



RAD Studio XE5 Product Address

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What is RAD Studio XE5?

Multi-Device means you don't have to support multiple development projects to deliver your app natively on multiple platforms (Android, iOS, Windows, and Mac).

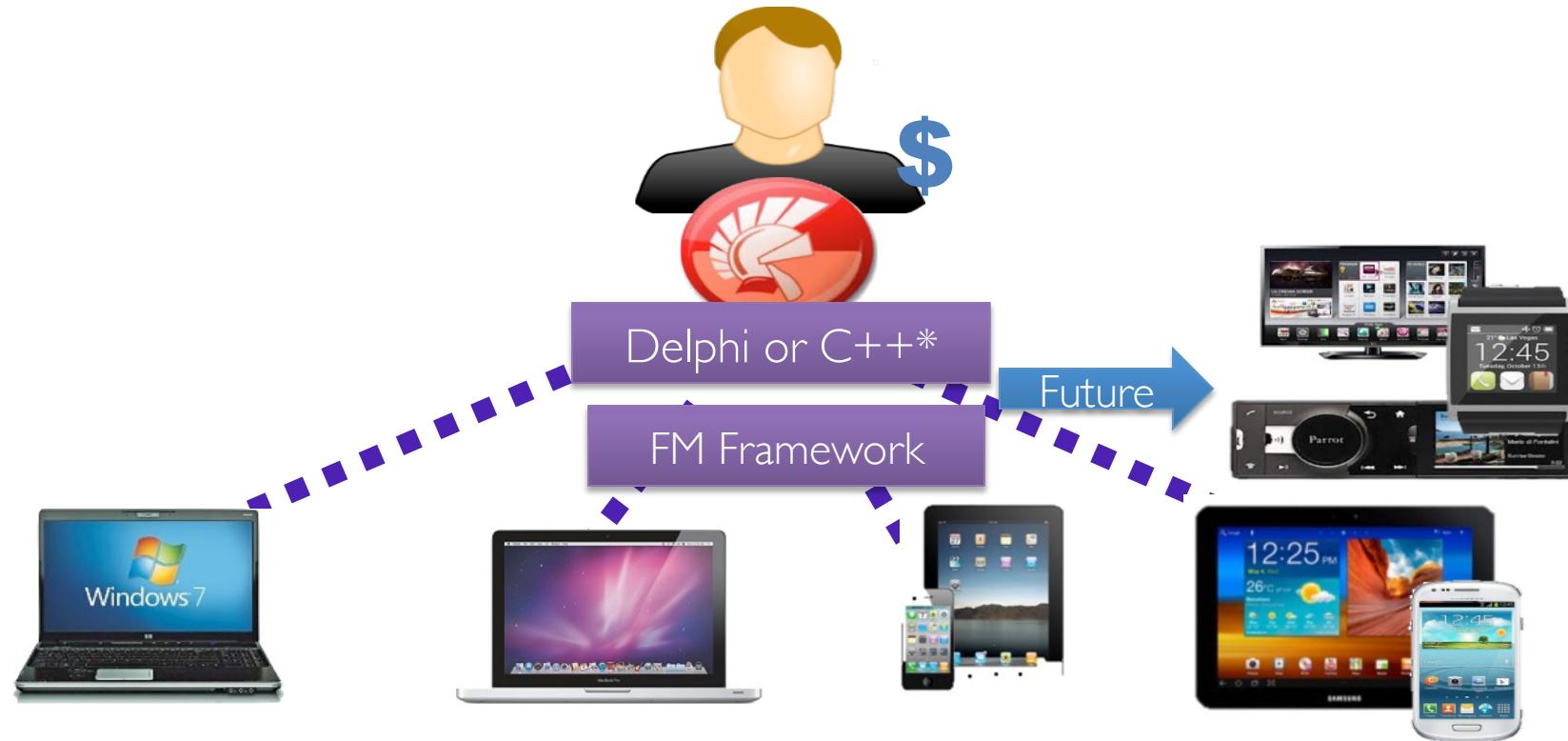
True Native app development lets you deliver script-free device native apps optimized for each underlying hardware platform – creating faster, richer apps that end users love.

The Fastest Way to create iOS and Android apps with visual development using a complete application framework.

Inherent Security is built in with natively secure apps by coding your apps to run directly on the device and not using targeted virtual runtimes.

