

World Tour

# RAD STUDIO XE3 NEW FEATURES

# About your presenter

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- ◎ Blog: [blogs.embarcadero.com/davidi/](https://blogs.embarcadero.com/davidi/)

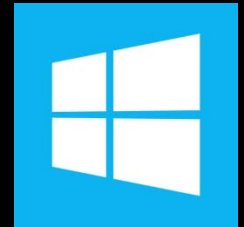
# RAD Studio XE3

The Developer Force Multiplier



Windows 8

Mac OS X  
Mountain Lion



C++

FM<sup>2</sup>

Metropolis UI



HTML5

Mobile

Visual LiveBindings



FM<sup>2</sup>

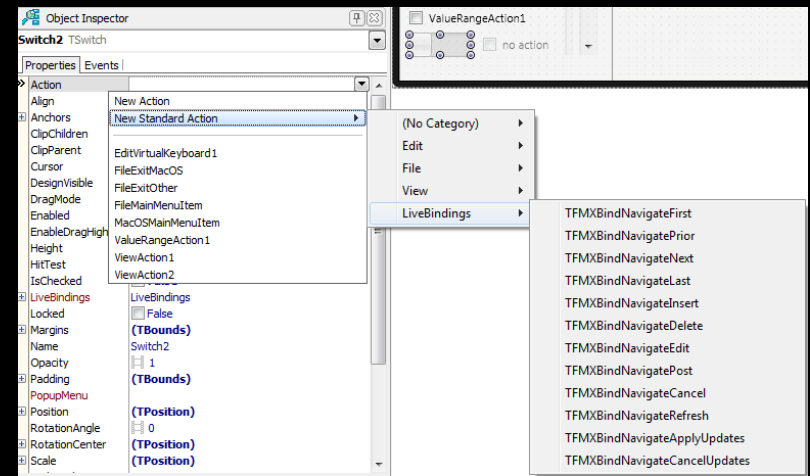
# Actions



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



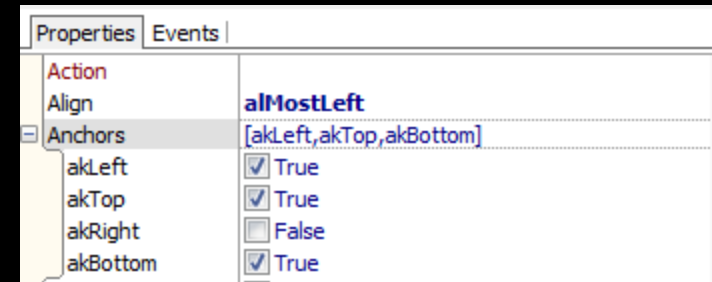
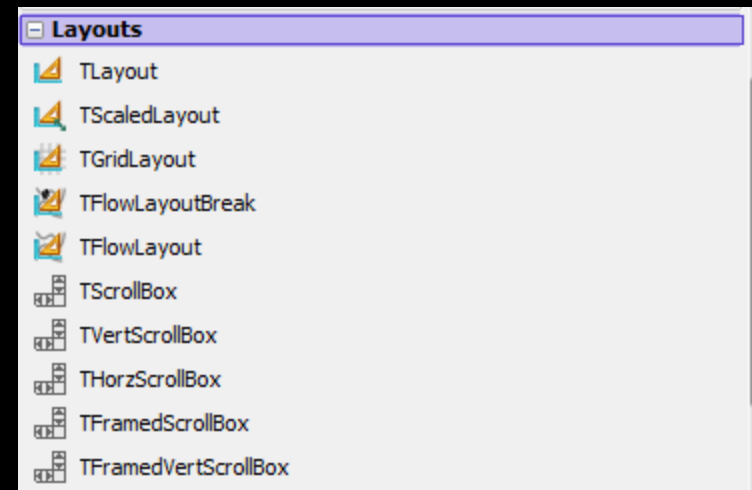
# Layouts and Anchors



