世界巡迴研討會

RAD STUDIO XE3

- Gordon Li

- 9/5 高雄, 9/6 台中, 9/7 新竹, 9/10 台北

Agenda

- 開場致詞
- RAD Studio XE3 產品概論
- FM^2
- Visual LiveBindings
- 中場休息
- Windows 8
- C++ 64bit
- HTML5 Builder
- Mobile Pack
- Q&A

RAD Studio XE3

The Developer Force Multiplier

Windows 8

Mac OS X
Mountain Lion

C++

FM^2

Metropolis UI

HTML5

Mobile

Visual LiveBindings

Mobile Studio

Mobile Studio

Delphi & C++Builder ARM optimized toolchains
Phone and Tablet development
Pixel-Perfect Native UI controls

FM^2 on iOS and Android dbExpress Data Access
InterBase ToGo and SQLlite
DataSnap client
Device HW Services/Sensors including Gyro, GPS, Camera, and Accelerometer
Mobile Form Designer

One native codebase for both Android and iOS

*Available soon as separate product add-on

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Windows 8

Easy VCL/FireMonkey application migration to Windows 8
Windows 8 Desktop applications
Metropolis UI
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

True Win 8 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
"Fat Finger" Touch
Gyro, Accelerometer,
Location (GPS) & Camera
Delphi and C++Builder

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Mountain Lion

Mac OS X

Mountain Lion

- Native Support for OS X Mountain Lion
- MacBook Pro Retina Support (4x higher res!)
- Mac App Store Compatible
- Pixel perfect FireMonkey Native OS X UI controls
- Native Mountain Lion or UI Custom Styling
- Non-Client Area FireMonkey Styling
- Delphi and C++Builder

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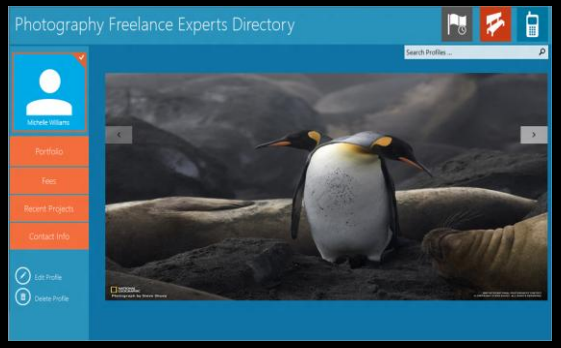
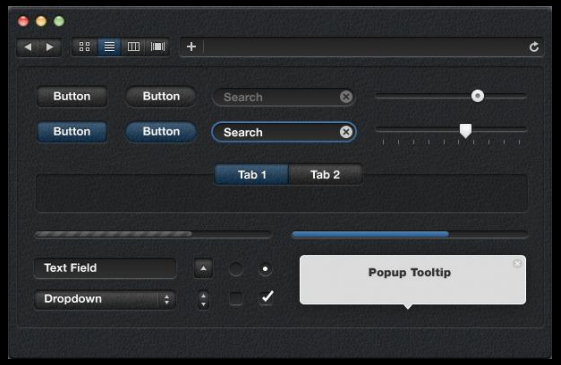
FM^2

FM2

FireMonkey "FM^2" – Major Upgrade
Windows 8 Metropolis UIs with Touch
Mac OS X Lion, Mountain Lion & Retina
Pixel Perfect OS Native Control Styling
Non-Client Area Styling
Anchors and Layout Managers
Actions and ActionLists
Audio/Video
High Performance and Quality
3rd party support
Delphi and C++Builder





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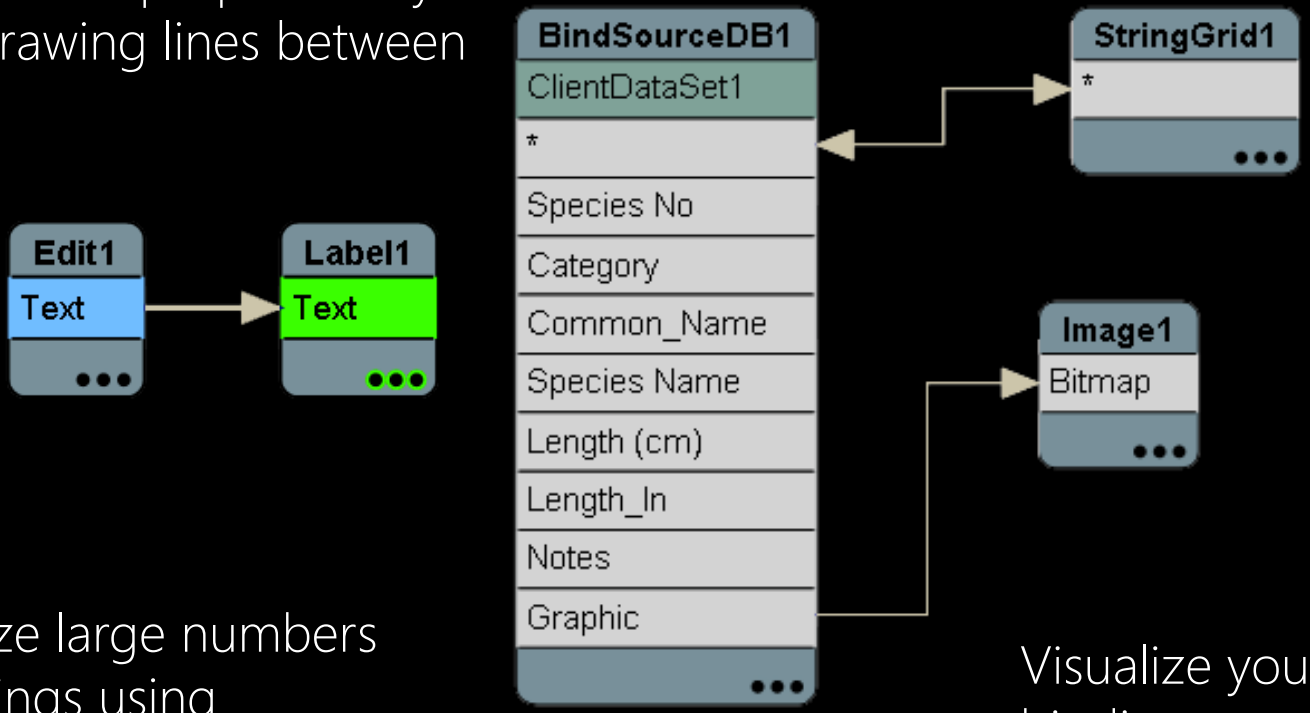
Visual LiveBindings

Visual LiveBindings

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

Delphi and C++Builder

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C++Builder

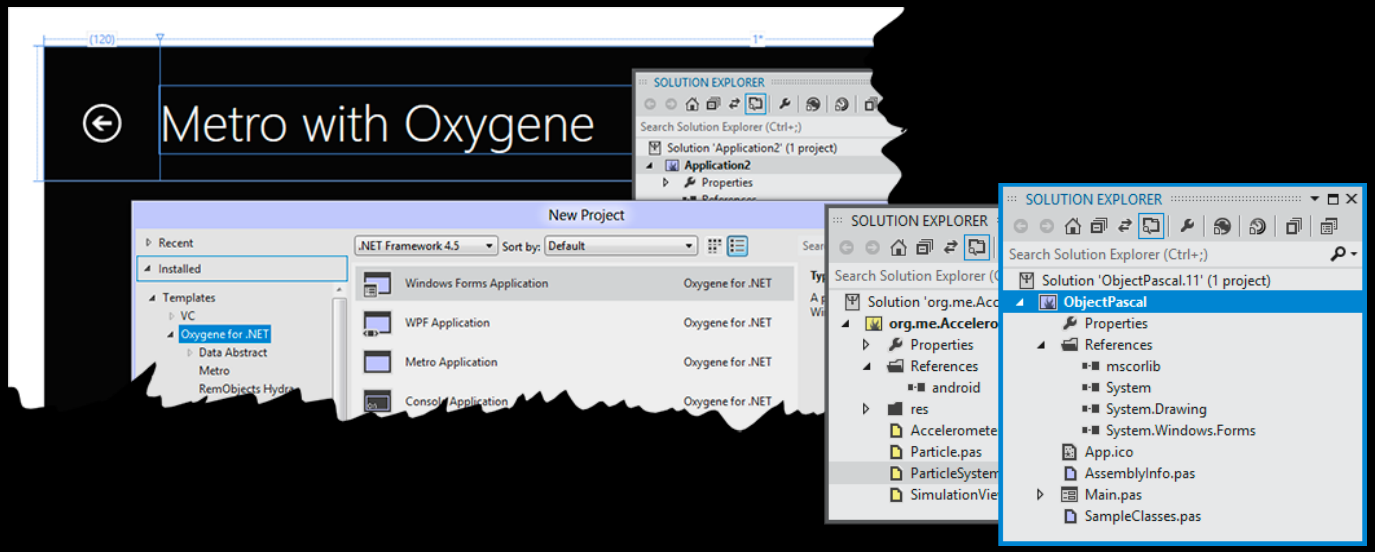
Shipping at XE3 RTM in Q3 2012
Windows 8 “Metro” and Mac OS X Mountain Lion
FireMonkey 2
Metropolis
Visual LiveBindings
64bit Beta

20% off when purchased w/ Maintenance (get 64bit when avail)

Coming in Q4 2012
All new 64-bit C++ Tool chain
Highest level of C++ language and library compliance

Prism

Prism XE3



Develop Windows .Net Metro and WinRT Apps

Visual Studio 2012 Integration

Advanced Code Analysis

RAD Studio XE3

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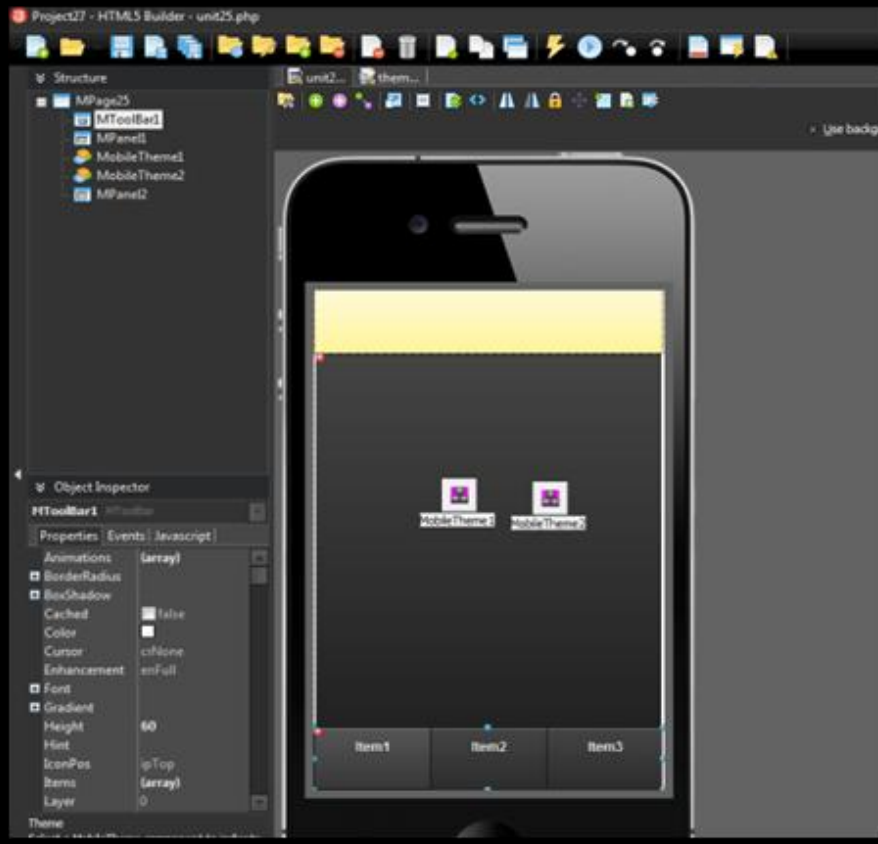
HTML5