Multi Device Application Platform means out of the box connectivity to major Enterprise database, on premise multi-tier middleware, and connectors to mBAAS services

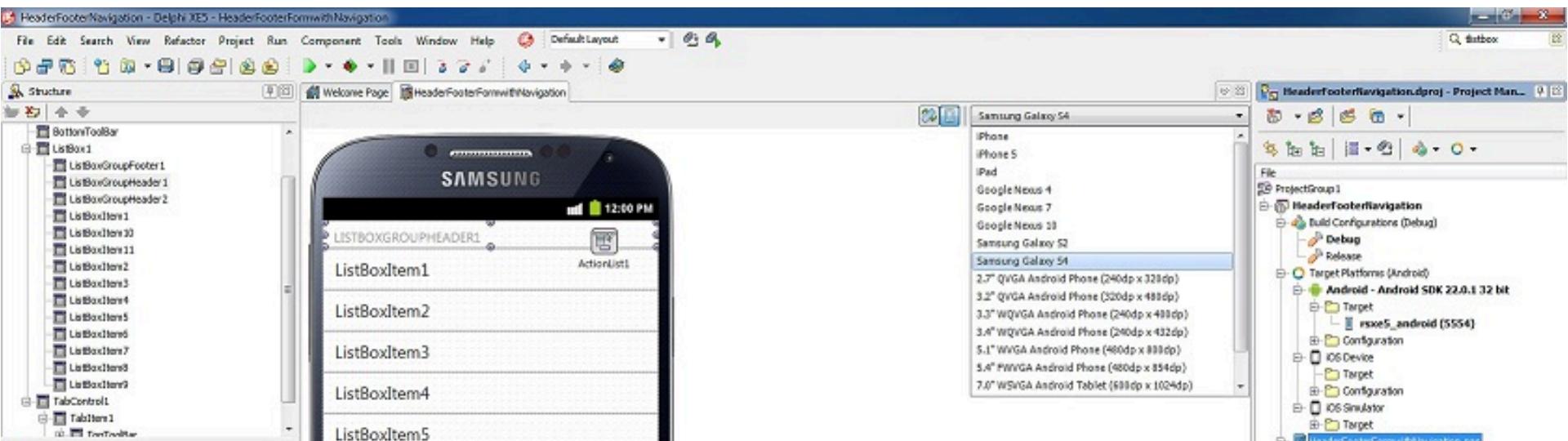
RAD Studio XE5



