#### World Tour

# WHAT'S NEW IN RAD STUDIO XE3

## About your presenters

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## RAD Studio XE3

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The Developer Force Multiplier

Windows 8

Mac OS X Mountain Lion

Delphi C++

 $FM^2$ 

Metropolis UI

HTML5

Mobile

Visual LiveBindings







#### What's New in RAD Studio XE3

- Visual LiveBindings
- FireMonkey 2 FM<sup>2</sup>
- Windows 8 Style / Metropolis UI
- InterBase XE3

# Visual LiveBindings

## LiveBindings – Quick Intro



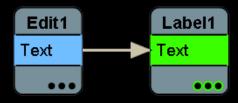
- Introduced in XE2
  - FireMonkey and VCL
- Relational expressions called binding expressions
  - Can be unidirectional or bidirectional
  - Standard converters out of the box
  - Add custom converters
- •Can be used design time / run time
- •Is all about control objects and source object

## **(**

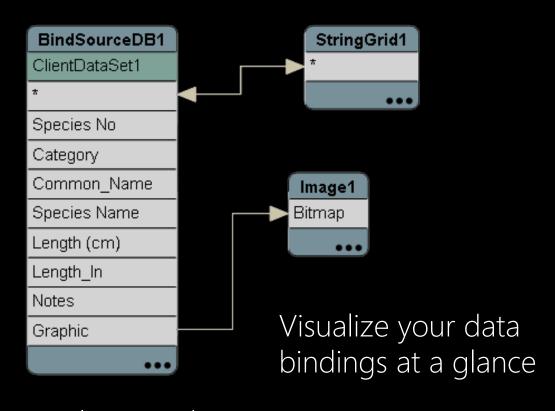
## Visual LiveBindings



Bind data and properties by simply drawing lines between objects



Organize large numbers of bindings using Photoshop-like "layers"

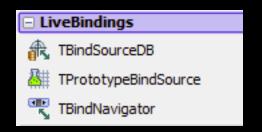


Zero lines code Delphi and C++Builder

## New Components



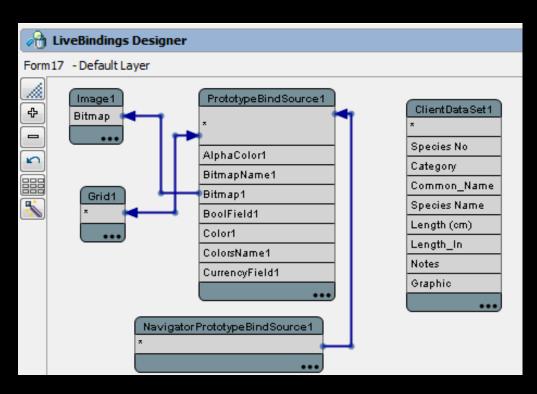
- New set of Visual LiveBinding Components
  - TLinkGridToDataSource
  - TLinkListControlToField
  - TLinkControlToField
  - TLinkControlToProperty
  - TLinkFillControlToField
  - TLinkFillControlToProperty
- Easier to link to Objects
  - TPrototypeBindSource
- Fast & Efficient
  - Uses Observers to evaluate when to update no need for manual notification of change.

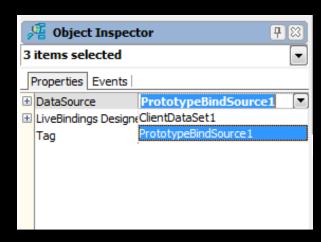




## Application Prototyping







- Design and prototype your application using sample data from the TPrototypeBindSource component
- Add a ClientDataSet component to your form and load your actual data
- Simply select all of your bindings and change the data source to use your real data in your application