HTML5 Builder

Rapid visual development using today's Web technologies
Target Web, iOS, Android, BlackBerry and Windows Phone
Front end dev with HTML5,
CSS3, and JavaScript
Server side dev with PHP
Mobile Device UI Styling
CSS3 Styling and Animations
Hundreds of visual components
Video, Audio, GPS, Camera,
Accelerometers and more



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Visual LiveBindings

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FM^2

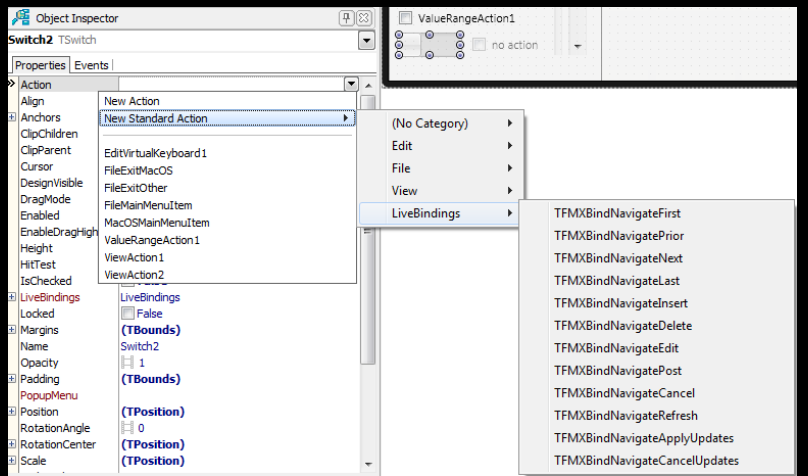
Actions

Framework-Independent Action Features Are Implemented in RTL

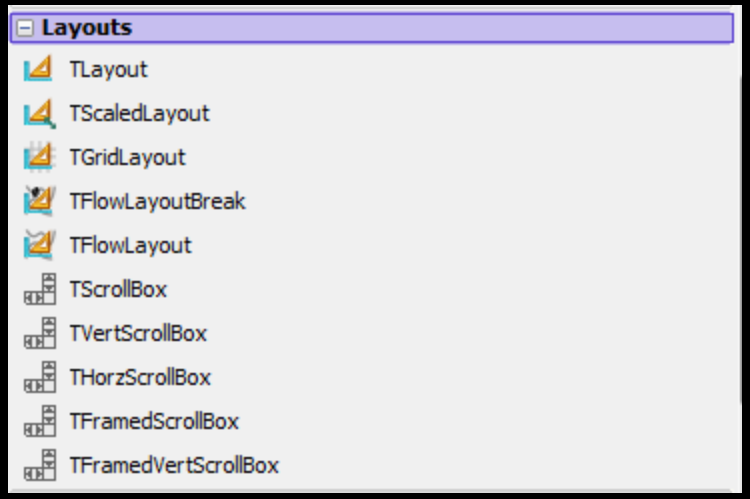
FireMonkey framework-specific action features are implemented in new FMX units:

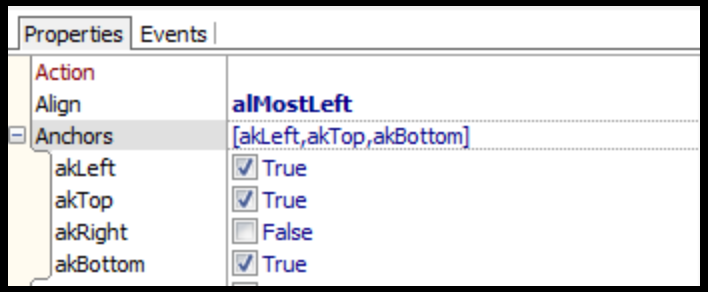
FMX.ActnList, FMX.StdActns, and others.

LiveBindings actions



Layouts and Anchors





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

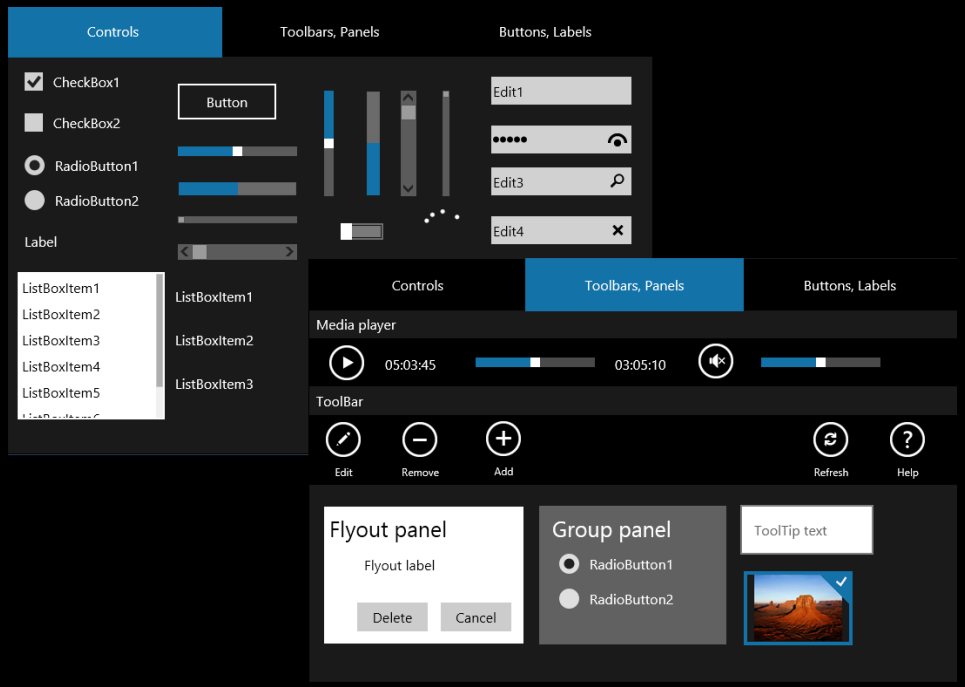
Custom styles with non-client area styling

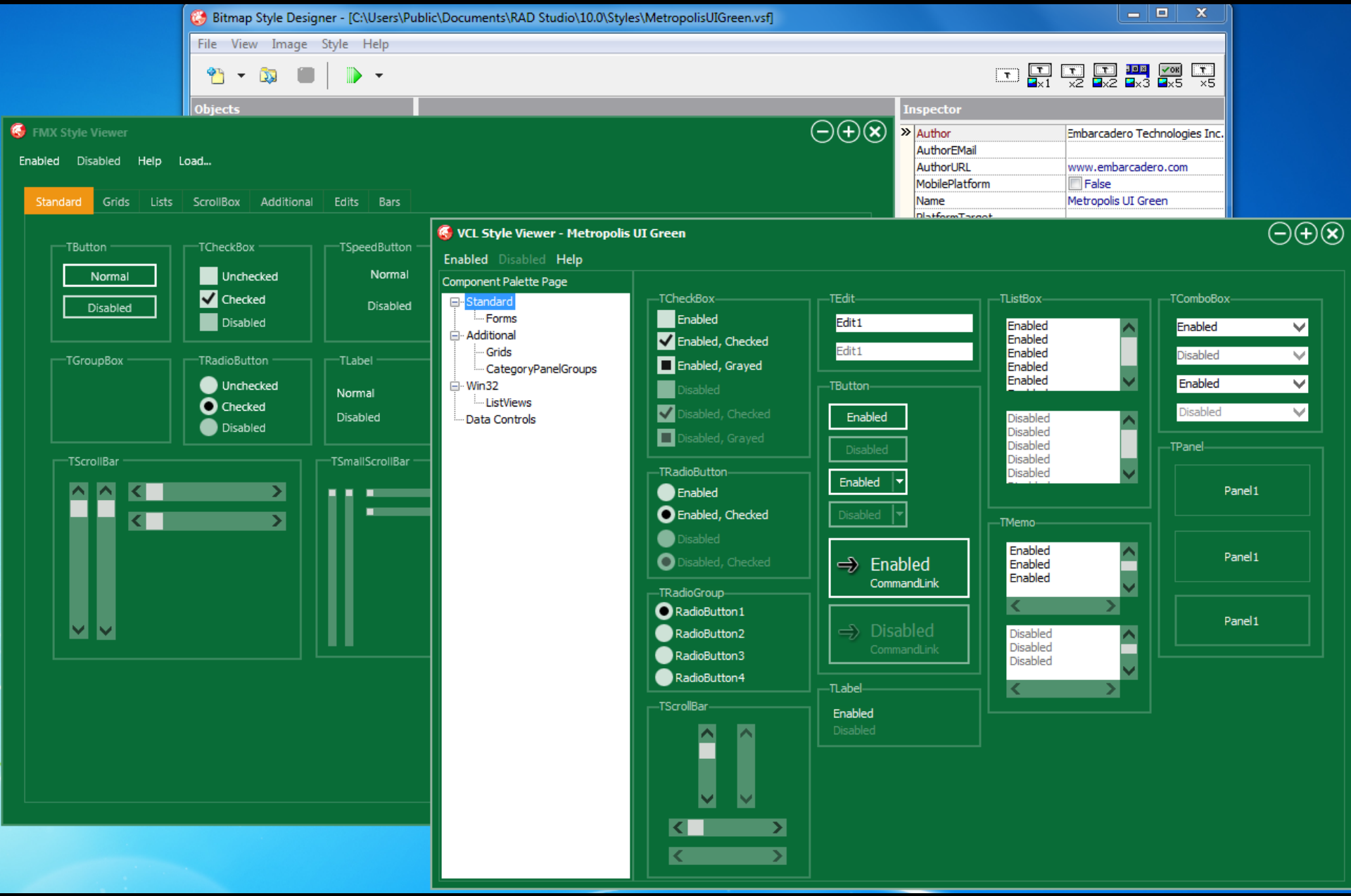
Windows 8 Style

Windows 8 “Metro” Style

Button style lookup

4 Style color combos




Bitmap Style Designer - [C:\Users\Public\Documents\RAD Studio\10.0\Styles\MetropolisUIGreen.vsf]
File View Image Style Help
Objects
Inspector
Author Embarcadero Technologies Inc.
AuthorEMail
AuthorURL www.embarcadero.com
MobilePlatform False
Name Metropolis UI Green
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
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CommandLink
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CommandLink
TLabel
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TListBox
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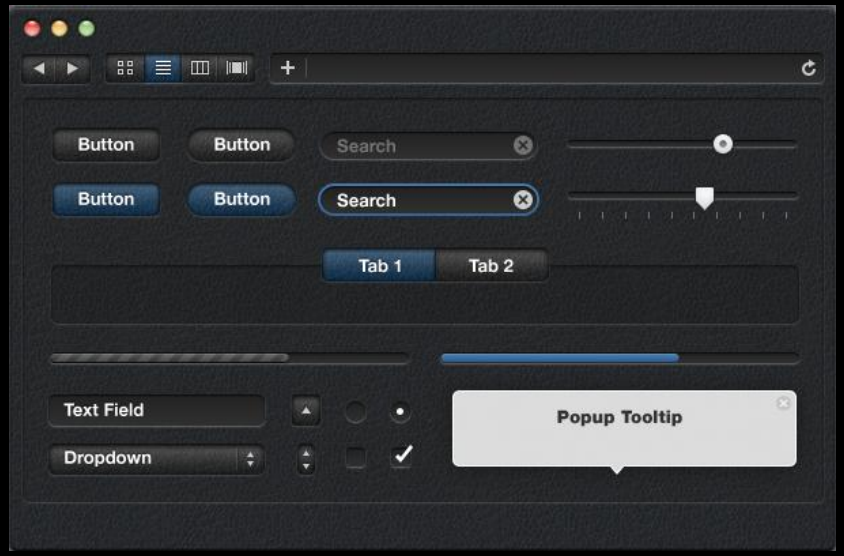
TMemo
Enabled
Enabled
Enabled
Disabled
Disabled
Disabled
TComboBox
Enabled
Disabled
Enabled
Disabled
TPanel
Panel1
Panel1
Panel1