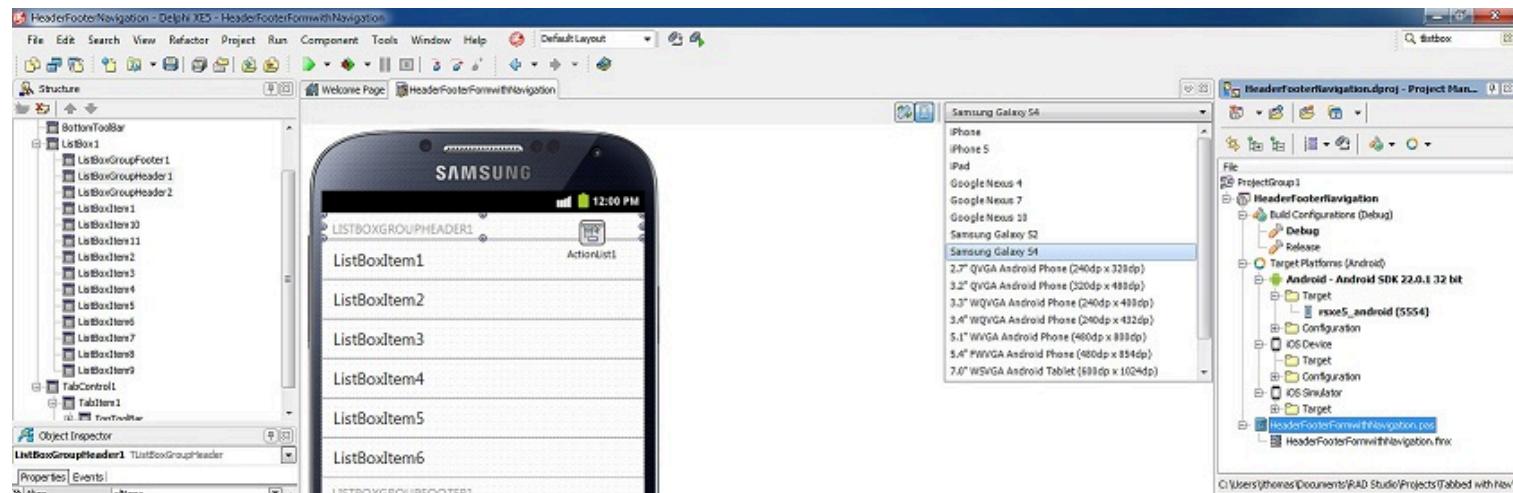
One team, One codebase

Delphi FireMonkey on Android and iOS

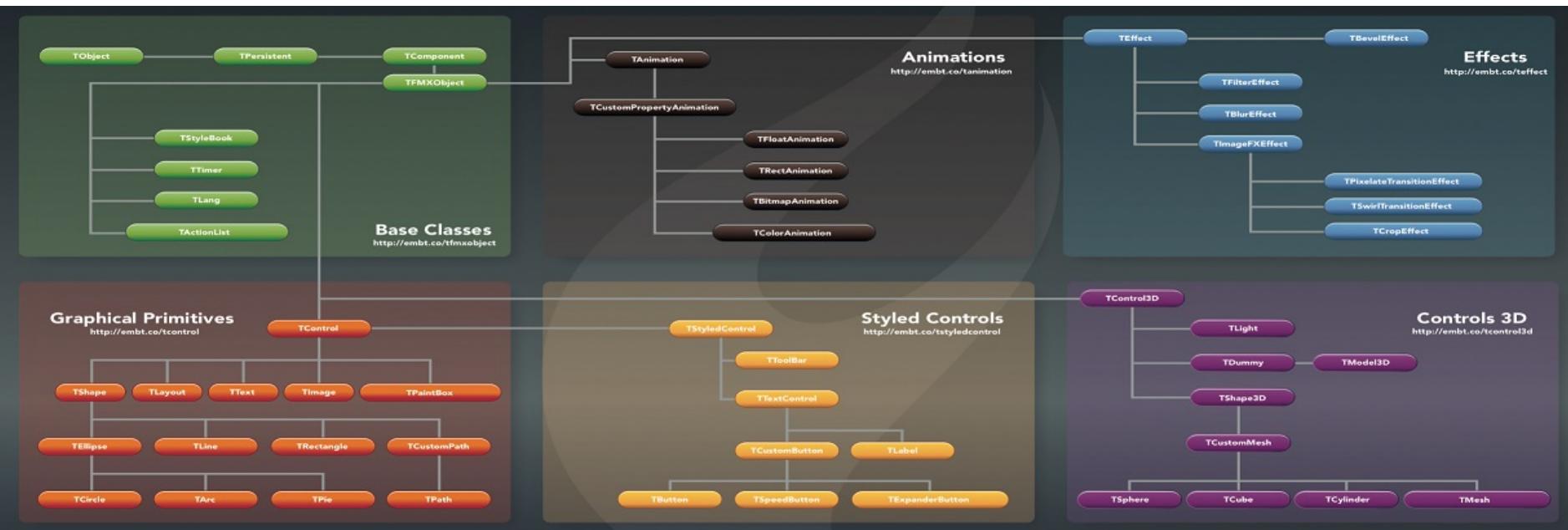
- “Native” and Custom Styles
- True Native Apps
- Delphi components and development model