Common layout engines  
like grid and flow

Anchors for all visible  
components

Alignment



# Multimedia

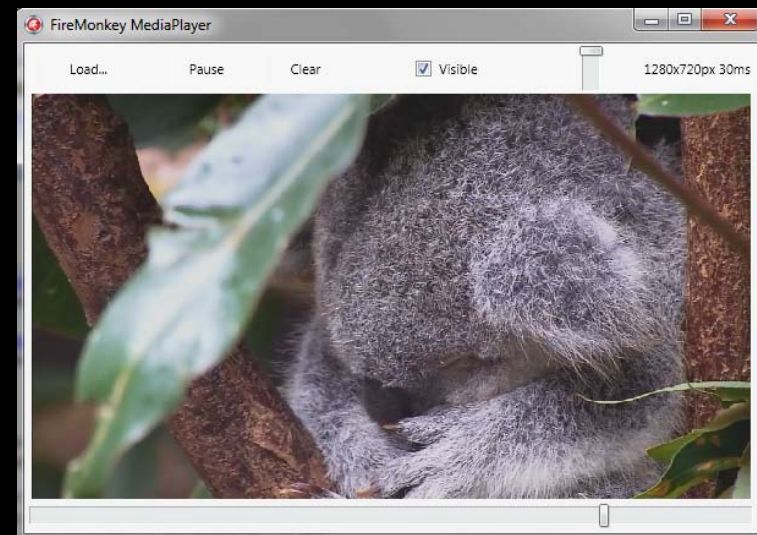


Camera picture and video capture

Audio and Video playback

DirectShow on Windows

QuickTime 10.5 or higher



# 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



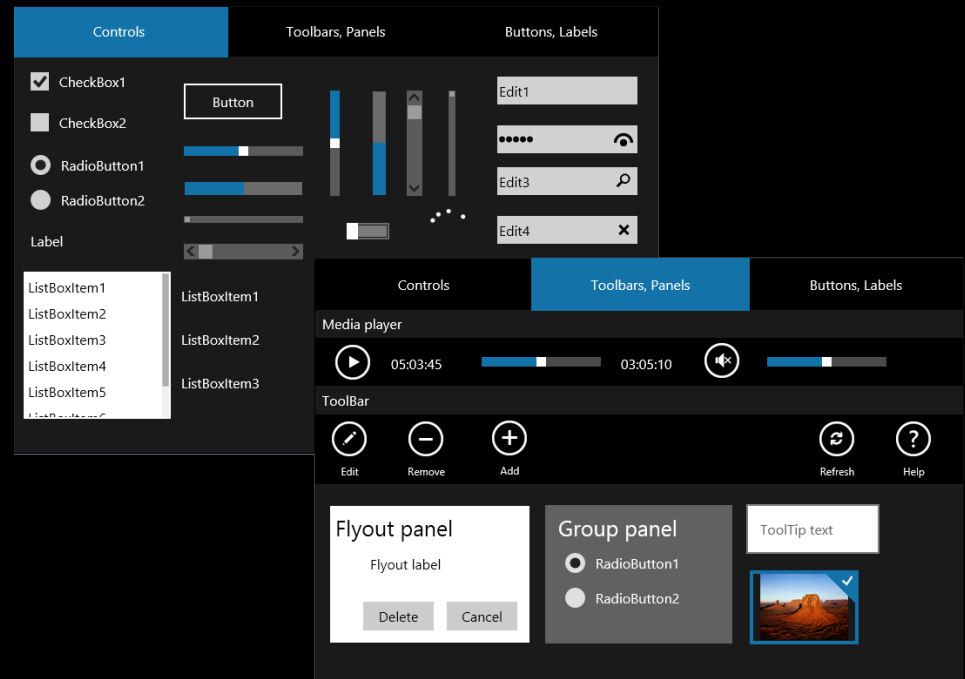
# Windows 8 Style

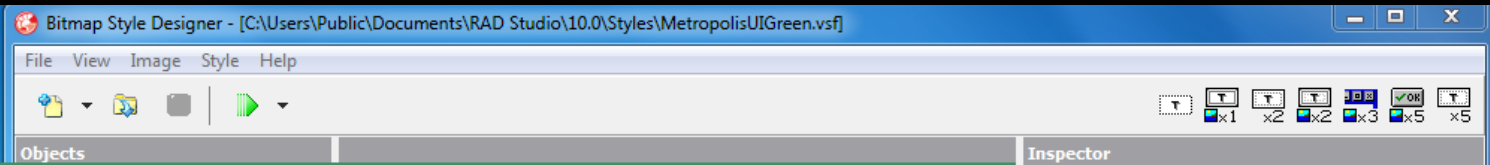


## Windows 8 "Metro" Style

### Button style lookup

### 4 Style color combos





Inspector	
>> Author	Embarcadero Technologies Inc.
AuthorEmail	
AuthorURL	<a href="http://www.embarcadero.com">www.embarcadero.com</a>
MobilePlatform	<input type="checkbox"/> False
Name	Metropolis UI Green
PlatformTarget	

## FMX Style Viewer

Enabled Disabled Help Load...

Standard Grids Lists ScrollBox Additional Edits Bars

TButton

Normal

Disabled

TCheckBox

☐ Unchecked

☒ Checked

☐ Disabled

TSpeedButton

Normal

Disabled

TGroupBox

TRadioButton

☐ Unchecked

☒ Checked

☐ Disabled

TLabel

Normal

Disabled

TScrollBar

TSmallScrollBar

## VCL Style Viewer - Metropolis UI Green

Enabled Disabled Help

Component Palette Page

- Standard
  - Forms
- Additional
  - Grids
  - CategoryPanelGroups
- Win32
  - ListViews
- Data Controls

TCheckBox

☐ Enabled

☒ Enabled, Checked

☒ Enabled, Grayed

☐ Disabled

☒ Disabled, Checked

☒ Disabled, Grayed

TRadioButton

☐ Enabled

☒ Enabled, Checked

☐ Disabled

☒ Disabled, Checked

TRadioGroup

☒ RadioButton1

☐ RadioButton2

☐ RadioButton3

☐ RadioButton4

TScrollBar

TEdit

Edit1

Edit1

TButton

Enabled

Disabled

Enabled

Disabled

Enabled CommandLink

Disabled CommandLink

TLabel

Enabled

Disabled

TListBox

Enabled

Enabled

Enabled

Enabled

Enabled

Disabled

Disabled

Disabled

Disabled

Disabled

TMemo

Enabled

Enabled

Enabled

Disabled

Disabled

Disabled

TComboBox

Enabled

Disabled

Enabled

Disabled

TPanel

Panel1

Panel1

Panel1

# Mac OS X Retina



Mountain Lion Style

High resolution assets

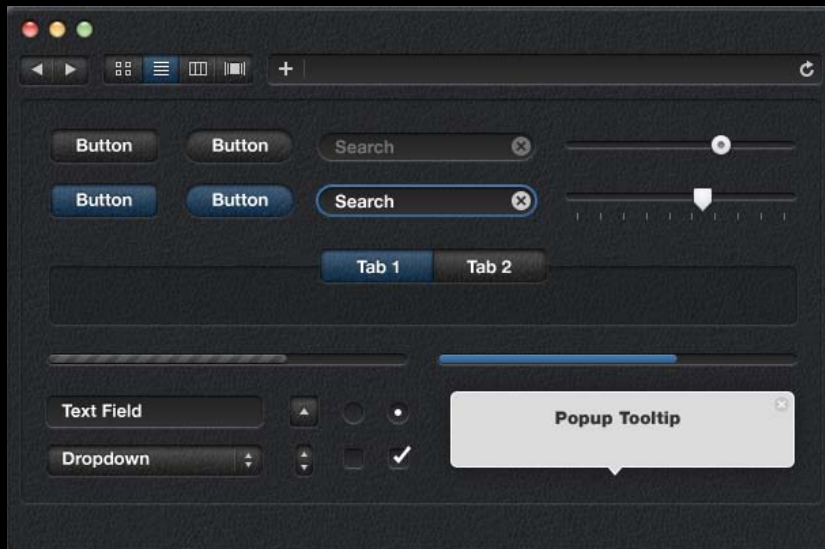
FM<sup>2</sup> determines if it should load Retina style  
or regular style