Mac OS X Retina

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

Location (GPS)

Motion (Accelerometer, Gyro)

DEMO

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Visual LiveBindings

Visual LiveBindings

Visual LiveBindings - Agenda

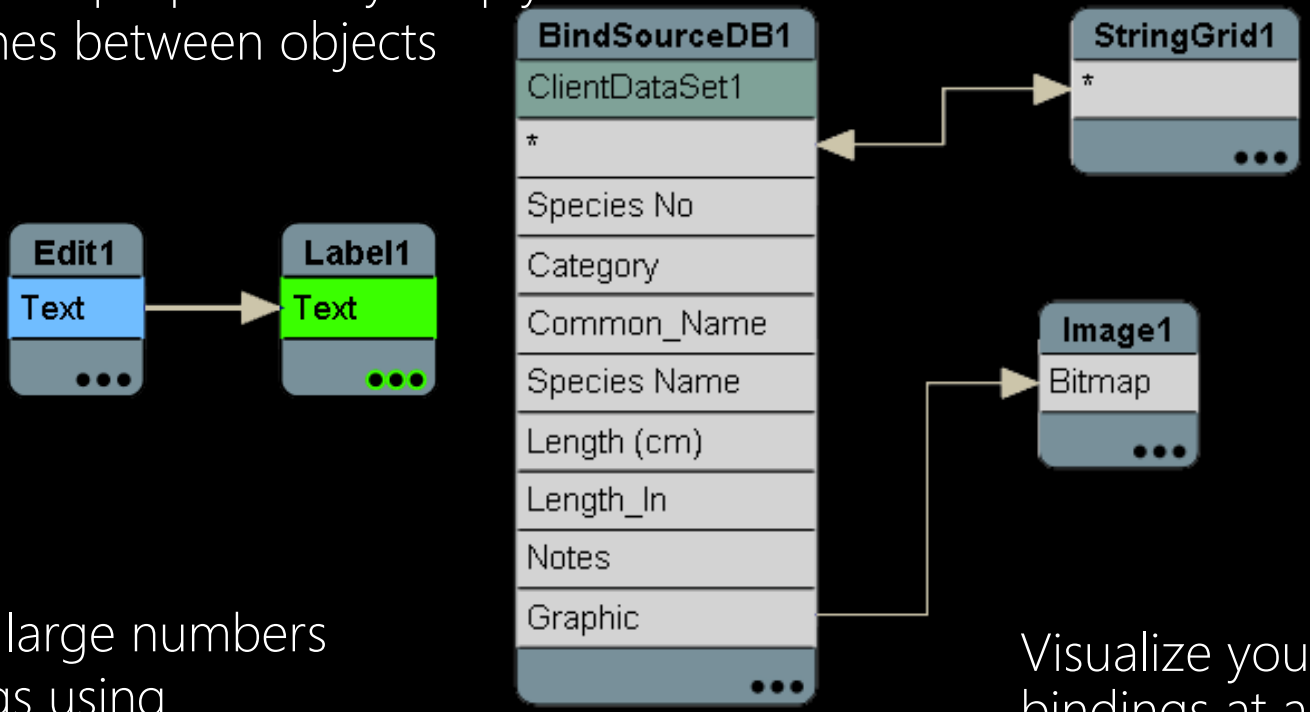
- Quick intro
- Visual LiveBindings Designer
- New components & wizards
- New IDE options
- Hands on Examples – Working with
  - Components
  - TDataSet
  - Objects
  - Layer Manger
  - Actions

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



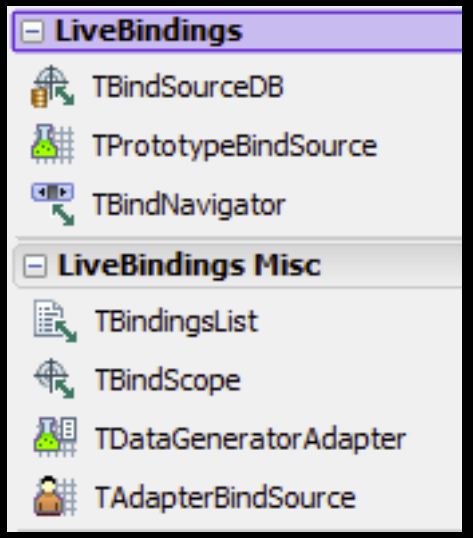
Organize large numbers of bindings using Photoshop-like "layers"

Visualize your data bindings at a glance

Zero lines code
Delphi and C++Builder

New Components

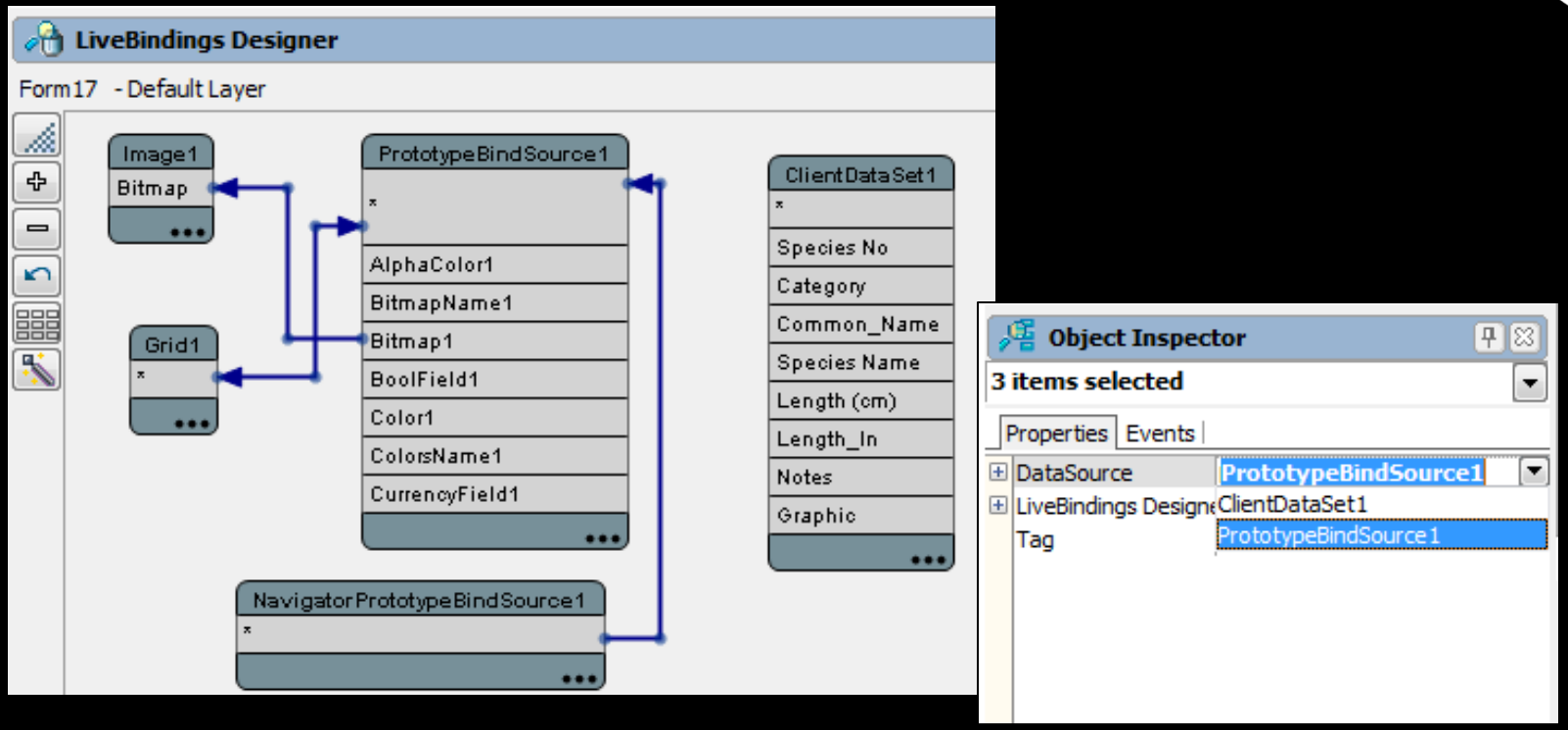
New set of Visual LiveBinding Components
- TLinkGridToDataSource
- TLinkListControlToField
- TLinkControlToField
- TLinkControlToProperty
- TLinkFillControlToField
- TLinkFillControlToProperty



Easier to link to Objects
- TPrototypeBindSource

Fast & Efficient
- Uses Observers to evaluate when to update – no need for manual notification of change.