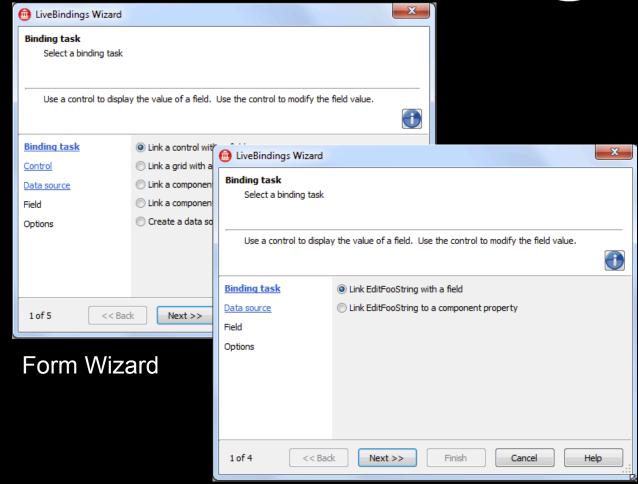
## Application Prototyping



#### Context aware Wizards







Example with TEdit selected

## Tools > Options



(fig. 0ptions	MALE MANAGER CASE	X
■ · Environment Options	Default Class Visibility  Excluded Items: TComponent  Included Items: TControl;TBaseBindScopeComponent;TCustomDataGeneratorAdap  Options  Display LiveBindings Wizard in right-click menu	
	OK Cancel H	lelp

## Lets see it in action!!

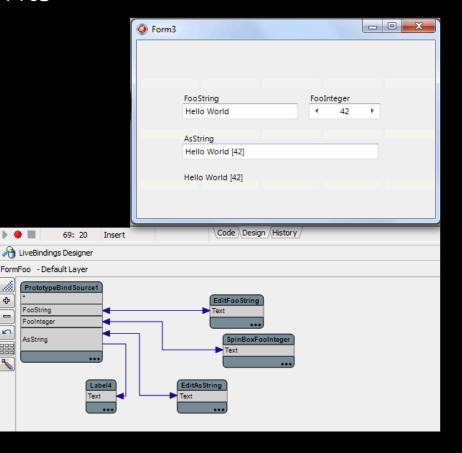


Working with Components

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AsString

- •Working with TDataSet
- Working with Objects

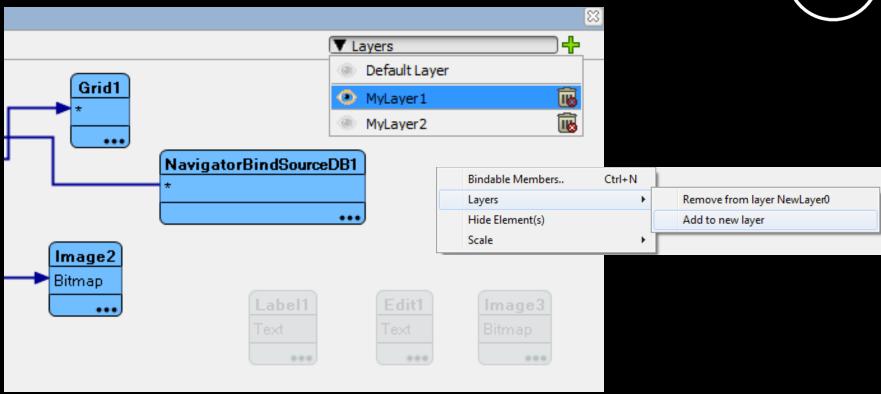


### Layers Management



## Layers Management





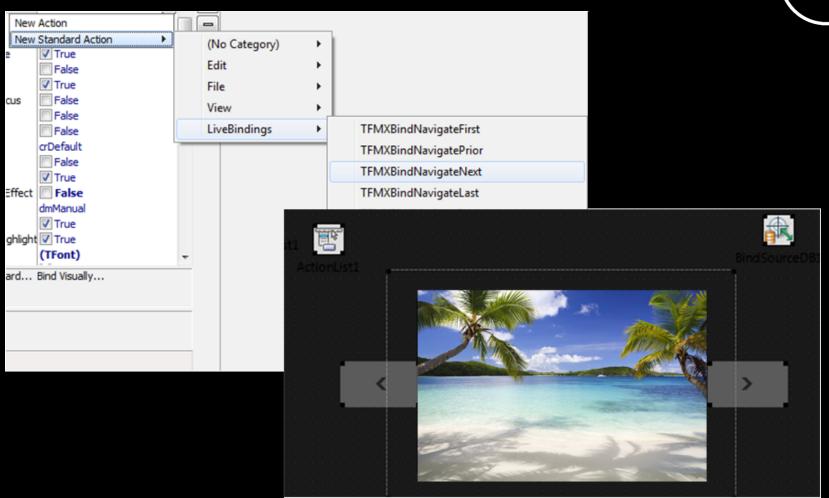
- Organize large numbers of bindings using Photoshop-like layers
- Quickly toggle visibility between layers
- Easily create your own layers
- View multiple layers at once