Visual Development

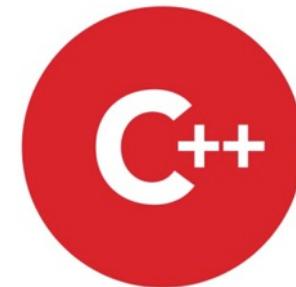


Component-Based Framework

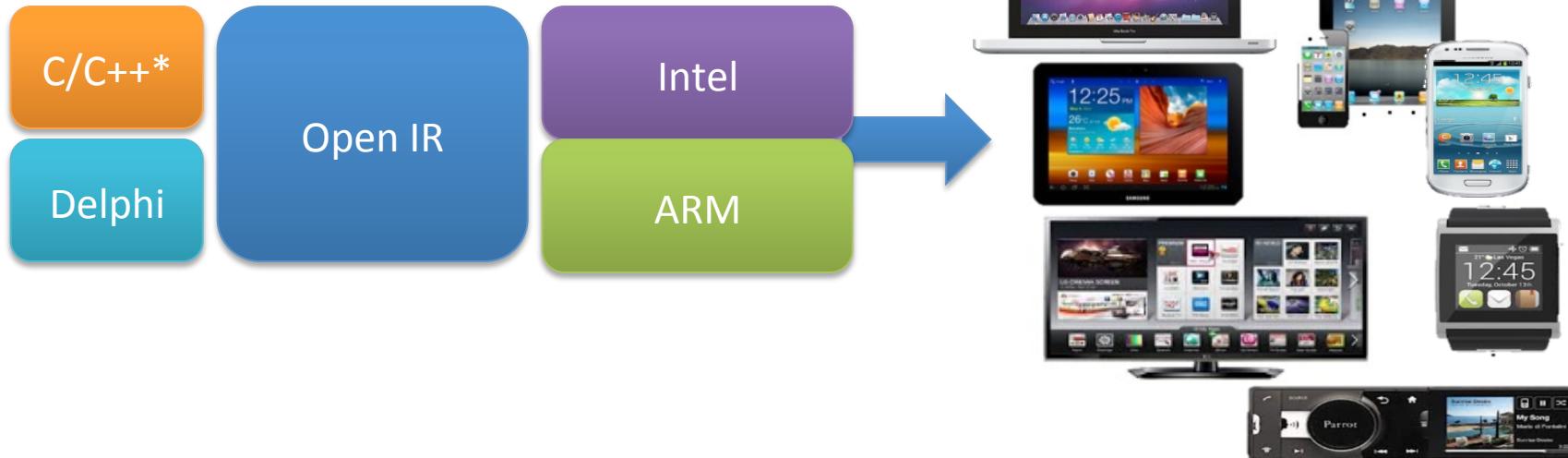


Modern Language Features

- Property-Method-Event
- Automatic Reference Counting
- Interfaces
- Attributes
- Generics/Collections
- Anonymous Methods (Lambda functions/closures)
- Rich RTTI (introspection/reflection)



Common Compiler Architecture



Cross compilation and Packaging

App Sources

FM Framework

Cocoa SDK

Native Developer Kit

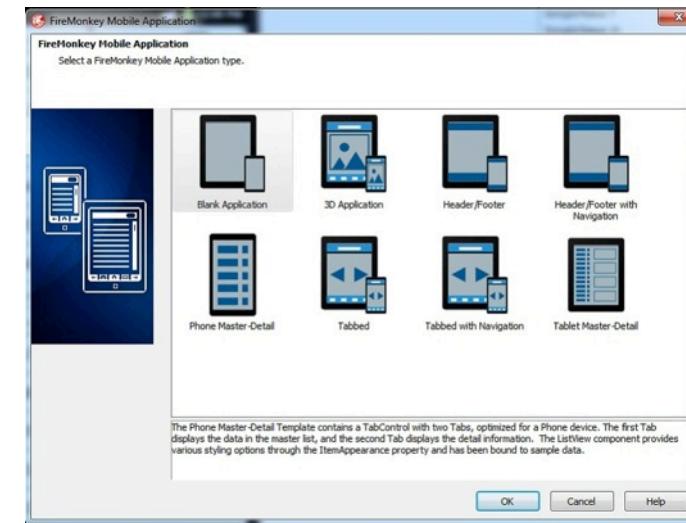
.app in IPA

.so in APK



Built-in Mobile Application Wizard

- Start with a blank HD or 3D FireMonkey application
- Choose from Tabbed Application, Header/Footer and Master/Detail Templates



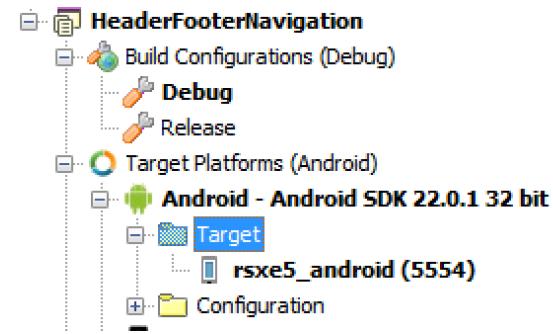
IDE deployment options for Android

Deploy Android apps to the Emulator

- Any AVD device

Deploy Android apps to the Device

- Debug
 - debug/deploy to device
- Ad-hoc
 - distribute APK anywhere
- App Store
 - deploy to an Android app store like Play or Amazon