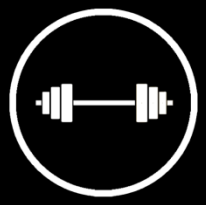
Application Prototyping



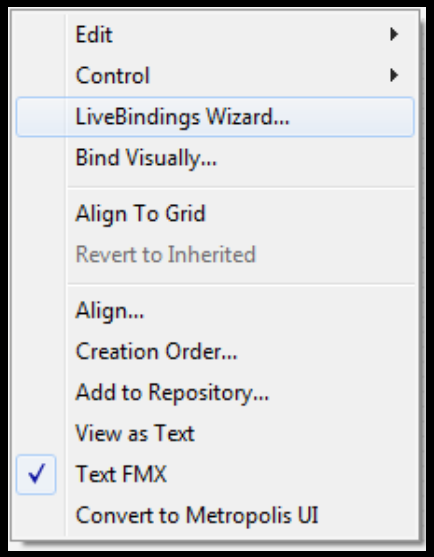
- Design and prototype your application using sample data from the TPrototypeBindSource component
- Add a ClientDataSet component to your form and load your actual data
- Simply select all of your bindings and change the data source to use your real data in your application

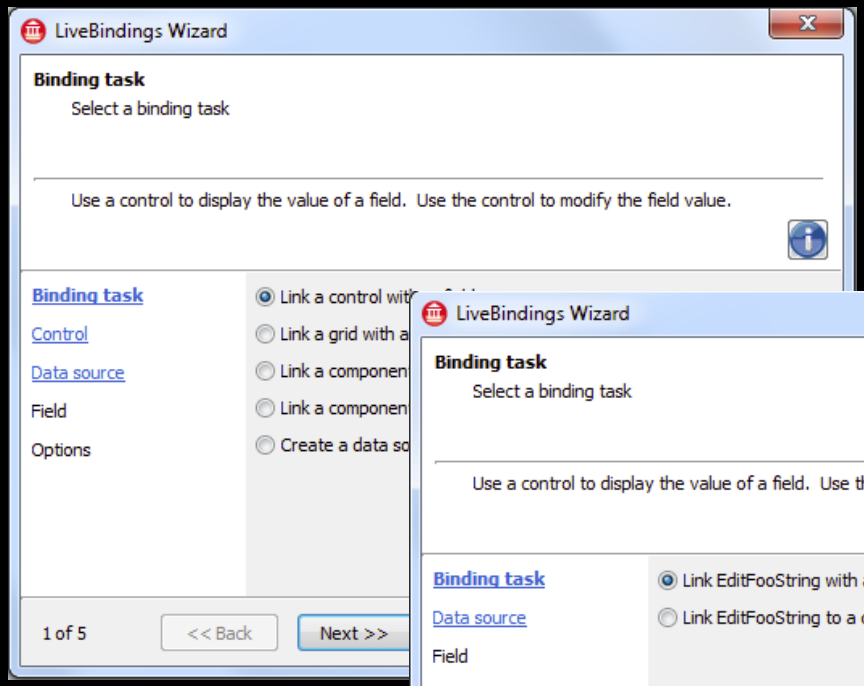
Application Prototyping

DEMO

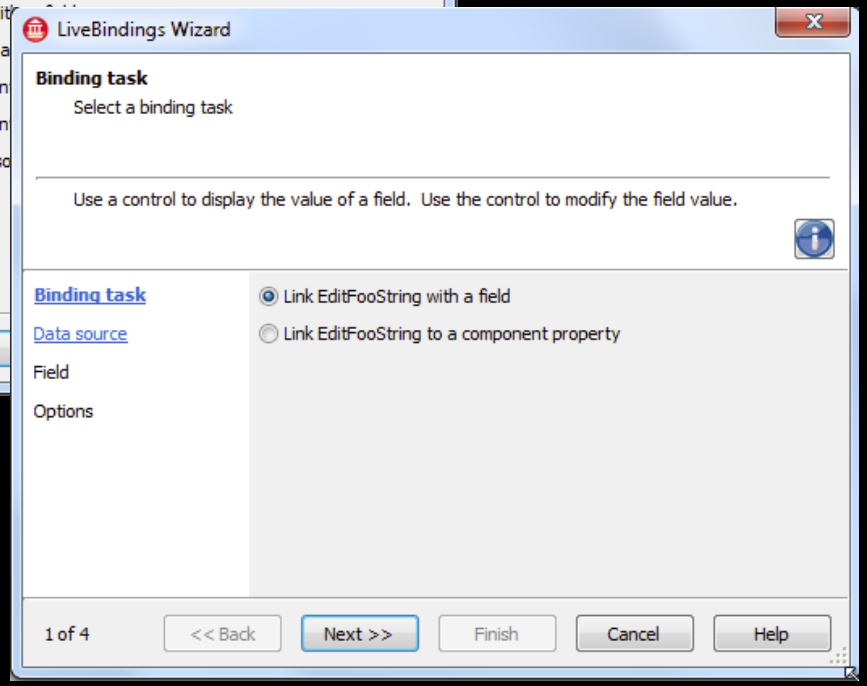


Context aware Wizards



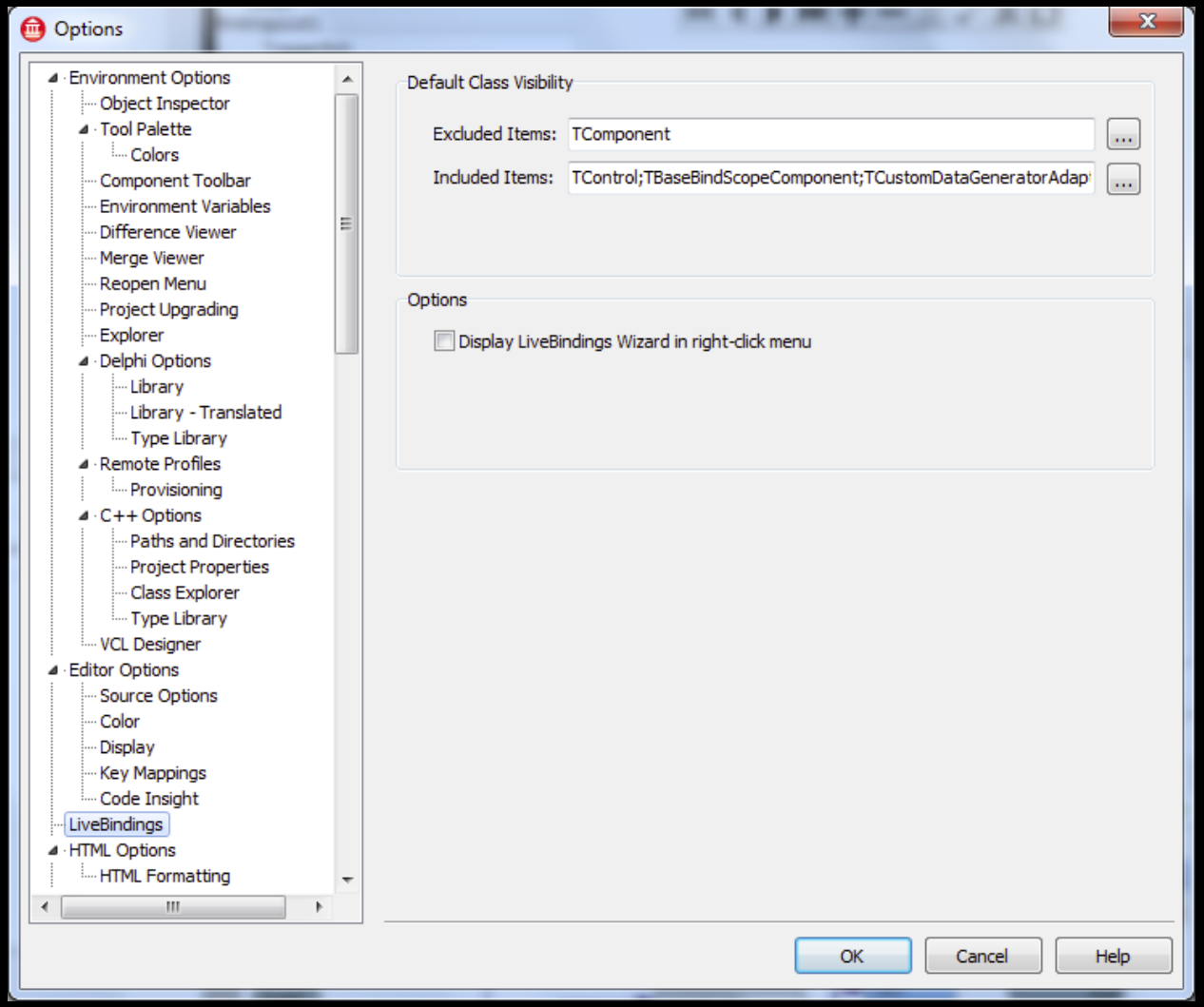


Form Wizard



Example with TEdit selected

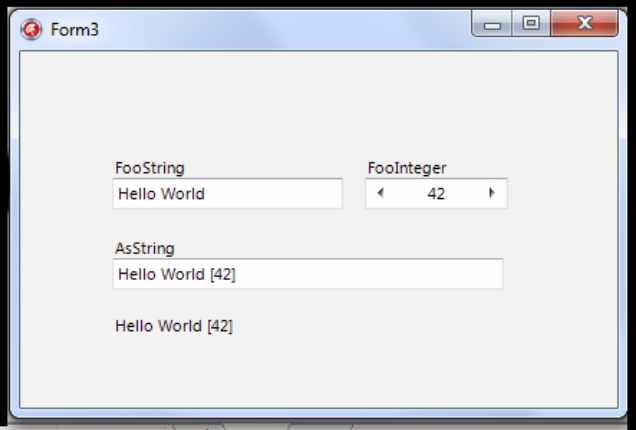
Tools > Options

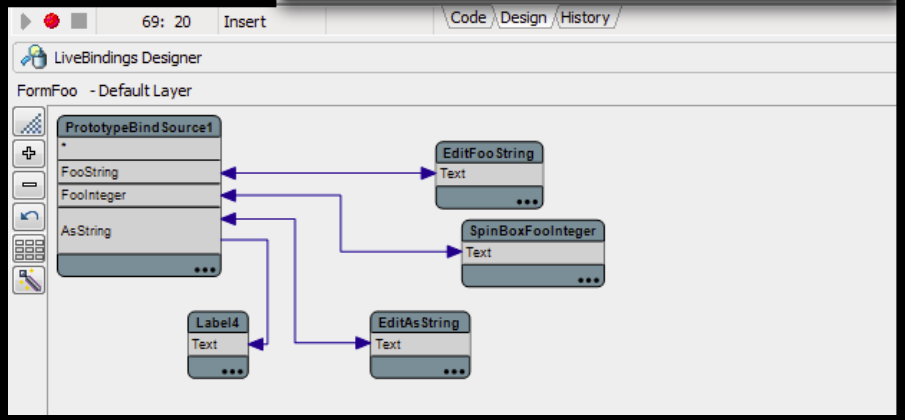


Lets see it in action!!