# Custom styles



Non-client area styling

Premium styles available from Embarcadero



# Sensors and Services



Services framework

- Determines availability of sensors and services

- Acquires rights from user

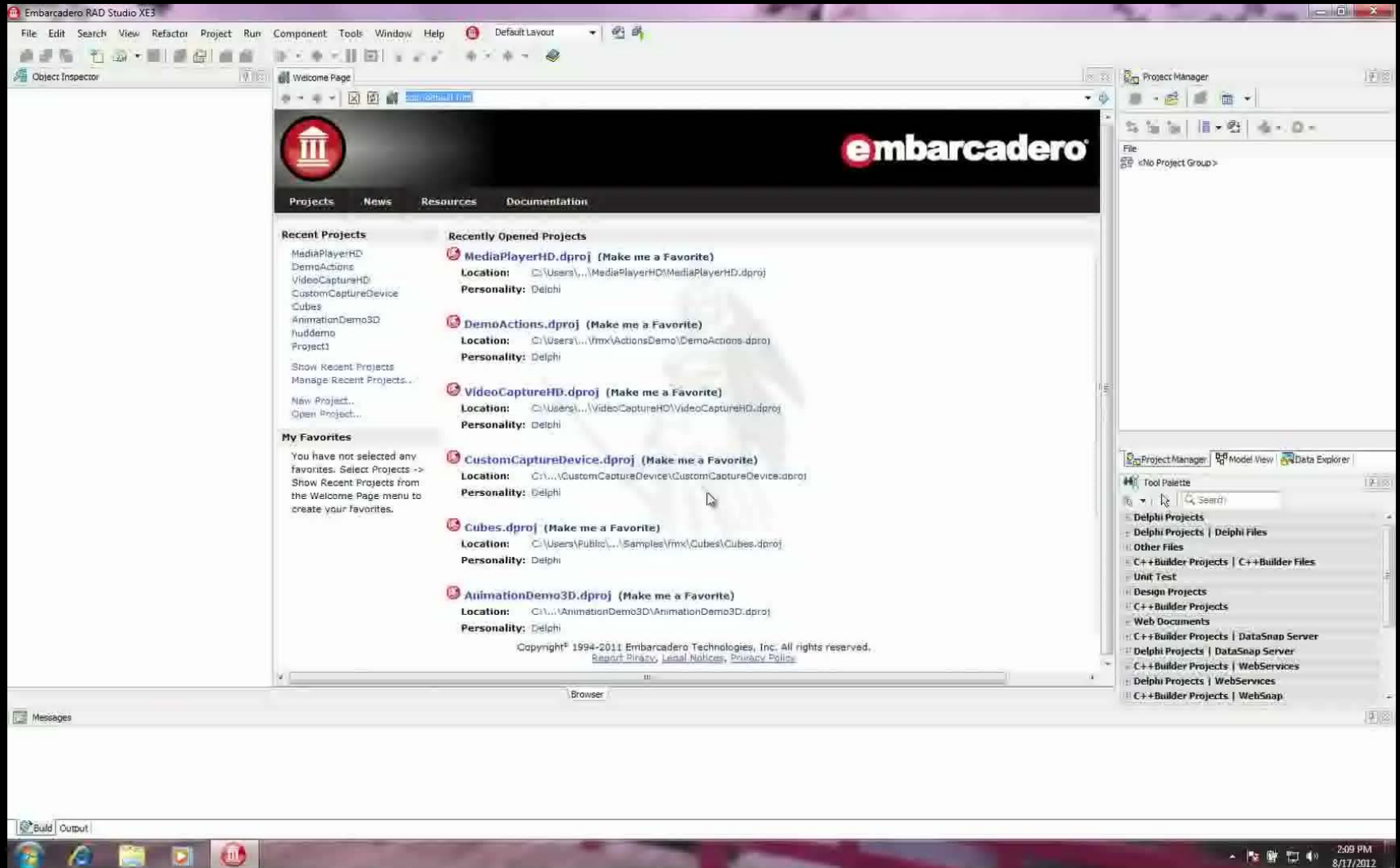
LocationSensor (GPS or Triangulation)

MotionSensor (Accelerometer and/or Gyro)

DEMO



# FireMonkey for Mobile Preview



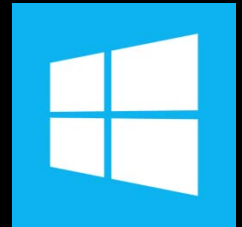
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Visual LiveBindings





# Visual LiveBindings

# Visual LiveBindings - Agenda

Quick intro

Visual LiveBindings Designer

New components & wizards

New IDE options

Hands on Examples – Working with

- Components

- TDataSet

- Objects

- Layer Manger

- Actions

# LiveBindings – Quick Intro



Introduced in XE2

FireMonkey and VCL

Based on relational expressions, called binding expressions

Can be unidirectional or bidirectional

Standard converters out of the box

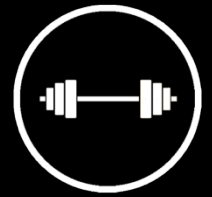
Add custom converters

Can be used design time / run time

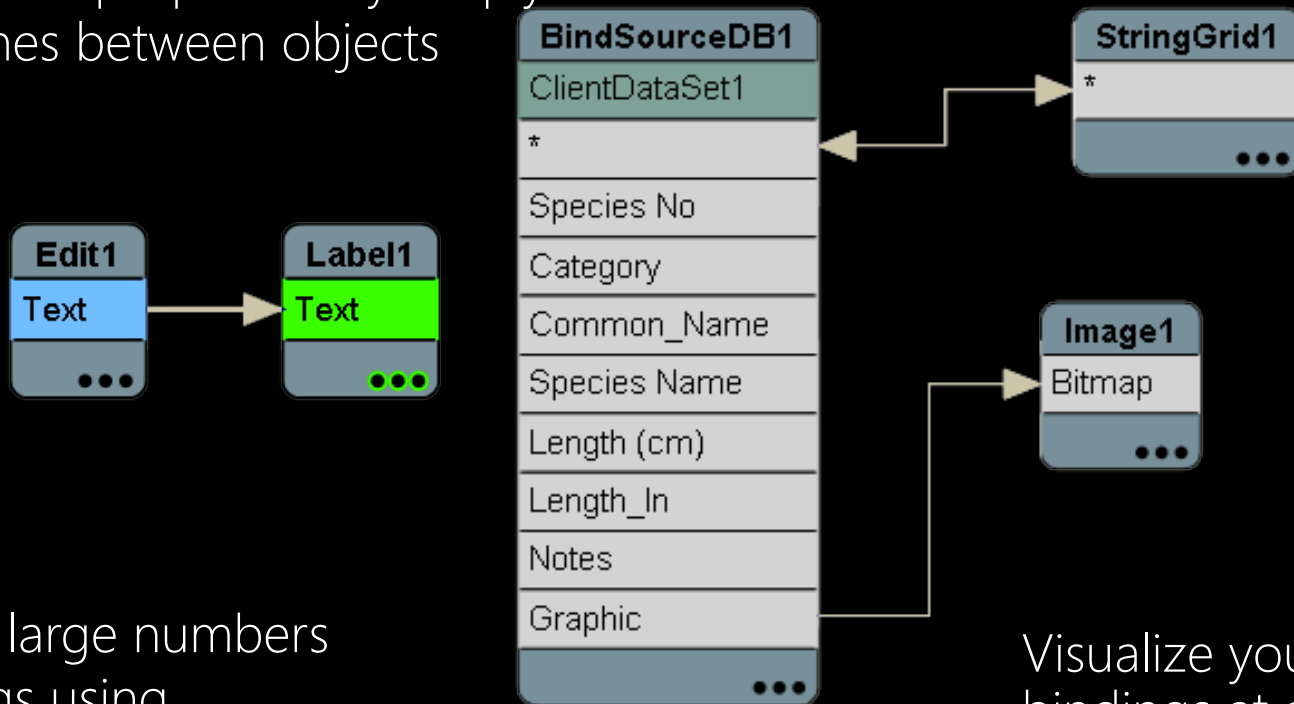
**Is all about control objects and source object**