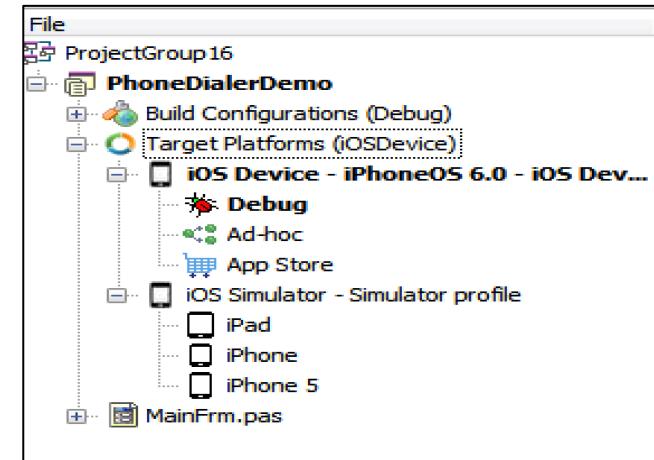
IDE deployment options for iOS

Deploy iOS apps to the Simulator

- iPhone (Retina/non-Retina)
- iPhone 5 (Retina/non-Retina)
- iPad (Retina/non-Retina)

Deploy iOS apps to the Device

- Debug (debug/deploy to device)
- Ad-hoc (distribute within own enterprise)
- App Store (deploy to the App Store)

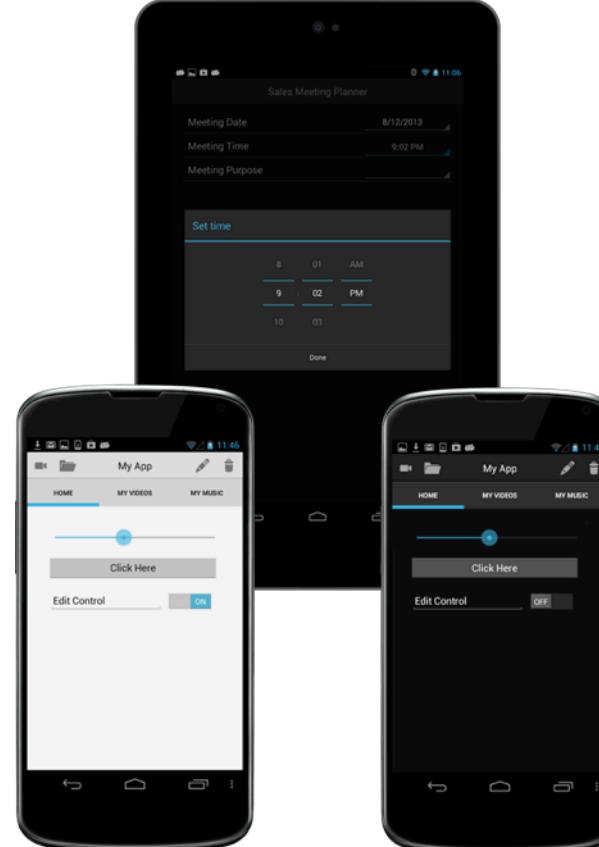


Defining Application Settings

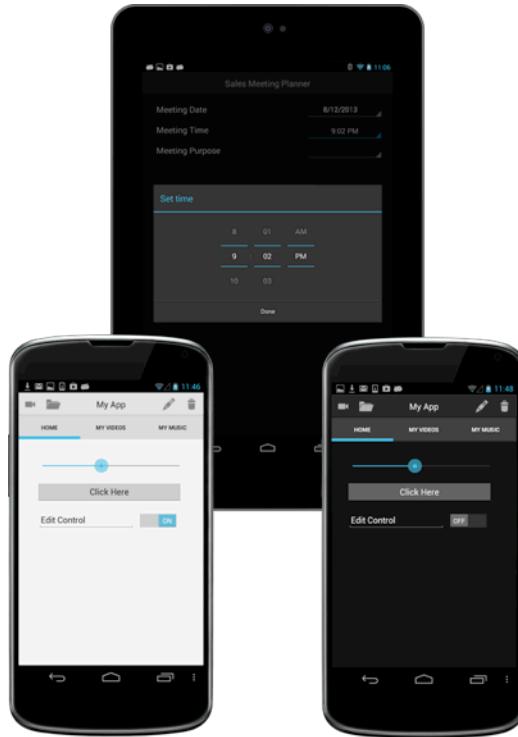
- Define device support in Project->Options
- Select app icons for app stores (for multiple resolutions) in Project-> Options