Hands on Examples

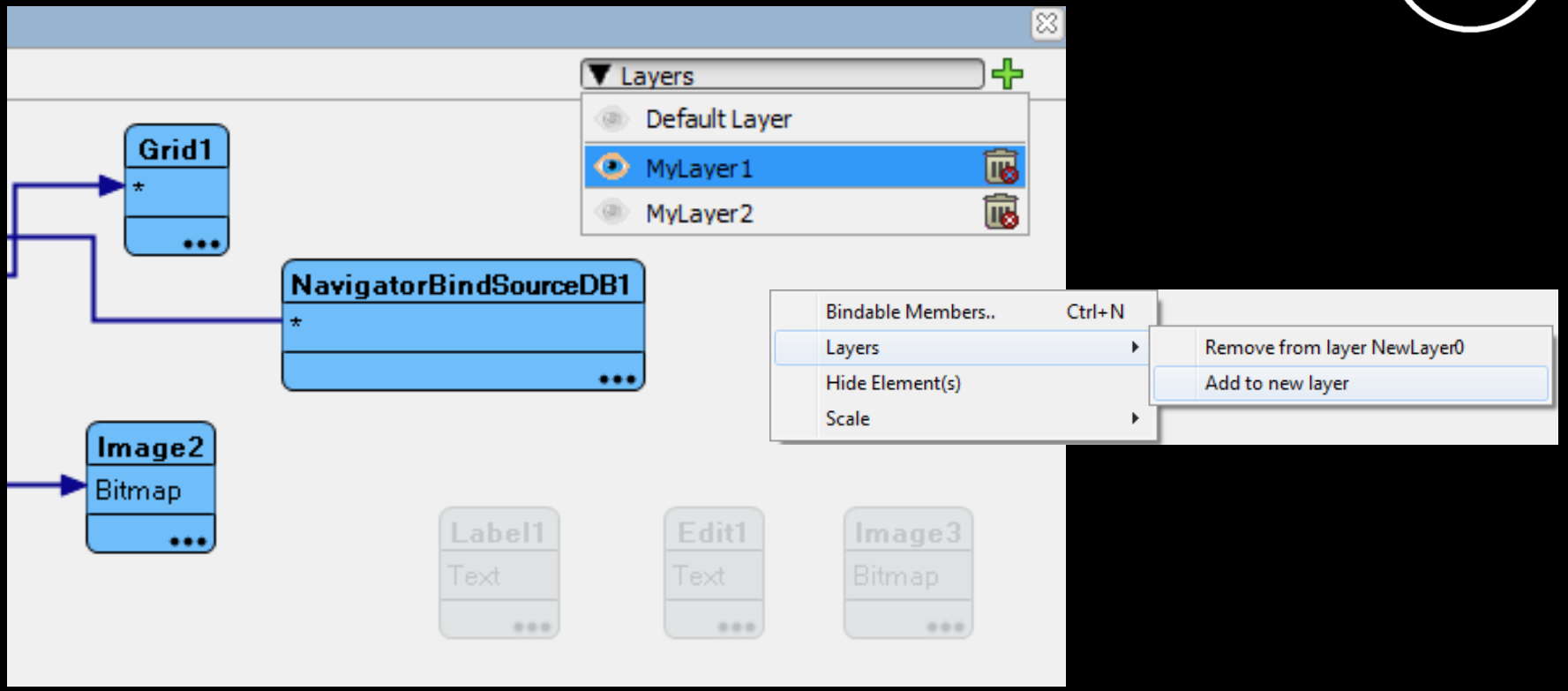
- Working with Components
- Working with TDataSet
- Working with Objects





DEMO

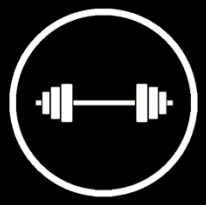
Layers Management



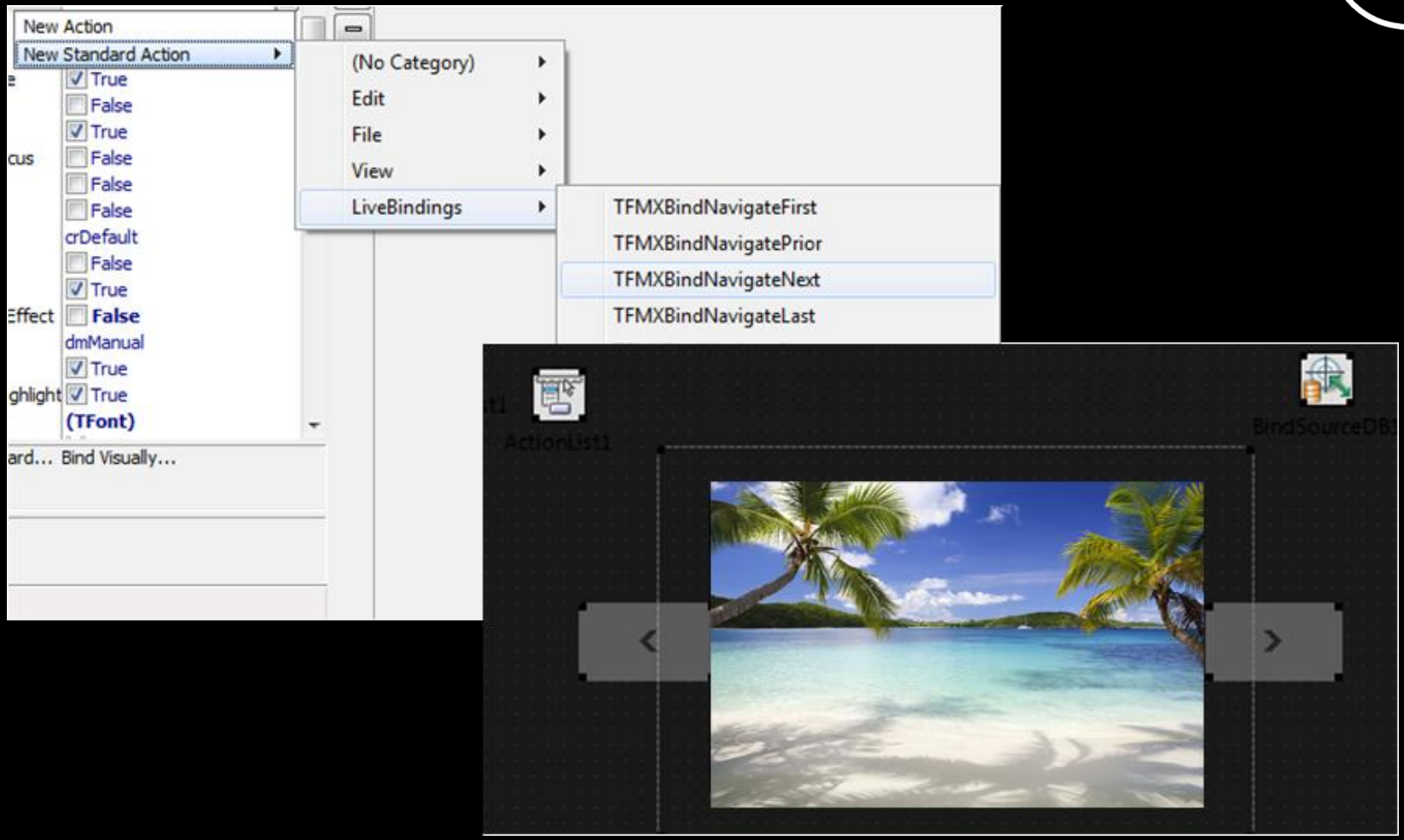
- Organize large numbers of bindings using Photoshop-like layers
- Quickly toggle visibility between layers
- Easily create your own layers
- View multiple layers at once

Layers Management

DEMO



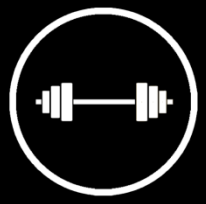
Actions



Easily use standard actions with LiveBindings

Actions

DEMO



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中場休息

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Intel & Atom Hardware Support
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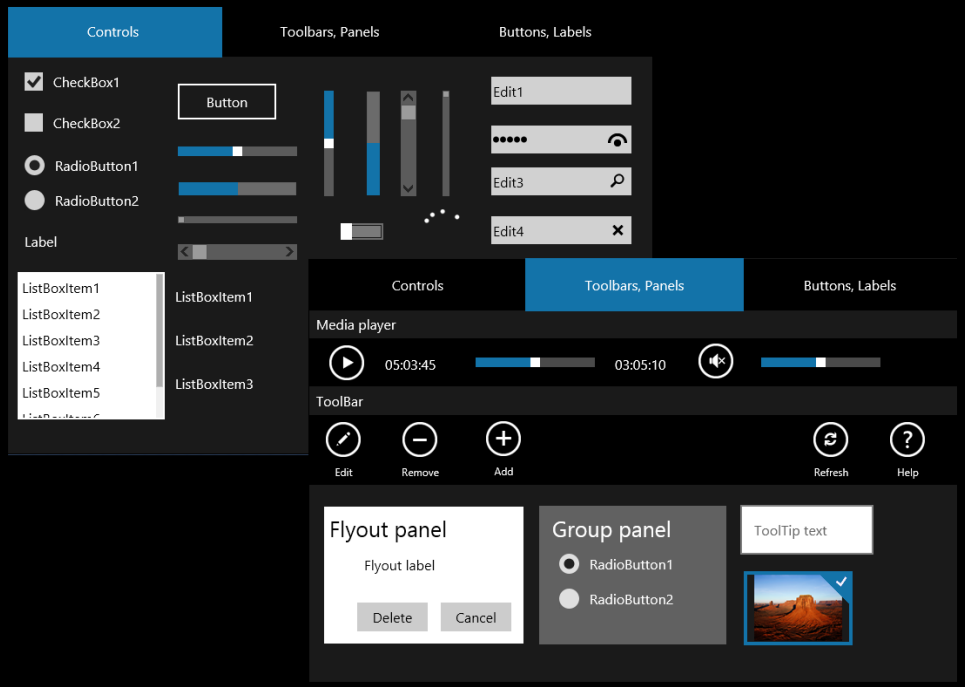
Windows 8 Style

