Developing for Windows and OS X

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ITDevCon 2012 is almost here ...

... and I'm busy preparing my presentations. Come join me in Verona and listen to following talks:

Regular expressions - friend or foe?

Regular expressions are one of the most underused features of the Delphi RTL. While in the past we could attribute this to the lack of built-in support, Delphi XE introduced the RegularExpressions unit which greatly simplifies the use of the regular expressions engine. This session will present basic ideas behind the regular expressions, examine the RegularExpressions unit and in particular the main workhorse - the TRegEx class - and continue with practical examples which will show how and when to use regular expressions - and particularly when to stay away from them.

"Hands On": Parallel programming with OmniThreadLibrary

In the past few years, OmniThreadLibrary has become “de facto” standard for Delphi multithreaded programming. Still, the main stumbling block for programmers to “go multithreaded” is the grasp of patterns and practices for multithreaded development. This "hands on" session will take different practical examples, deconstruct them into basic operations and then show how to build simple parallel solutions based on the initial analysis.

"Hands-On": Developing for Windows and OS X

Multiplatform development is slowly taking hold in the Delphi world. While we can argue that the tools for the mobile platform are still in the infancy stage, the situation on the desktop is quite different. Delphi is a valid development tool for the OS X-based computers. The main topic of this session will be hassle-free multiplatform development - how to write your code that it "simply works" on both platforms and what to do when this is not possible.

(That is, if you'll not be listening to other great presentations running at the same time!)
How do I set up environment for developing OS X applications?
Computer(s)

- Mac with Parallels
- PC + Mac + gigabit Ethernet

- Multiple monitors are helpful
  - Windows + Delphi on one monitor
  - OS X + application on another
Toolchain

- Delphi on Windows
- Platform Assistant on OS X
- Remote Debugger

- docwiki.embarcadero.com/RADStudio/XE3/en/Mac_OS_X_Application_Development
How do I create installation package for my program?
Installation

- No good cross-platform solution
- [docwiki.embarcadero.com/RADStudio/XE3/en/Mac_OS_X_Application_Development](docwiki.embarcadero.com/RADStudio/XE3/en/Mac_OS_X_Application_Development) describes how to create signed ‘bundle’ for Mac App Store
  - App Store is not a required step

- XE2: Delphi OS X Bundler
  [blogs.embarcadero.com/davidi/2012/06/20/41591](blogs.embarcadero.com/davidi/2012/06/20/41591)
What third party components can I use to enhance my application?
Components

• Arcana Apesuite
  – arcana.sivv.com/apesuite/
  – SVG, grid, clipboard, ribbon-like paged toolbar, tray icon ...

• TMS
  – www.tmssoftware.com/site/tmsfmxpack.asp
  – Grid, calendar, navigation bar, tile list, clock, compass, badge ...
How do I work with files and folders?
File System

• Differences in file system [OS X = Unix]
  – Directory Folder
  – No drive letters, everything starts at /
    • [Windows] c:\users\gabr\test.txt
    • [OS X] /home/gabr/test.txt
  – Possibility of file system loops
    • Also on Windows
  – No concept of “file extension”

• System.IOUtils
How do I handle Audio and Video playout and recording?
Media Support

• Fmx.Media
  – Fmx.Media.Mac
  – Fmx.Media.Win

• TMediaPlayer
• TAudioCaptureDevice
• TVideoCaptureDevice
How do I create and print reports?
• FastReport
• XE2/XE3
How do I print from a FireMonkey application?
• [docwiki.embarcadero.com/RADStudio/en/Printing_from_a_FireMonkey_Application](docwiki.embarcadero.com/RADStudio/en/Printing_from_a_FireMonkey_Application)

• Fmx.Printer (.Win, .Mac)

• Fmx.Dialogs
  – TPrintDialog
  – TPrinterSetupDialog
  – TPageSetupDialog
How do I work with XML documents on OS X?
• TXMLDocument
  – DOMVendor = ADOM XML v4
  – Xml.Win.msxmlIdom
• TNSXMLDocument
  – OS X only
• 3rd party
  – OmniXml
How do I work with databases on OS X?
Databases

• dbExpress
  – [P] InterBase, MySQL, SQLite (local)
  – [E, U, A] InterBase, Firebird, Oracle, MySQL, SQL Anywhere, Informix, SQLite
  – DataSnap
  – ClientDataSet

• Visual LiveBindings
Where can I learn more?
Literature

• TIndex [www.tindex.net]
• 31 XE3 quick videos in 31 days
  – blogs.embarcadero.com/davidi/2012/10/01/41686
• DelphiFeeds
• StackOverflow
  – [delphi] [firemonkey]
Questions?