### Layers Management



## Actions





Easily use standard actions with LiveBindings

# Actions DEM

FM<sup>2</sup>

## FireMonkey

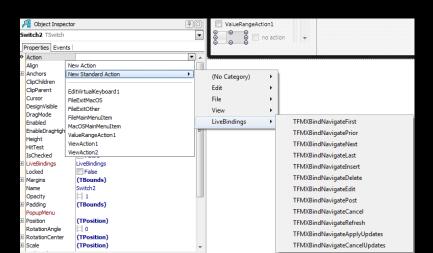
## FireMonkey Graphics Architecture

Application		C++		
Framework	FireMonkey			
3D API	DirectX°	OpenGL.	Open	GL ES
Platform	TM		iOS	
	Desktop		Mobile	

#### Actions



- Framework-Independent Action features are Implemented in RTL
- FireMonkey framework-specific action features are implemented in new FMX units
  - FMX.ActnList, FMX.StdActns, and others.
- LiveBindings actions



## Layouts and Anchors



- Common layout engines
  - Flow Layout
  - Grid Layout
- Anchors
- Alignment



F	Properties Events					
	Action					
	Align	alMostLeft				
	Anchors	[akLeft,akTop,akBottom]				
	akLeft	▼ True				
	akTop	▼ True				
	akRight	☐ False				
	akBottom	▼ True				

## Touch/Gestures

- Same standard support as in VCL
- Gesture Manager
- Standard Gestures

#### Multimedia

- Audio and Video playback
- Camera bitmap capture
- Audio capture
- Windows
  - AVI, WMV, MP4, M4V, MOV
  - WMA, MP3, WAV
- Mac
  - MOV, M4V, MP4, AVI
  - WAV, MP3





## Bitmap based Styles



- FireMonkey can render bitmap based controls instead of vector graphics
- Shared external (redistributable) Styles designer
- Pixel-Perfect OS specific controls
- Custom styles with non-client area styling

## Mac OS X Retina



- Mountain Lion Style
- High resolution assets
- •FM<sup>2</sup> determines load of Retina or regular style

## Custom styles



- Non-client area styling
- Premium styles available from Embarcadero





#### FireMonkey 3D - Enhancements

- DirectX 9 and 10, OpenGL ARB, OpenGL ES
- FMX.Types3D.TTexture class uses GPU memory to store real data.
- TShaderManager manages shaders
  - Avoids overloading in the GPU
  - Different objects can use the same shaders.
- New material system
  - Based only on shaders
  - Allows unlimited variation of lighting and materials in application
- TMaterialSource
  - TColorMaterialSource
  - TLightMaterialSource
  - TTextureMaterialSource

## Services, Sensors and Devices (4)



- Services framework
  - Determines availability of sensors and service
  - Acquires rights from user
- Sensor and Device Management
- Sensor Components
  - LocationSensor (GPS or Triangulation)
  - MotionSensor (Accelerometer and/or Gyro)
- Devices
  - Audio and Video
  - Play and Capture

#### TMS Software's TMS Grid for FireMonkey

- Part of TMS Software's TMS Pack for FireMonkey
- Included in the Bonus Pack
- High performance
- Highly visual grid component
- Supports FireMonkey 2
  - Objects
  - Styles
  - Multi-platform support: Win32, Win64 and Mac OS X

# DEM

## Windows 8



## Windows 8



Easy VCL/FireMonkey application migration to Windows 8

Windows 8 Desktop applications

Metropolis "Metro-Style" Apps

Delphi and C++Builder

32-bit and 64-bit\*

Intel & Atom Hardware Support

Surface Pro and Slate Tablets



\*64bit C++ to be estimated to be released in Q42012



## Metropolis



True Metro-Style Desktop apps on Windows XP, Vista, 7, and 8

Migrate existing VCL & FM apps to Metropolis

Project templates (Grid and Split layouts)

Surface Pro and Slate Tablet Ready

WinRT LiveTile integration

Office 2013 Styling

"Fat Finger" Touch

Gyro, Accelerometer &

Location (GPS)