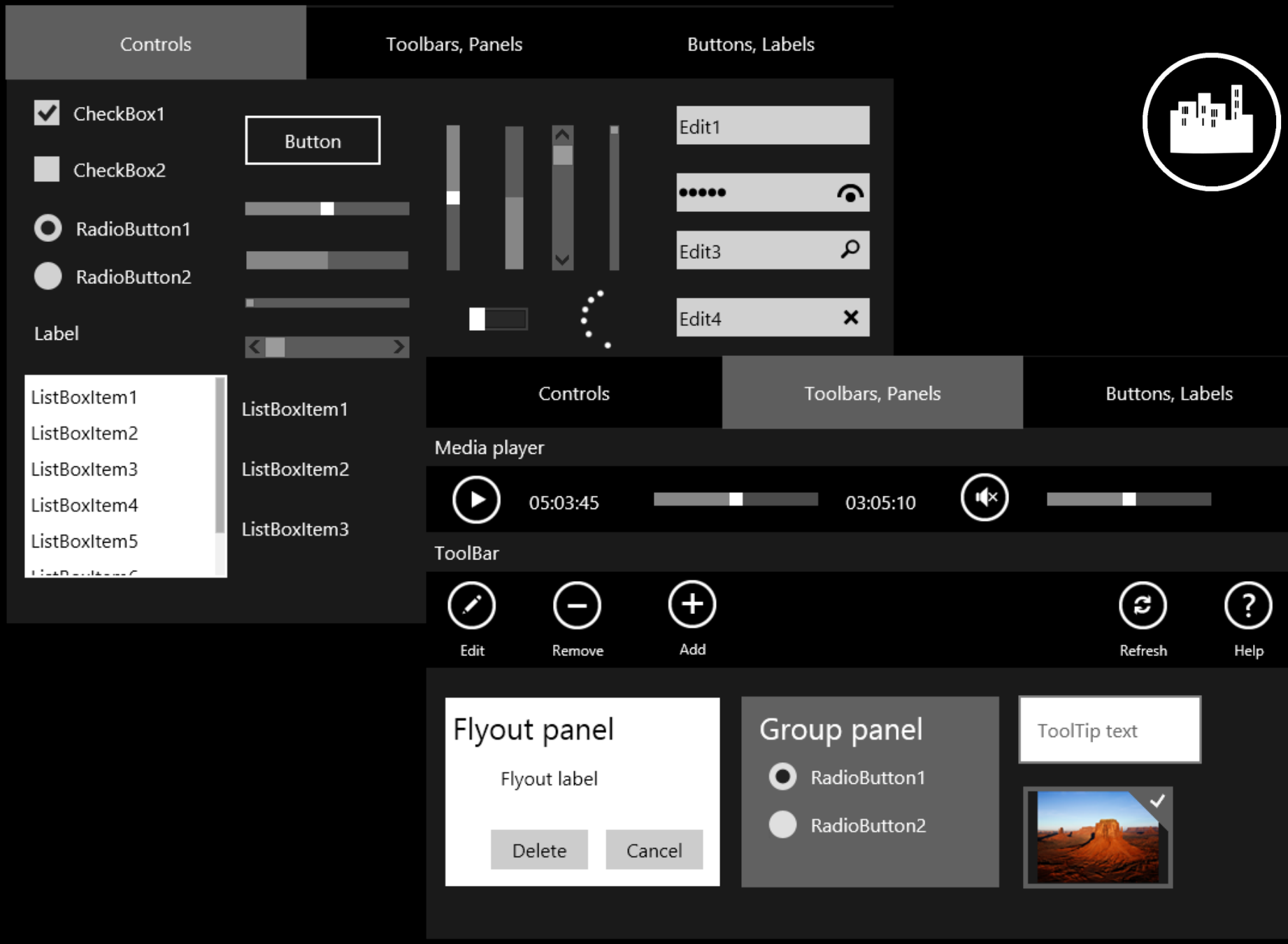
Windows 8 Metropolis Style

Button style lookup

4 Style color combos



Controls
Toolbars, Panels
Buttons, Labels
CheckBox1
CheckBox2
RadioButton1
RadioButton2
Label
Button
Edit1
Edit3
Edit4
ListBoxItem1
ListBoxItem2
ListBoxItem3
ListBoxItem4
ListBoxItem5
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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Edit4
ListBoxItem1
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ListBoxItem3
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ListBoxItem5
ListBoxItem1
ListBoxItem2
ListBoxItem3
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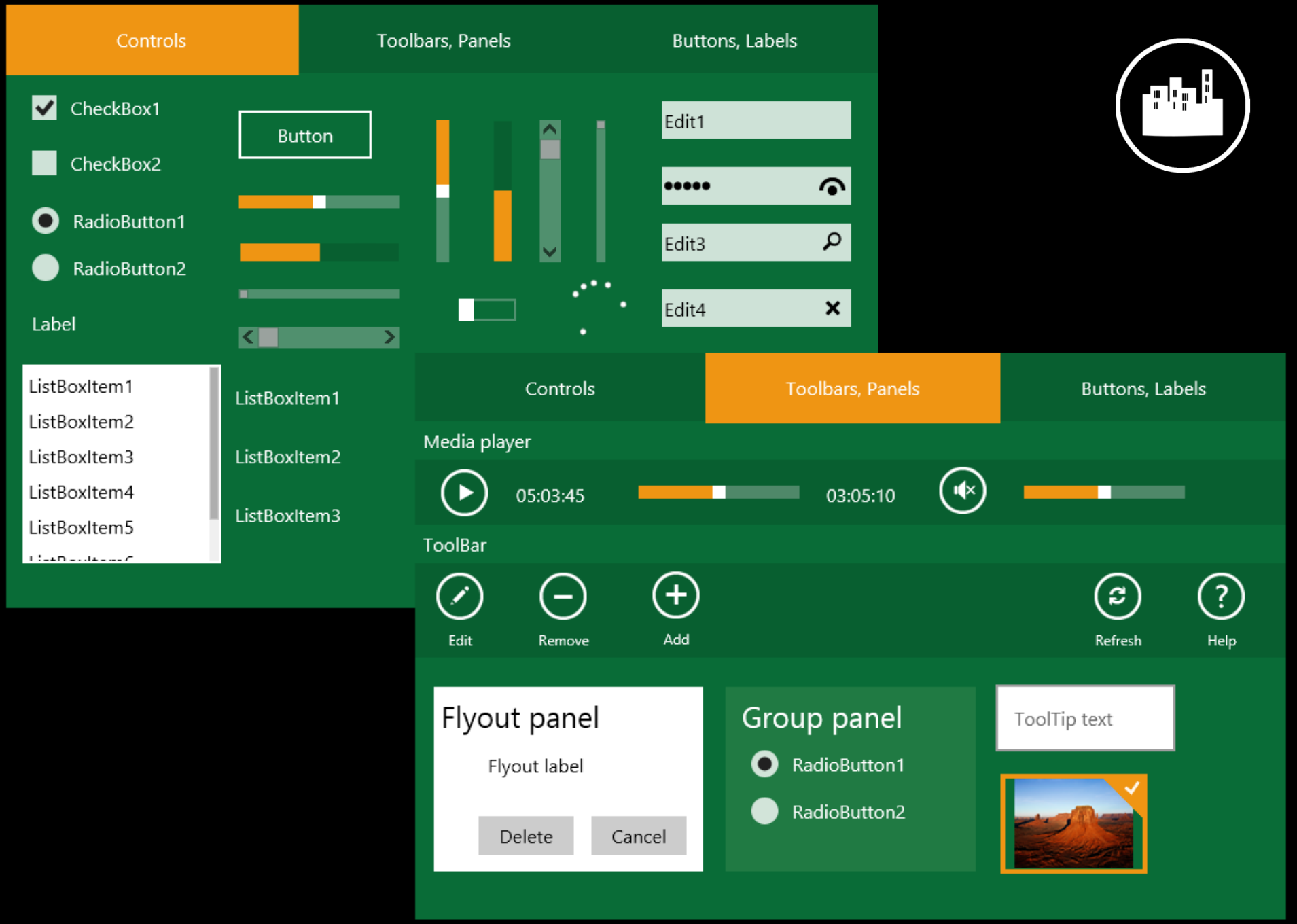
ToolTip text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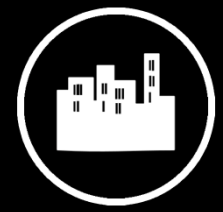
RadioButton2
ToolTip text

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

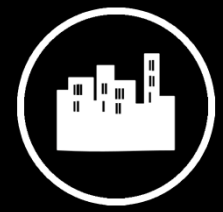
VCL and FireMonkey

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

DEMO

RAD Studio XE3

The Developer Force Multiplier

Windows 8

Mac OS X
Mountain Lion

C++

FM^2

Metropolis UI

HTML5

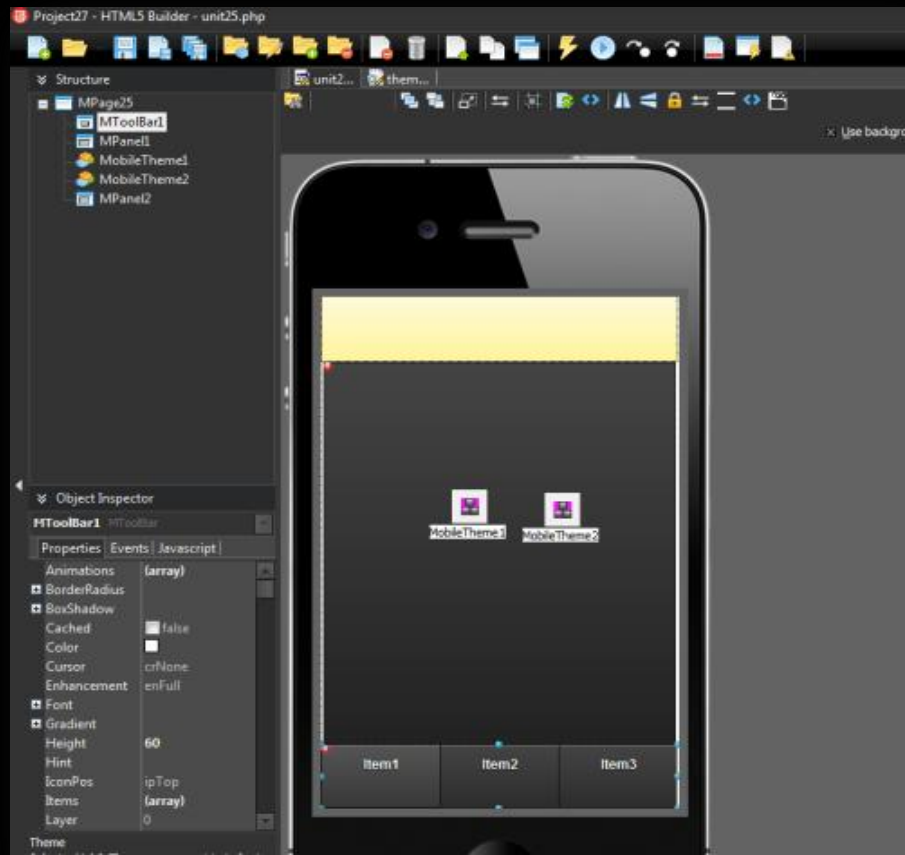
Mobile

Visual LiveBindings

HTML5

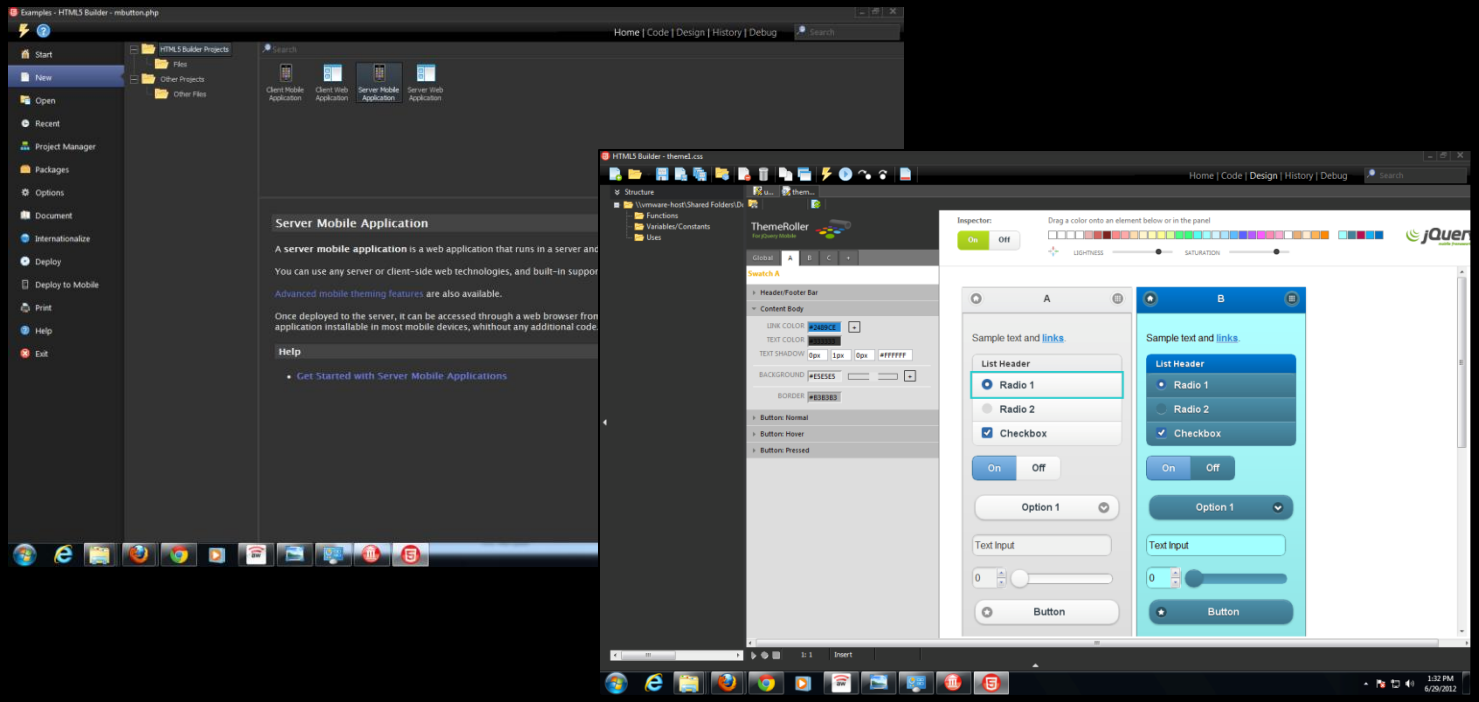
HTML5 Builder

Rapid visual development using today's Web technologies
Target Web, iOS, Android, BlackBerry and Windows Phone
Front end dev with HTML5, CSS3, and JavaScript
Server side dev with PHP
Mobile Device UI Styling
CSS3 Styling and Animations
Hundreds of visual components
Video, Audio, GPS, Camera, Accelerometers and more