# Visual LiveBindings



Bind data and properties by simply drawing lines between objects

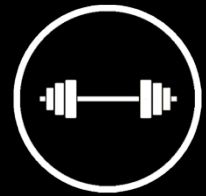


Organize large numbers of bindings using Photoshop-like "layers"

Visualize your data bindings at a glance

Zero lines code  
Delphi and C++Builder

# New Components



New set of Visual LiveBinding Components

TLinkGridToDataSource

TLinkListControlToField

TLinkControlToField

TLinkControlToProperty

TLinkFillControlToField

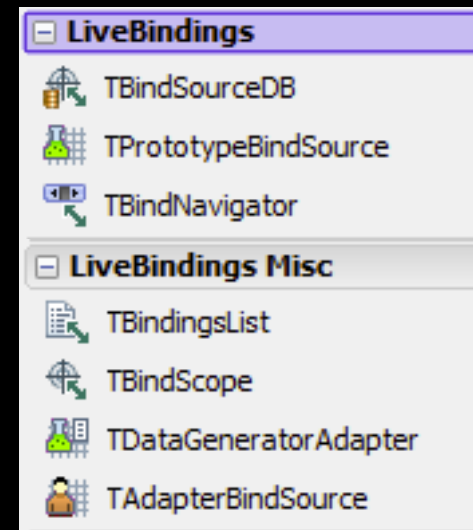
TLinkFillControlToProperty

Easier to link to Objects

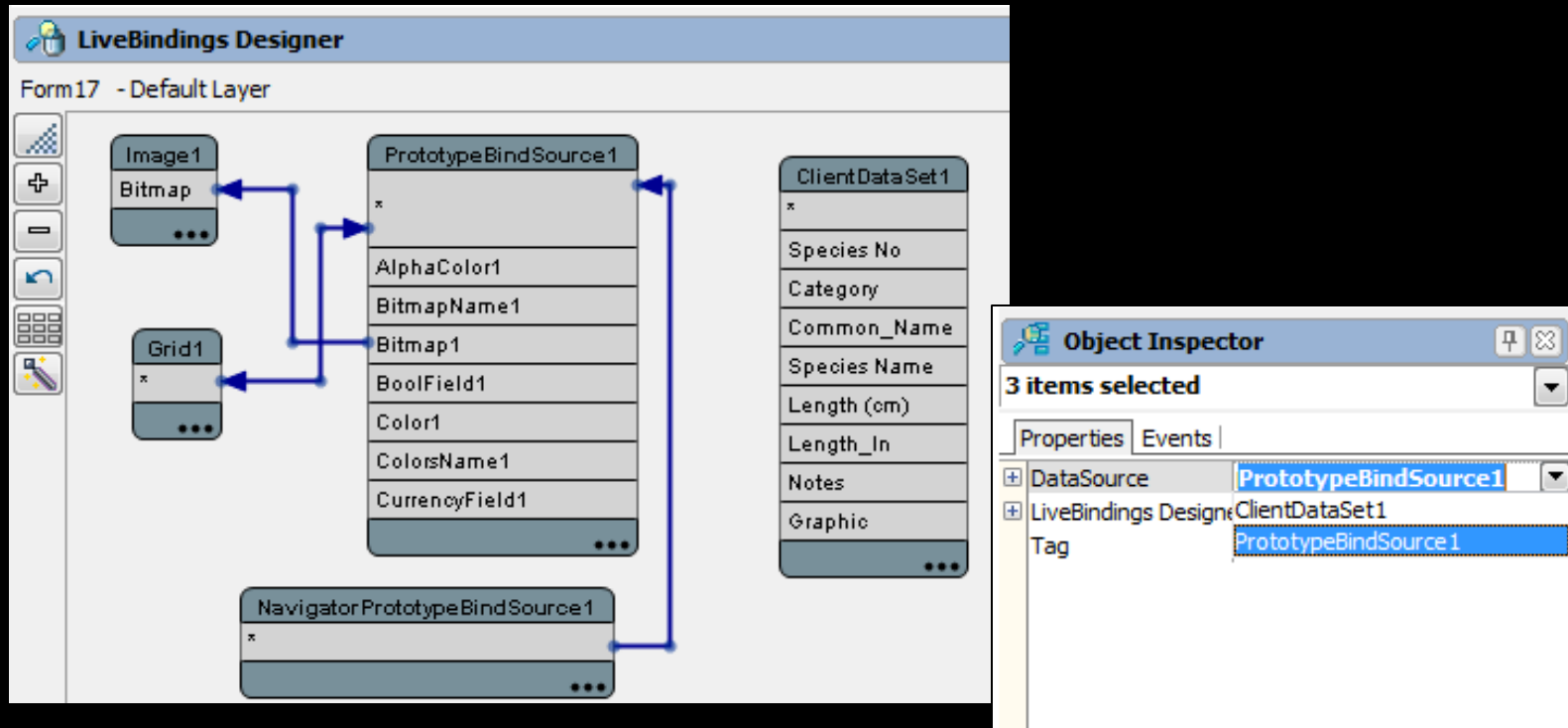
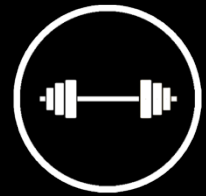
TPrototypeBindSource

Fast & Efficient

Uses Observers to evaluate when to update – no need for manual notification of change.