Delphi and C++Builder



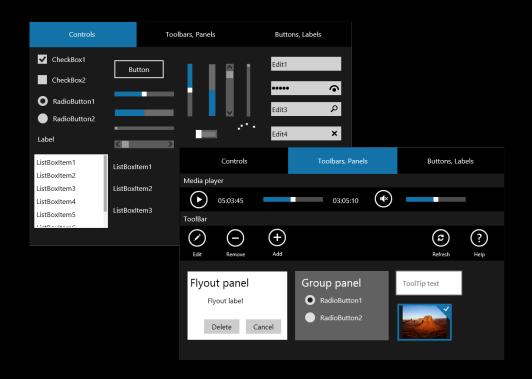
## Windows 8 Style

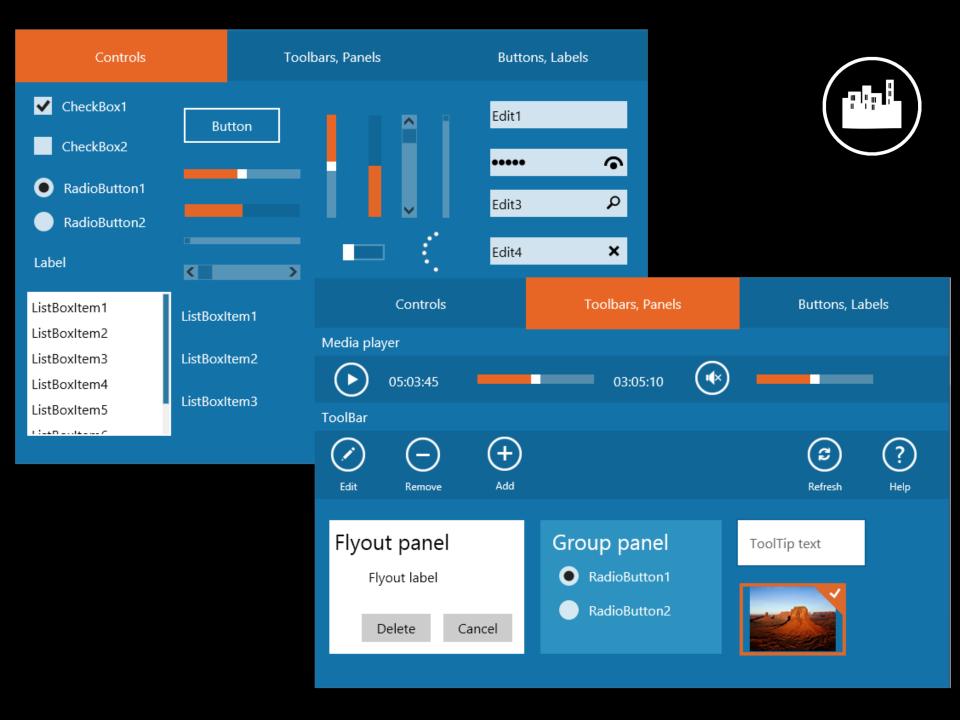


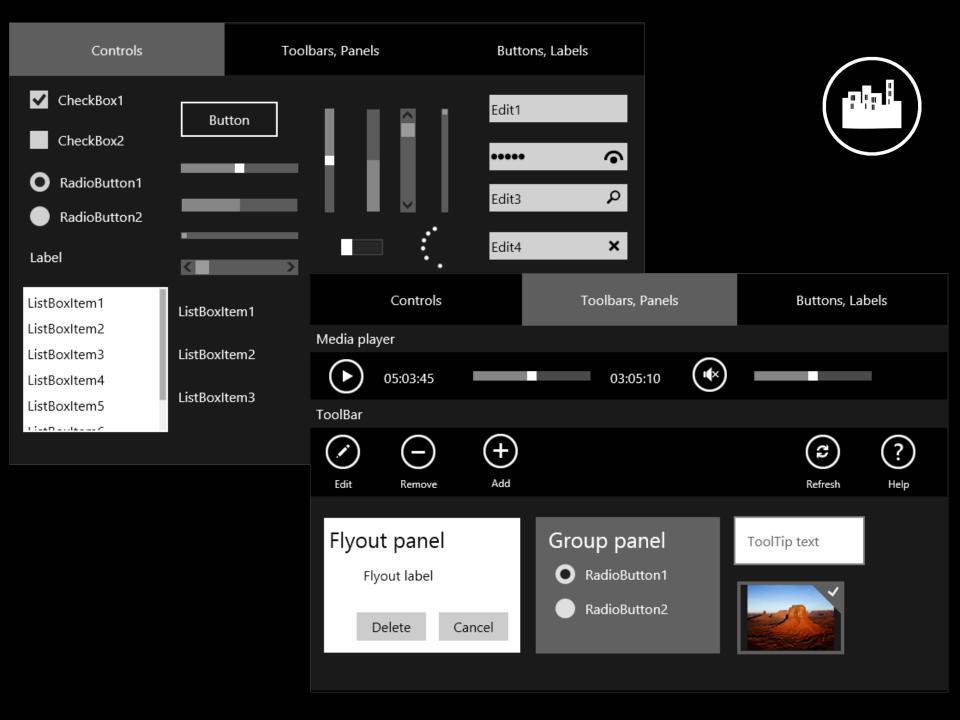
Windows 8 Metropolis Style

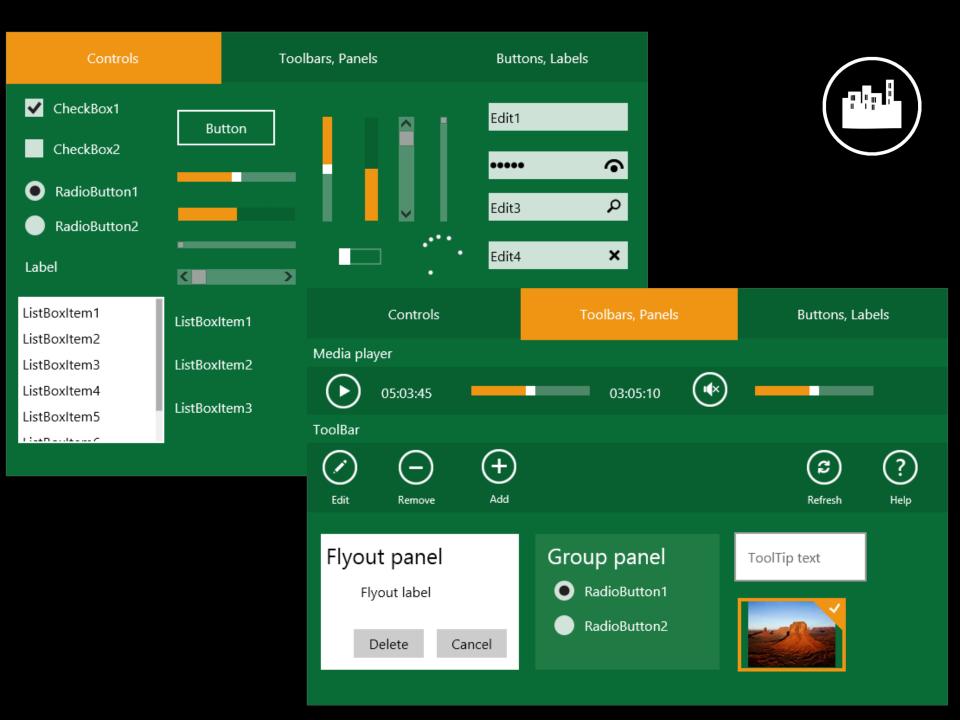
Button style lookup

4 Style color combos









### Styles



#### Form Conversion



Right-click on any existing VCL and FireMonkey form to convert to Metropolis

Adds StyleBook and styles into a Metropolis form

Sets TApplication property

Removes non-client area

Makes form fullscreen

#### New Project Templates



Basic, Grid, and Split layout

VCL and FireMonkey

Delphi and C++Builder

#### MetropolisUIListBox



A collection of fields and image components for a GridViewForm

Easily connects to a ClientDataSet

Populates the range of selected records into the list

## Metropolis UI Samples showing common Windows 8 elements and behavior



Windows 8 style ToolTips

Windows 8 style Flyouts

Windows 8 Style Edit Controls

Windows 8 Style FlipView



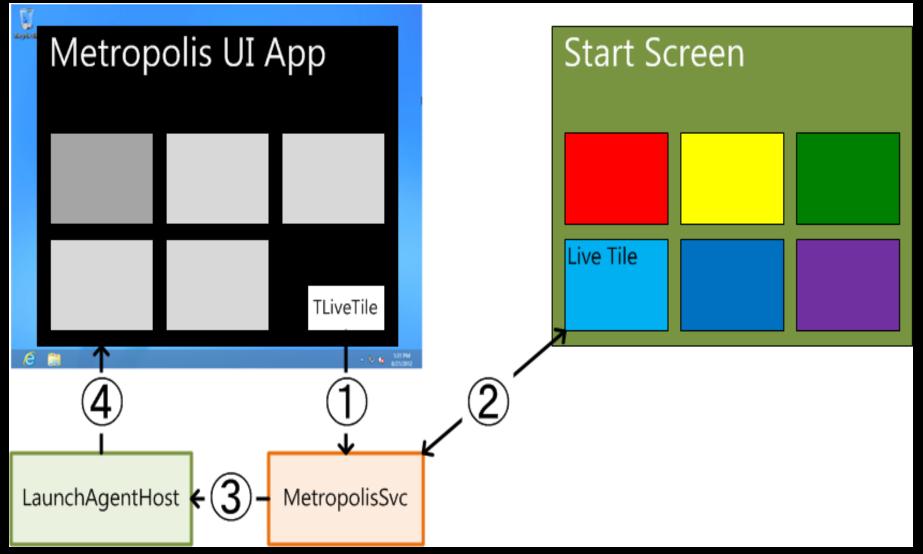
#### Live Tiles



- Works for VCL and FM2 applications
- TLiveTile component
- Metropolis Service display updates on tile
- Launch Agent Host associate tile with app
- Sideloading the application
  - Win8 Development License
  - Win8 Enterprise edition