HTML5 Builder

Workflow optimized UI



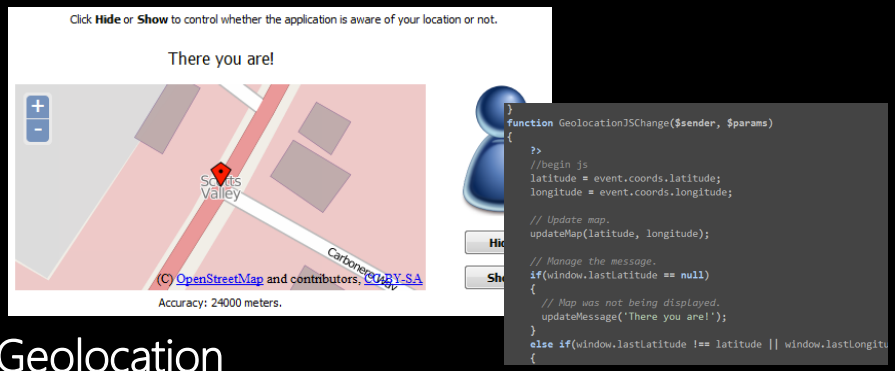
HTML5 Builder has been optimized for usability and provides powerful visual application development with hundreds of drag-and-drop components.

Context based workflows only display tools and menus that are applicable to the user's current action, making application development easier and faster than ever before.

HTML5 Builder

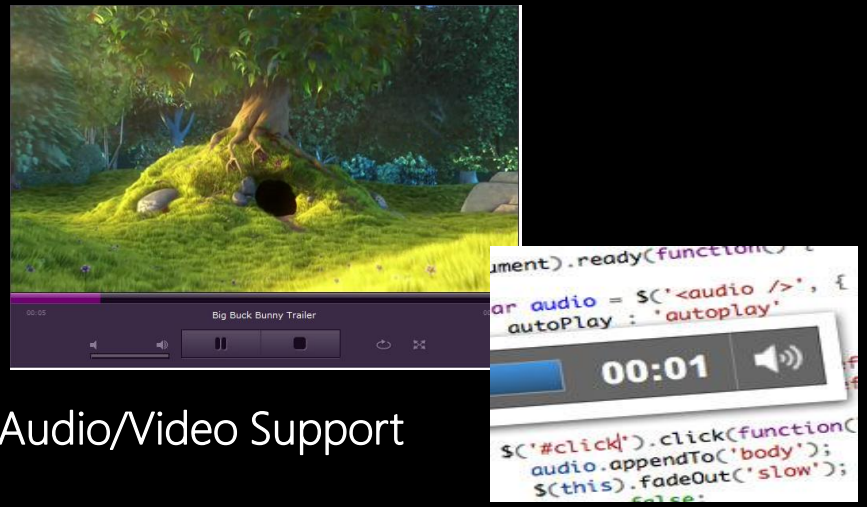
HTML5 Components

Canvas



Geolocation

Local Storage



Audio/Video Support

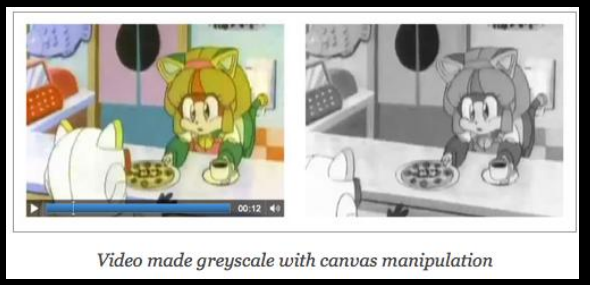
HTML5 Builder

<Canvas>

The HTML5 Canvas component provides a drawing interface for dynamically drawing and rendering 2D and 3D shapes and images using JavaScript.

Draw basic shapes, create fluid drawings and charts, add effects to photos and even apply animations and effects to videos.

You no longer need to rely on client-side plugins such as Flash to display dynamic content on websites and mobile devices.



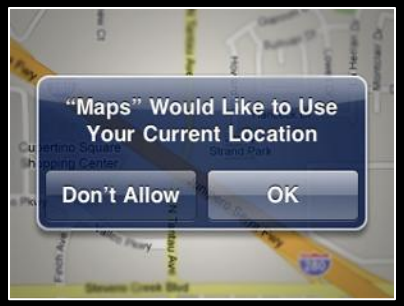
Video made greyscale with canvas manipulation

<Canvas>

DEMO

HTML5 Builder

Geolocation

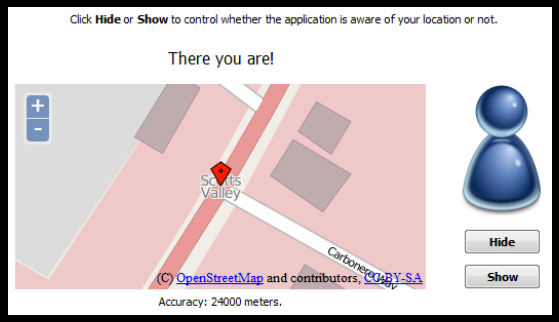



```
}
function GeolocationJSChange($sender, $params)
{
    ?>
    //begin js
    latitude = event.coords.latitude;
    longitude = event.coords.longitude;

    // Update map.
    updateMap(latitude, longitude);

    // Manage the message.
    if(window.lastLatitude == null)
    {
      // Map was not being displayed.
      updateMessage('There you are!');
    }
    else if(window.lastLatitude !== latitude || window.lastLongitu
    {
```

Take advantage of the powerful HTML5 Geolocation API using **HTML5 Builder** and make your web applications and mobile web apps more interactive.

The Geolocation component enables you to show the user's current location on a map, display location specific information to your customers and more.

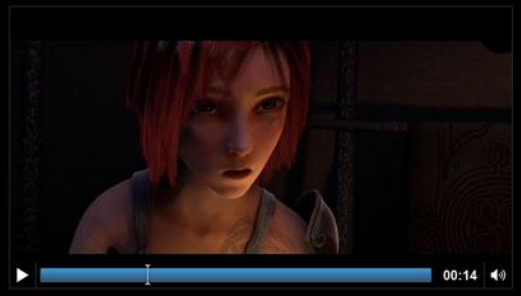
Use it in mobile web applications to show nearby events or on your website to get details on your customers' current location, connection speed and more to display location specific offers or provide localized support.



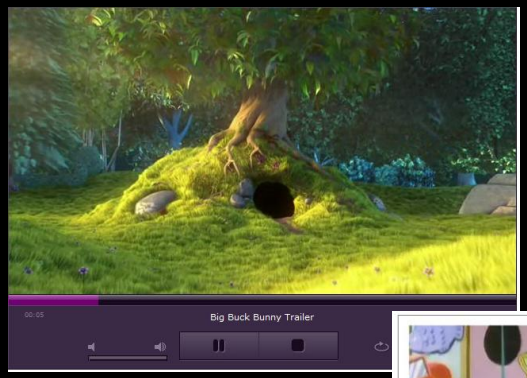
Geolocation DEMO

HTML5 Builder

<Audio> & <Video>



HTML5 Video & Audio Player



The HTML5 audio and video components make it easy to embed media in your web applications without requiring the user to install plugins like Flash to view them.

Videos and audio clips are rendered directly in the browser, displaying the browser's native media controls.

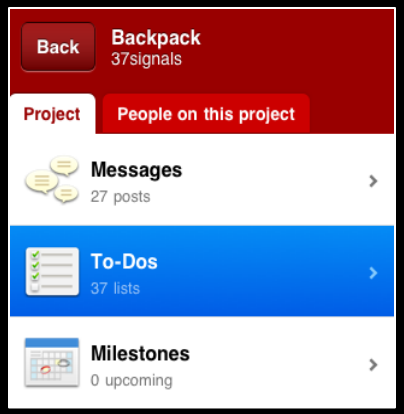
Easily play movies or audio tracks on your website, develop your own advanced media player with custom skins, or combine it with the canvas component to apply stunning visual effects to your videos. The possibilities are endless.

<Audio> & <Video>

DEMO

HTML5 Builder

Local Storage



Included as part of HTML5, the local storage api allows you to develop mobile web apps and websites that leverage the browser's storage capabilities instead of relying on third party databases.

Local storage allows you to store data in the web browser on the client's device can be accessed even after the browser is closed.

Local Storage can access up to 10 MB of space depending on the user's browser.

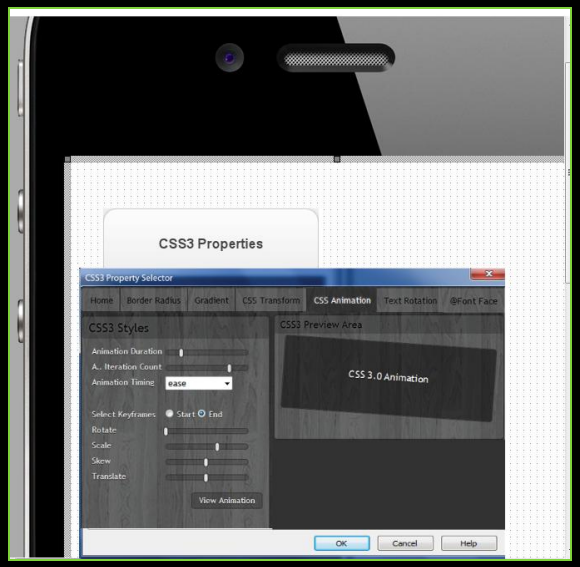
```
//begin js

window.localIsSupported = function() {
  try {
    return 'localStorage' in window && window['localStorage'] !== null;
  } catch (e) {
    return false;
```

Local Storage

DEMO

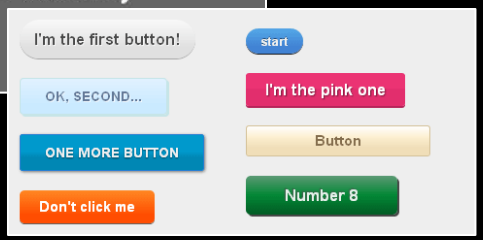
HTML5 Builder

CSS3 Styling and Animations



CSS3 provides advanced capabilities for creating custom user interfaces. With CSS3 support in **HTML5 Builder**, you can set and customize CSS3 properties for each user interface element.

HTML5 Builder also offers an intuitive visual interface for creating CSS3 animations and generates CSS3 code that can be viewed and edited in the Code Editor.