# Application Prototyping

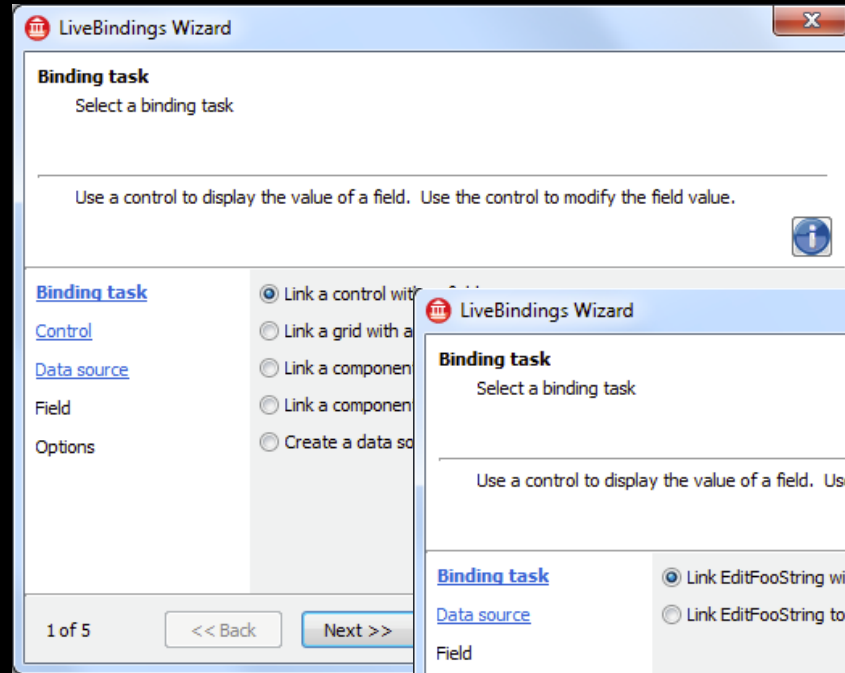
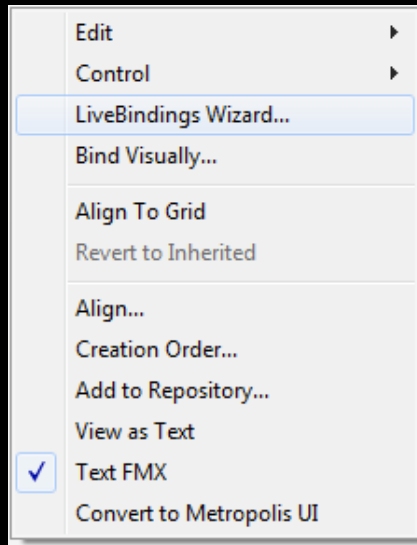
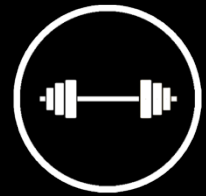


- Design and prototype your application using sample data from the TPrototypeBindSource component
- Add a ClientDataSet component to your form and load your actual data
- Simply select all of your bindings and change the data source to use your real data in your application

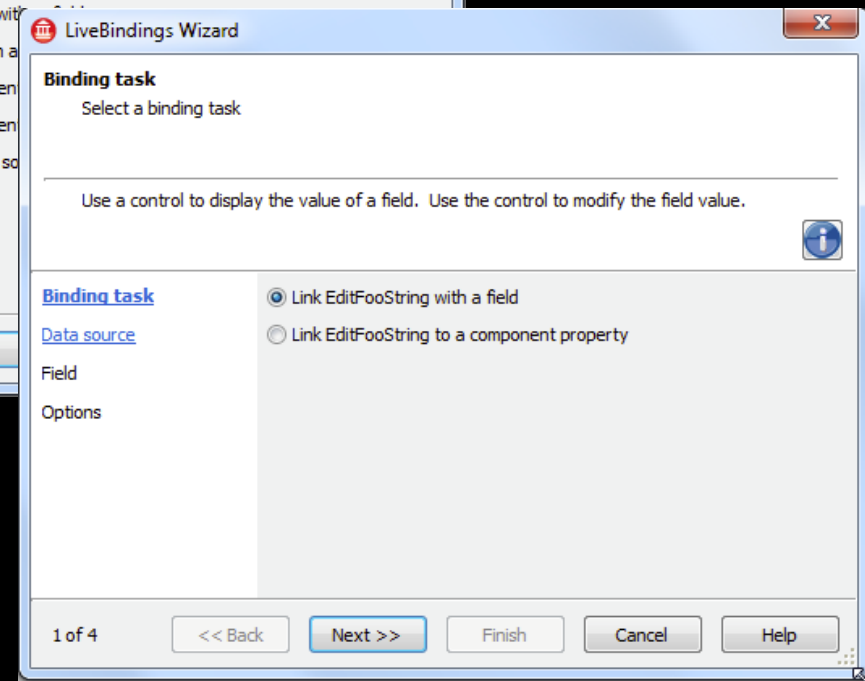
Application Prototyping

DEM 

# Context aware Wizards



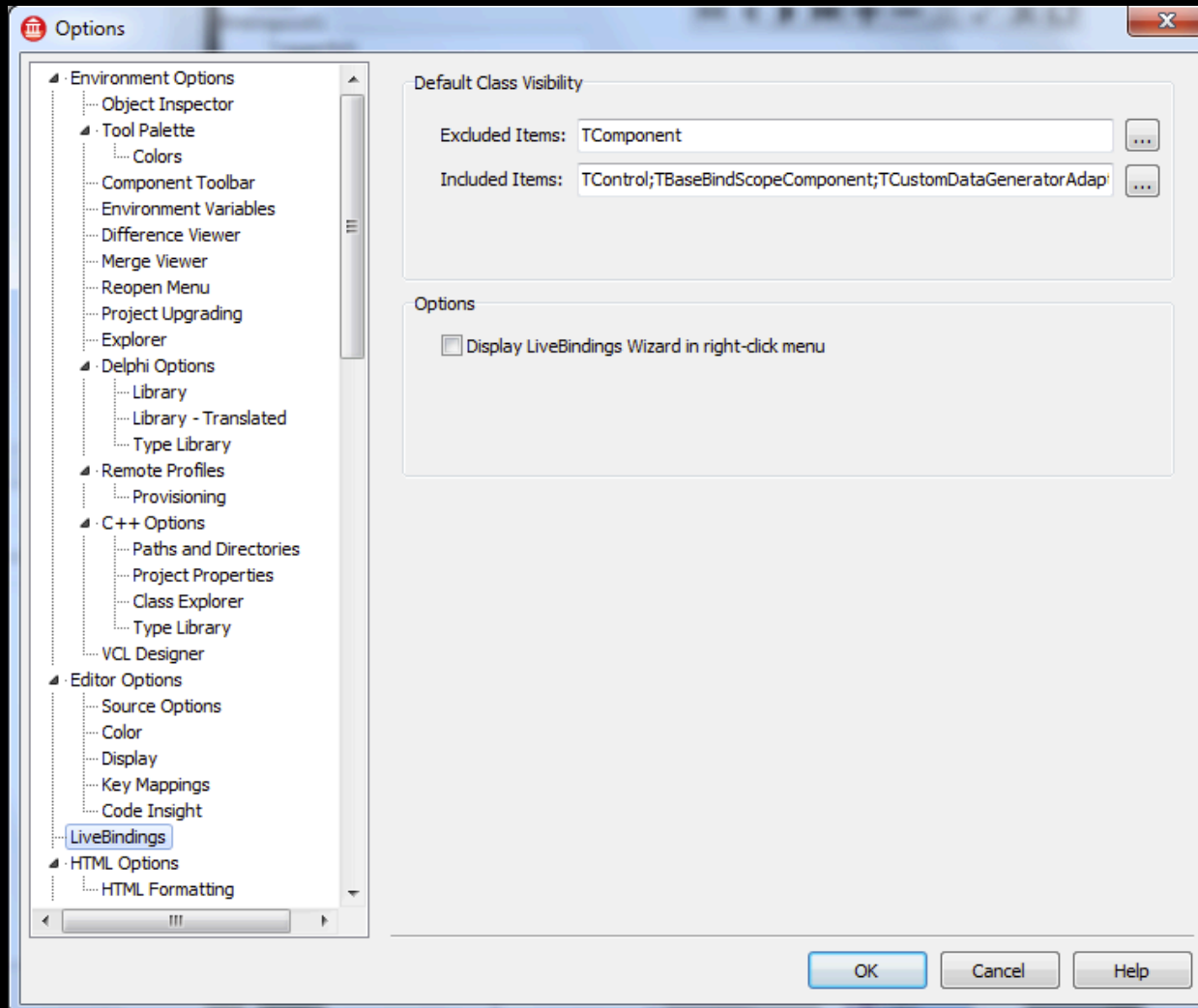
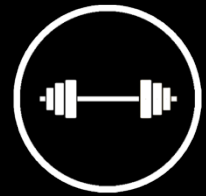
Form Wizard