Native Styling

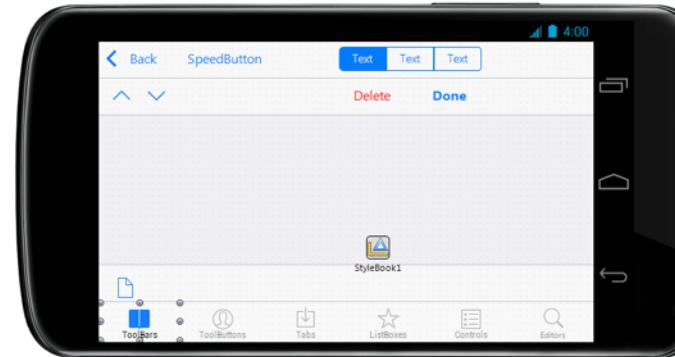
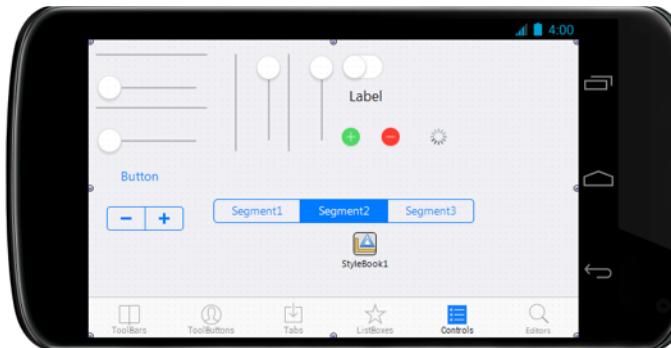
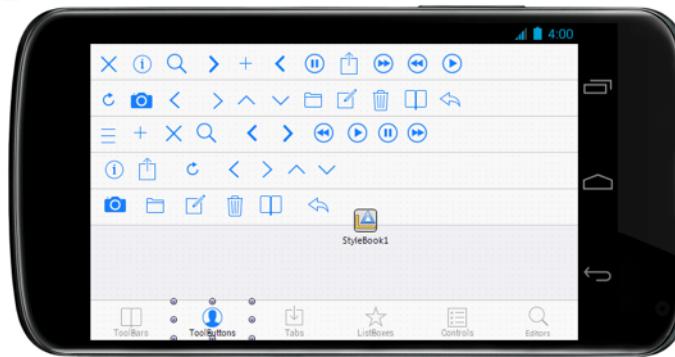
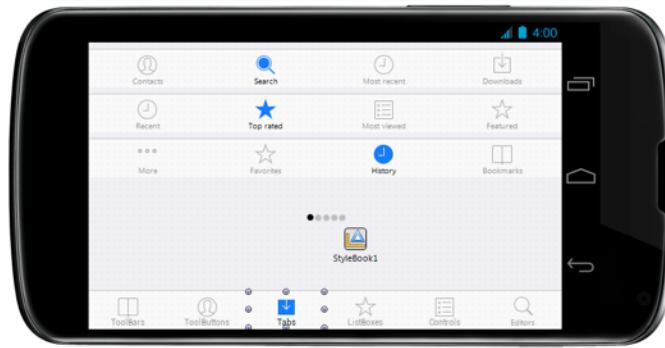


