Enhancements: Unicode Strings (migration)**

After the break, we change the focus from Unicode strings themselves to the way they are used in the Delphi RTL and VCL, and see how we can make best use of Unicode today, but also how we can migrate existing applications (using AnsiString) over to Unicode. Or keep them in AnsiString when needed.

There are a number of source code constructs that need special attention when migration to Unicode (such as the size of a "Char" and the length of buffers), which are also covered in detail both in the masterclass and the courseware manual.

16:50 Fidget break

17:00 **Integrated Translation Environment, External Translation Manager**

The last part of the day is used to demonstrate the new Integrated Translation Environment and External Translation Manager in order to produce multi-language applications.

18:00 End

19:00 Dinner at the pub for anyone staying overnight.

Tuesday November 18th Agenda - VCL, Com and Databases

09:30 Registration, tea/coffee and calories

10:00 **RTL/VCL Enhancements**

We start with the RTL and VCL enhancements, showing extensions made to RTL classes (such as TObject) as well as a list of new components and component enhancements. Some GUI-effects are visible only on Windows Vista, and I demonstrate this (in a VMWare environment running XP, so the demos are run side-by-side for best comparison).

11:20 Tea/coffee and more calories

11:35 **COM Enhancements, Ribbon Controls**

The COM icons and wizards in Delphi 2009 have been enhanced and made more consistent. However, the biggest change in the COM area are the .ridl files that remove the fragile relationship between a binary TLB file and the project. The .ridl files are human readable text files that can be stored in version control systems, you can run a "diff" on them, and even copy and paste COM interfaces or other parts from one file to another, so now more than one developer can work on a given ActiveX library at the same time.

Ribbon Controls are demonstrated as GUI controls that interact with the action manager component in Delphi to produce Word 2007-like GUIs. A closer look at Microsoft's license for using and deploying GUI's based on this interface type is also included.

12:50 Lunch at the pub

14:00 **DBX4 / DataSnap Enhancements**

After lunch, we cover the DBX4 data access framework and introduce the new DataSnap architecture which no longer relies on COM. After a brief architectural overview, we build several examples, showing how to export classes and methods, do connection pooling, and explain the life cycle and the difference between Server, Session and Invocation..

15:20 Tea/coffee and yet more calories

15:35 **DataSnap Enhancements**

After the break we continue with DataSnap enhancements in Delphi 2009, and see – among others – how we can use existing COM-based remote data modules in the new DataSnap architecture and how we can send updates from clients back to the server and resolve the errors (if any should arise).

16:50 Fidget break

17:00 **Delphi 2009 Q&A Session**

The closing section of the last day consists of a short summary of what we've seen in both days, and some questions and answers that haven't been addressed during the day itself.

Attendees can always contact Bob by e-mail after the training event for more information or support.

18:00 End



Bob Swart (Bob@eBob42.com)
Bob Swart Training & Consultancy
Statenlaan 36
5708 ZW HELMOND
THE NETHERLANDS
<http://www.drBob42.com>