Example with TEdit  
selected



# Tools > Options



# Lets see it in action!!

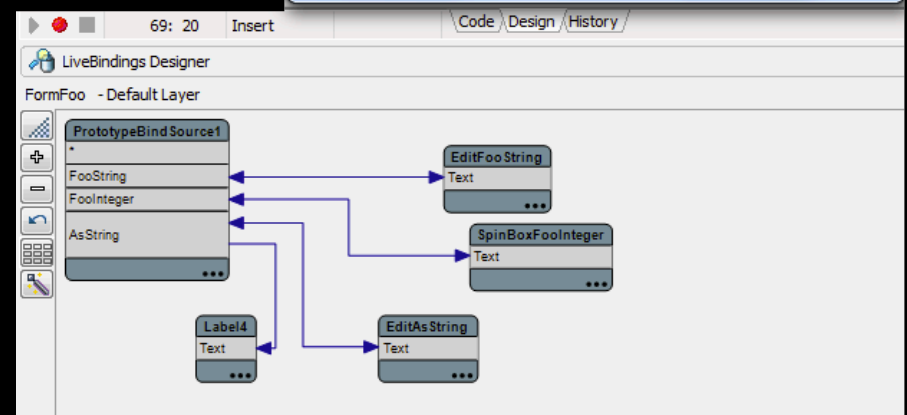


## Hands on Examples

Working with Components

Working with TDataSet

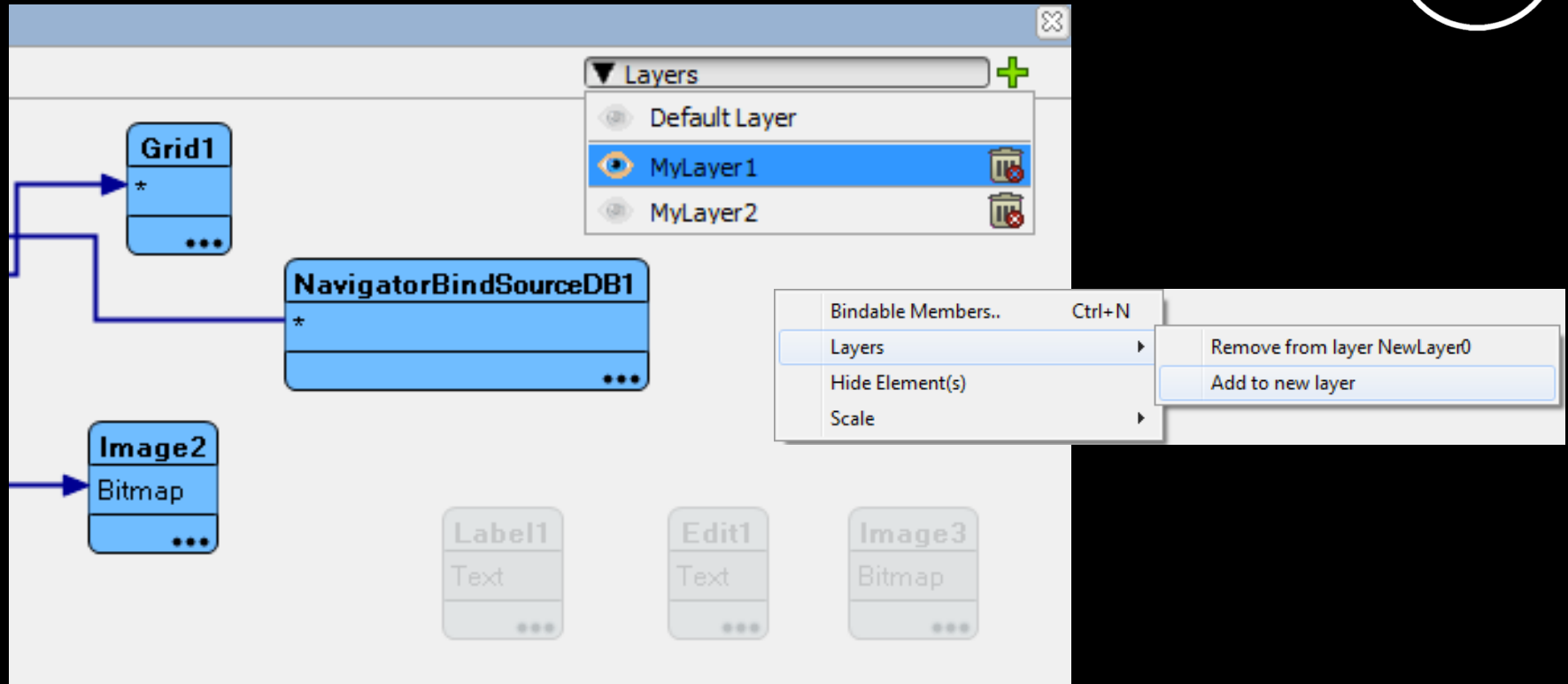
Working with Objects



DEMO



# Layers Management

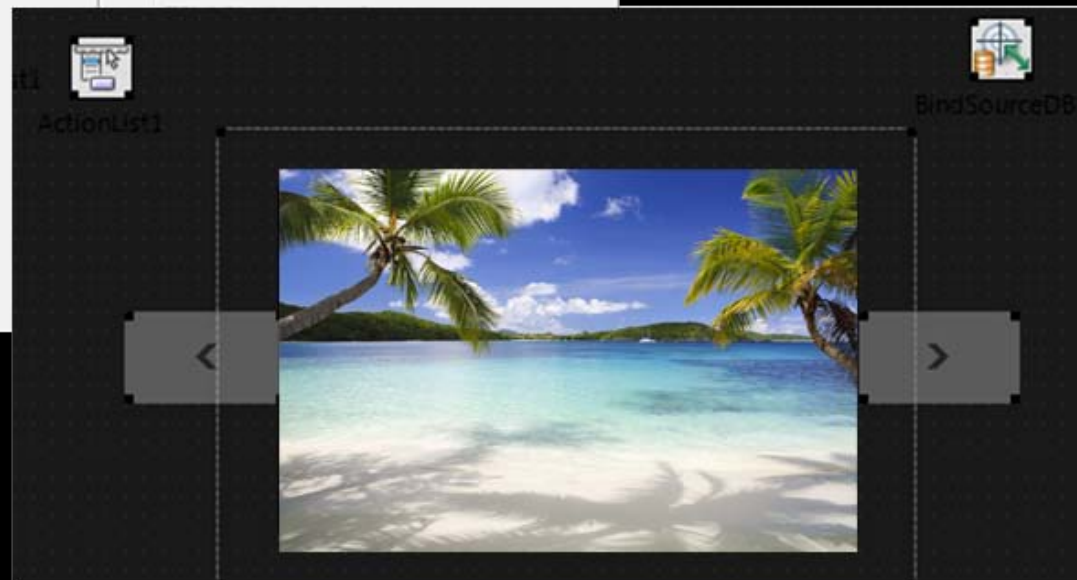
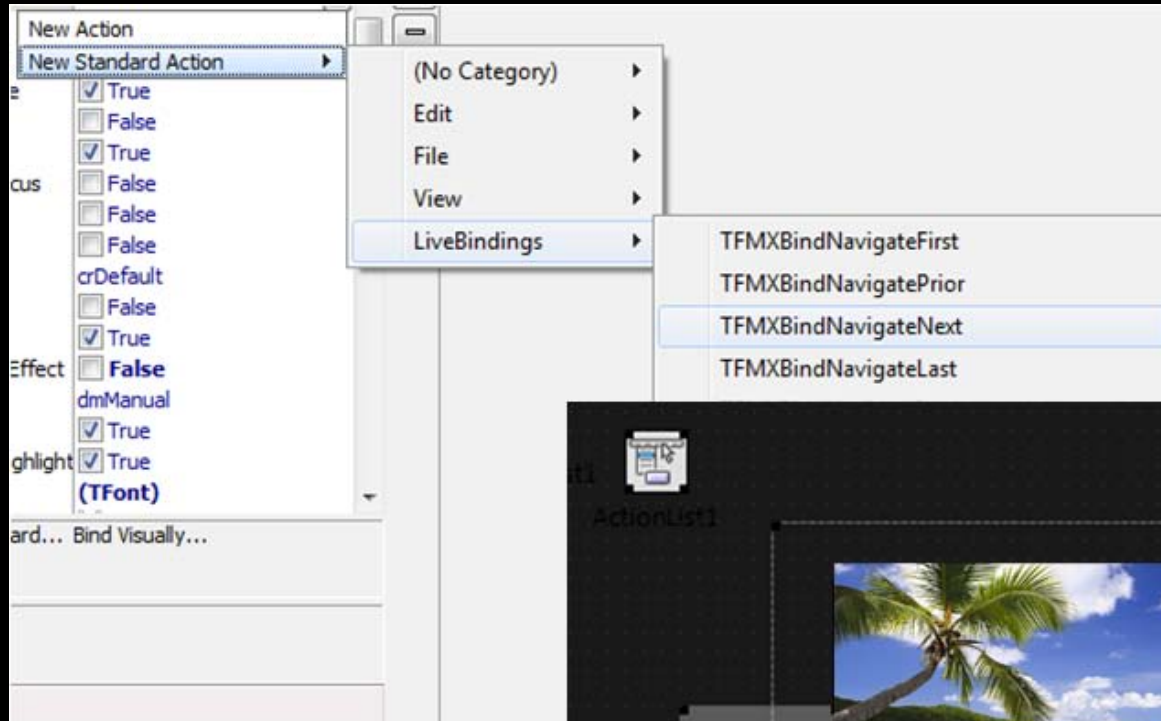


- Organize large numbers of bindings using Photoshop-like layers
- Quickly toggle visibility between layers
- Easily create your own layers
- View multiple layers at once

Layers Management

DEMO 

# Actions



Easily use standard actions with LiveBindings

Actions

DEMO 

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

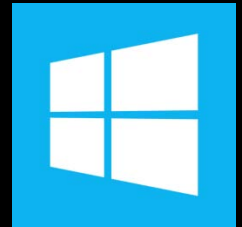
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# Metropolis UI