Android Styles



- Holo Light (default Android style)
- Holo Dark (custom Android style)
- Both styles include built-in support for all resolutions supported on Android (1x – 3x)

iOS 7 Style



Will be made available soon after iOS 7 is publicly available

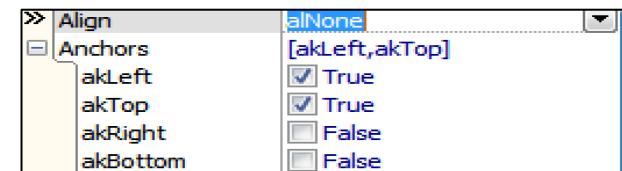
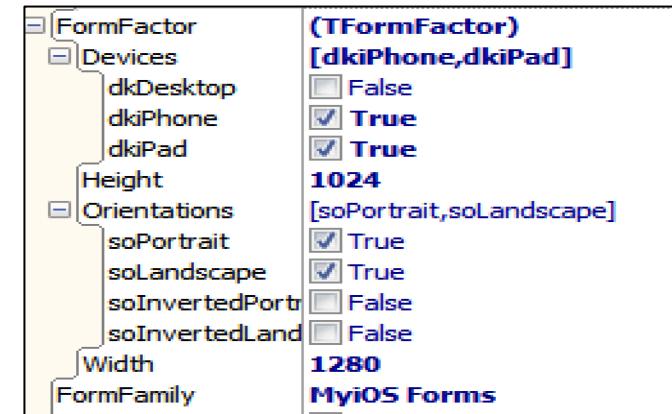
Native controls

- Message alerts
- Custom Picker
- Date Picker
- Phone Dialer
- iOS Keyboards
- Text Editing for TMemo and TEdit
 - Cut/Copy/Paste/Zoom



Layout Management

- Alignment
- Anchors
- Form Family for loading the correct form depending on the target device when developing different forms for phones vs tablets and Landscape vs Portrait



Gestures

- Swipe
- Tap
- Pinch & Zoom
- Tap & Hold
- Double-Tap



Media Library Actions



- Accessing the Camera App
- Accessing the Camera Roll
- Sharing content i.e. photos via Message (SMS), Mail, Facebook, Twitter etc.
- Slide Transitions for Tabs

(No Category) ▾

Edit ▾

Window ▾

File ▾

Tab ▾

View ▾

Media Library ▾ ▾ TTTakePhotoFromLibraryAction

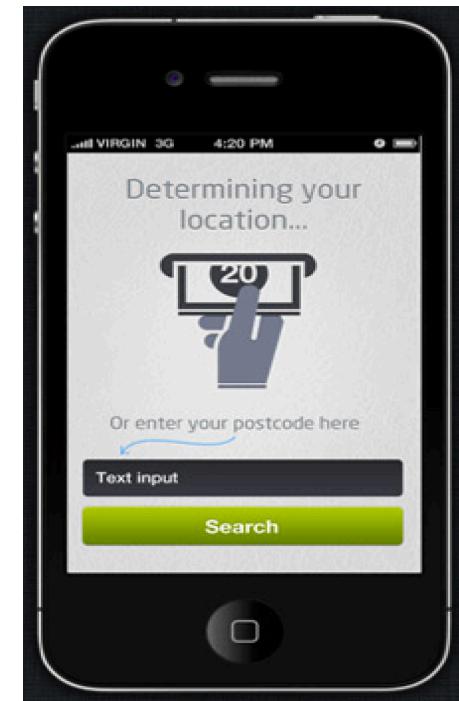
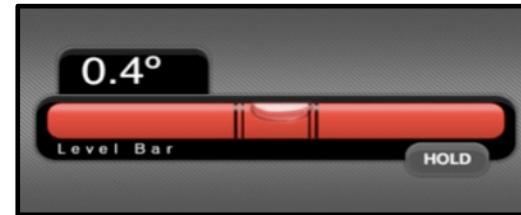
LiveBindings ▾ ▾ TTTakePhotoFromCameraAction

TShowShareSheetAction

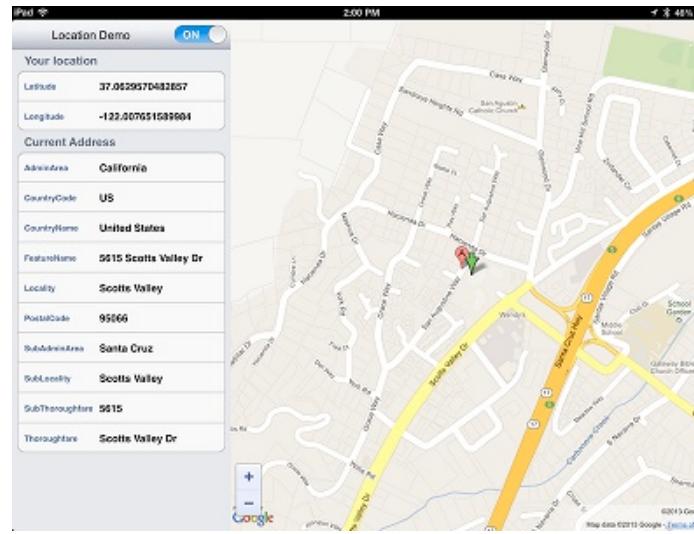
A screenshot of a Mac OS X context menu. The menu items are: (No Category), Edit, Window, File, Tab, View, Media Library, and LiveBindings. Under View, there are three submenu items: TTTakePhotoFromLibraryAction, TTTakePhotoFromCameraAction, and TShowShareSheetAction. The "Media Library" item is highlighted with a blue border.