CSS3 Property Editors

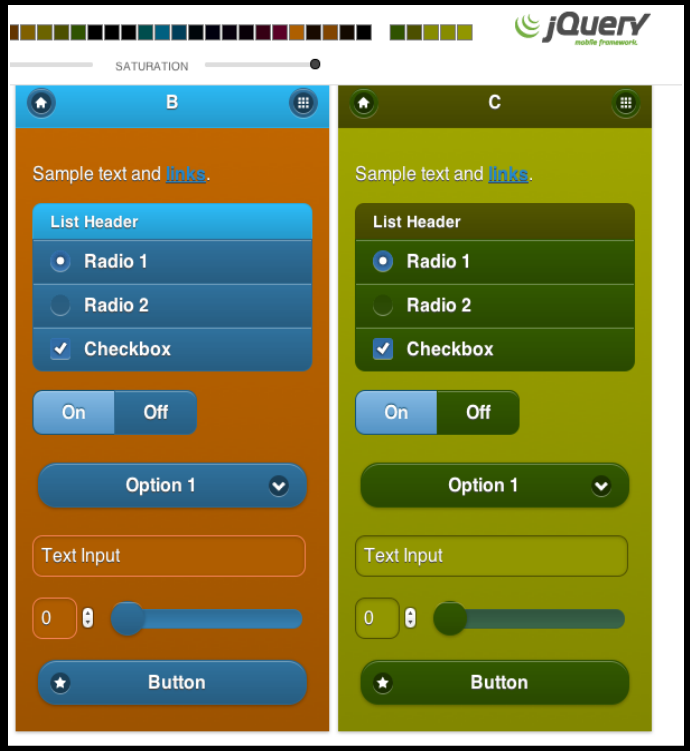
DEMO

CSS3 Animations

DEMO

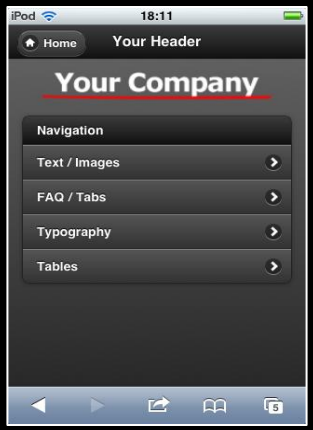
HTML5 Builder

jQuery Mobile UI Theming



The jQuery Mobile UI theming interface in **HTML5 Builder** allows you to easily create new color schemes for your mobile applications by dragging and dropping colors onto your UI controls.

After your have created your new theme, a CSS file is automatically generated that can be used to style a control or entire mobile application to your liking.

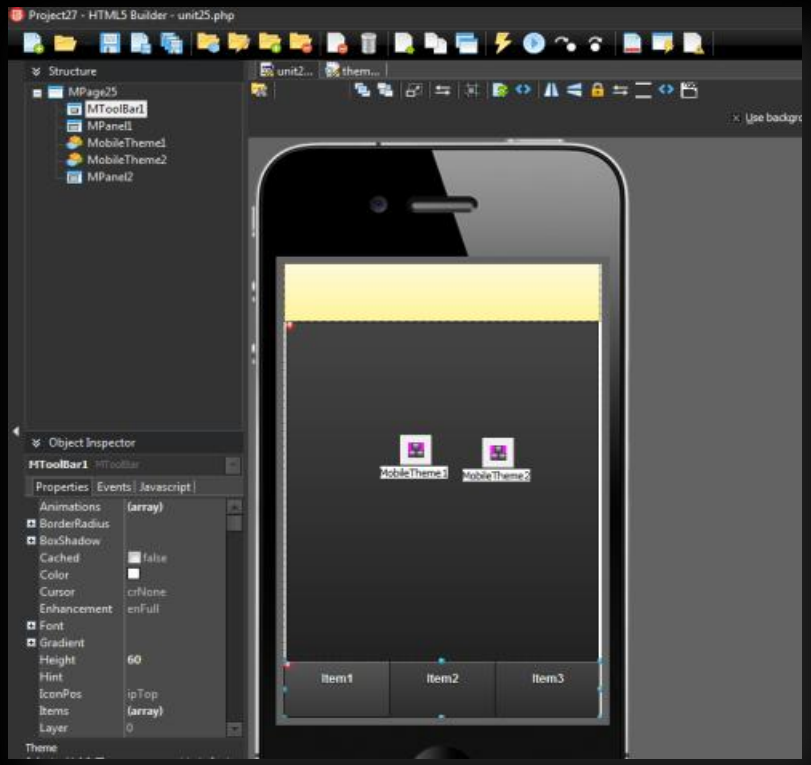


Mobile Theming

DEMO

HTML5 Builder

Multi Platform Mobile Development



Create mobile applications for iOS, Android, BlackBerry and Windows Phone using a single HTML5, JavaScript and CSS3 codebase.

Compile your mobile applications using PhoneGap and the native phone SDKs on your machine or compile in the cloud using the integrated PhoneGap Build system, without the need to install any SDKs on your machine.

PhoneGap:Build

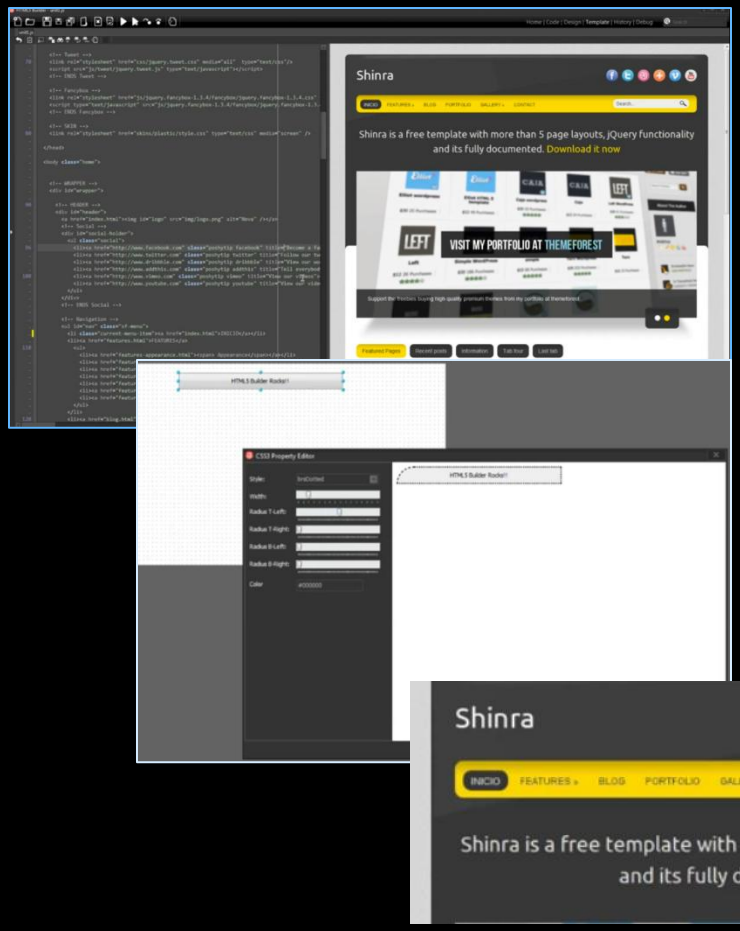
Write once. Compile in the cloud. Run anywhere.

Mobile Apps

DEMO

HTML5 Builder

Client Web Application with Live Preview



Write your own HTML and JS code or a use an existing template

See code changes live and get a live preview of your project

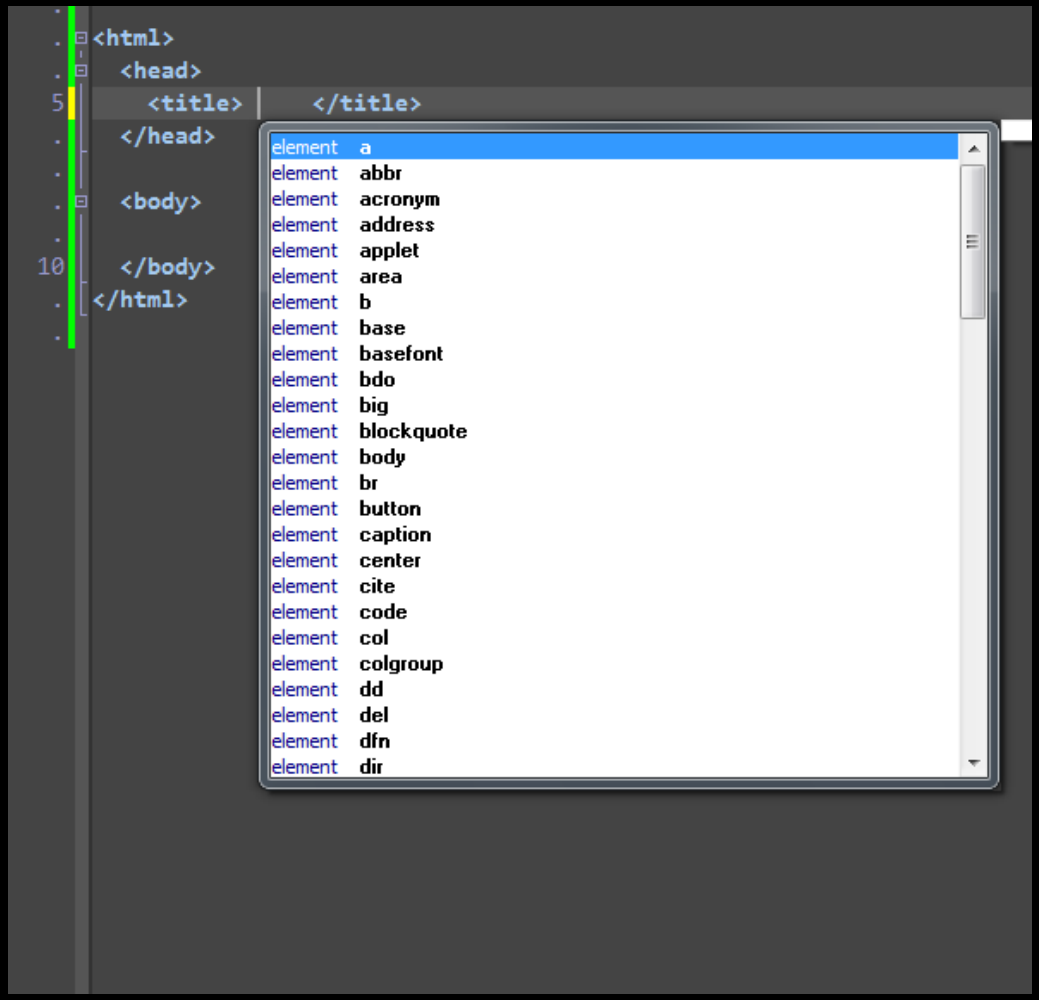
Design and customize existing HTML5 Builder UI components through CSS3 property and animation editors and embed them in your client page with live preview

Client Web Apps

DEMO

HTML5 Builder

HTML and Javascript Code Insight



HTML Code Insight and **JavaScript Code Insight** in HTML5 Builder provides developers with instant access to information as they code their application.

Code Insight offers code completion by displaying hints with relevant elements as the developer types and shows tool tips for expressions and symbols.

Code Insight

DEMO

C++

C++ 64 Demo

DEM

Mobile Studio

Mobile Studio

Preview

RAD Studio XE3

The Developer Force Multiplier

Windows 8

Mac OS X
Mountain Lion

C++

FM^2

Metropolis UI

HTML5

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Visual LiveBindings

Questions?