# 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



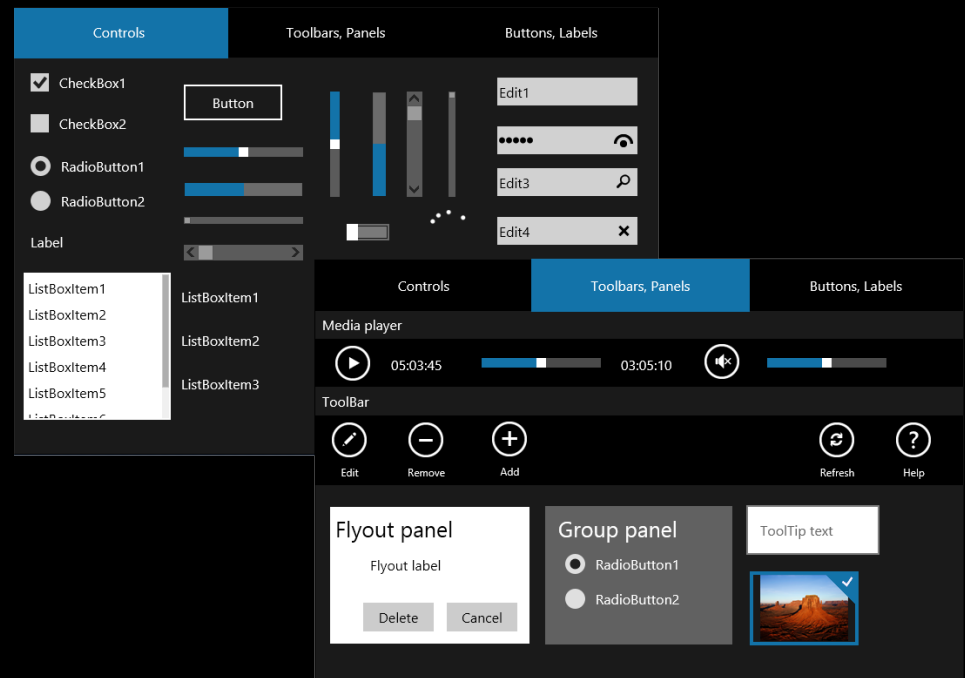
# Windows 8 Style



## Windows 8 Metropolis Style

Button style lookup

4 Style color combos





## Controls

## Toolbars, Panels

## Buttons, Labels

☒ CheckBox1

☐ CheckBox2

☐ RadioButton1

☐ RadioButton2

Label

Button

ListBoxItem1

ListBoxItem2

ListBoxItem3

ListBoxItem4

ListBoxItem5

ListBoxItem6

ListBoxItem1

ListBoxItem2

ListBoxItem3

## Controls

## Toolbars, Panels

## Buttons, Labels

Media player



05:03:45



03:05:10



ToolBar



Edit



Remove



Add



Refresh



Help

Flyout panel

Flyout label

Delete

Cancel

Group panel

☐ RadioButton1

☐ RadioButton2

ToolTip text



## Controls

## Toolbars, Panels

## Buttons, Labels



☒ CheckBox1

☐ CheckBox2

☐ RadioButton1

☐ RadioButton2

Label

Button



Edit1



Edit3



Edit4



ListBoxItem1

ListBoxItem2

ListBoxItem3

ListBoxItem4

ListBoxItem5

ListBoxItem6

ListBoxItem1

ListBoxItem2

ListBoxItem3

## Controls

## Toolbars, Panels

## Buttons, Labels

### Media player



05:03:45



03:05:10



### ToolBar



Edit



Remove



Add



Refresh



Help

### Flyout panel

Flyout label

Delete

Cancel

### Group panel

☐ RadioButton1

☐ RadioButton2

ToolTip text





Styles

DEMO



# 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

# Metropolis Project Templates

DEMO 

# 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

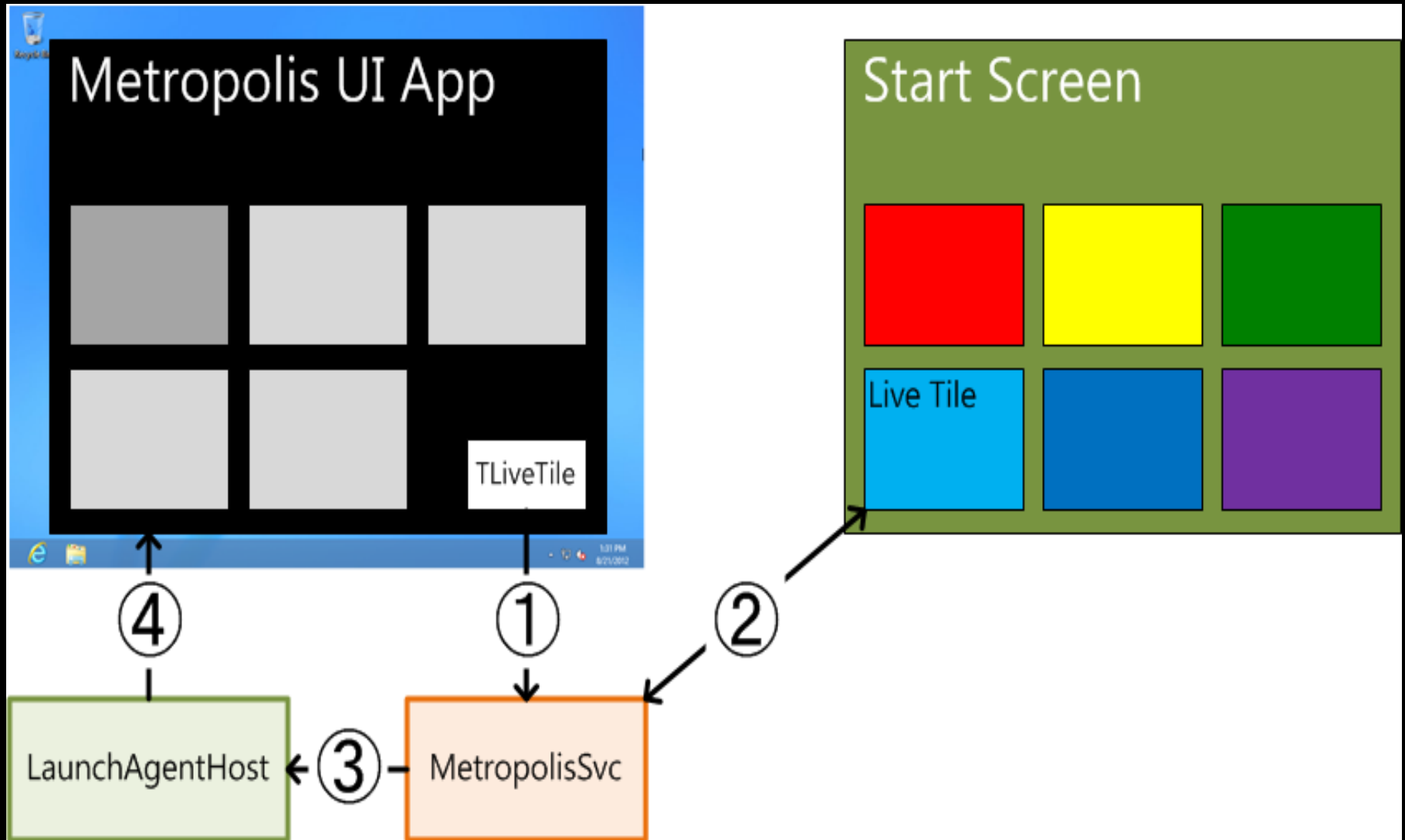
Windows 8 Style FlipView

# Live Tiles



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

# Live Tiles





DEMO



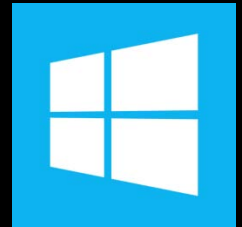
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Questions?