- Supports Narrow and Wide Tiles

#### Live Tiles







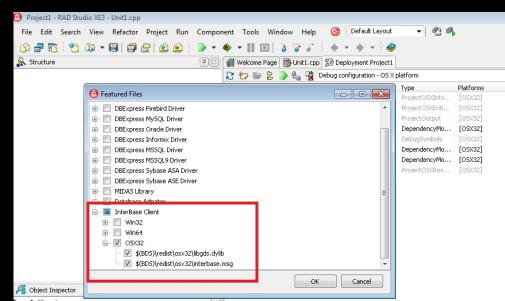
## InterBase XE3



## InterBase XE3



- Free Developer Edition of InterBase XE3 included with IDE
- New! ToGo test deployment licenses included with RAD Studio
- Directly deploy apps and databases from the RAD IDE for Server and ToGo Edition -> Windows & Mac
- New! dbExpress ToGo connector and 64 bit ODBC driver
- Copy databases directly between XE3 Windows and Mac
- Continue using InterBase XE for Linux, Solaris and Mac(server edition)



# Summary

#### Summary

- Development teams are facing more challenges than ever to support an increasing number of platforms
- RAD Studio, the developer force multiplier, provides the solution
- Develop for Windows, Mac, web and mobile
- Virtually multiply your development force with RAD Studio XE3



### RAD Studio includes



#### Choose the edition that's right for you

Features/Edition	Architect	Ultimate	Enterprise	Professional	Starter
Database connectivity and drivers	Local/remote and for all databases including InterBase, SQL Server, Oracle, Sybase and more via ODBC. Advanced Amazon and Azure cloud connectivity.  Local InterBase, MySQL and SQLite only.				XML in memory data only
Compilers	Windows (32-bit and 64-bit for Delphi) and Mac OS X				32-bit Windows only
IDE tools	Advanced with refactoring, unit testing UML visualization and full UML modeling  Advanced with refactoring, unit testing, unit testing, UML visualization			Basic	
Components	Basic and advanced VCL and FireMonkey components with source code and ability to create components.				Basic VCL and FireMonkey components.No source code.
Advanced database tools	ER/Studio Developer Edition	DB PowerStudio Dev Edition	None		
Earlier version access	Get licenses and downloads for earlier versions				Not included
License	Full commercial license				Limited commercial

#### Free RAD XE3 Bonus Pack

When you buy RAD Studio XE3, Delphi XE3 or C++Builder XE3

Offer ends September 28, 2012

#### Mida Converter



#### TMS Grid



#### Premium Style



- Get \$250 US in additional software free with purchase of Delphi XE3, C++Builder XE3 or RAD Studio XE3
- Bonus Pack includes: VCL to FireMonkey converter,
   FireMonkey grid control, and FireMonkey premium style
- Offer ends 28 September 2012

# Questions?

### RAD Studio XE3

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The Developer Force Multiplier

Windows 8

Mac OS X Mountain Lion

Delphi C++

 $FM^2$ 

Metropolis UI

HTML5

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