Sensor Components

- Location Sensor (GPS)
- Motion Sensor (Accelerometer)
- Orientation Sensor (Gyroscope)



Location Sensor



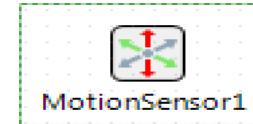
Commonly used in applications that require location awareness

- Get location of your iOS device using latitude and longitude
- Use Reverse Geocoding to convert location data to a readable address
- Works across Win/Mac/iOS
- Can be used with the WebBrowser component to display a location

Motion Sensor (Accelerometer)

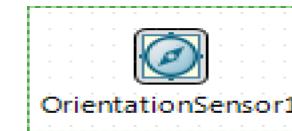
Used to detect motion in your application as you move your device

- Get Acceleration Values and Angle Acceleration Values (X, Y, Z)
- Determine Speed
- Determine Motion



Orientation Sensor (Gyroscope/Compass)

- Get X,Y,Z tilt values
- Get X, Y, Z distance values



Mobile Services

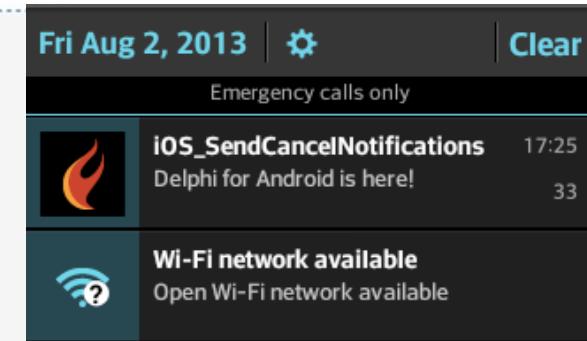
- Notification Center
- ... and more



Notification Center

- New FireMonkey Component in XE5
- Supports various notification types on iOS, Android and Mac OS X

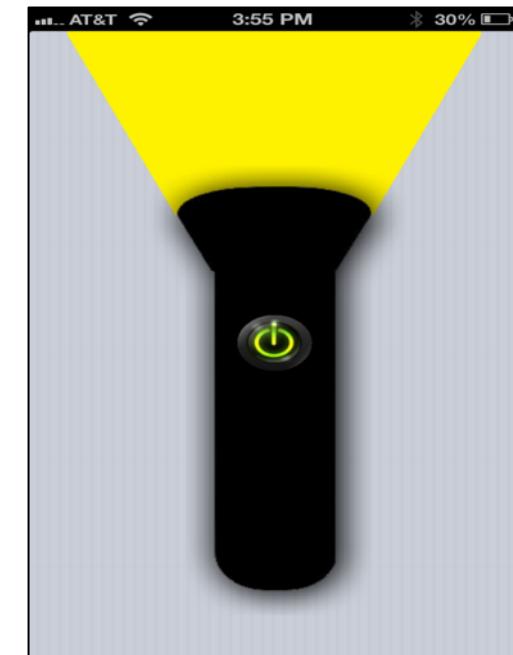
```
procedure TForm1.ScheduleNotification;
var
  MyNotification: TNotification;
begin
  MyNotification := NotificationCenter1.CreateNotification;
  try
    MyNotification.Name := 'MyNotification';
    MyNotification.AlertBody := 'Delphi for your mobile device is here!';
    // Fired in 10 seconds
    MyNotification.FireDate := Now + EncodeTime(0, 0, 10, 0);
    // Send notification to Notification Center
    NotificationCenter1.ScheduleNotification(MyNotification);
  finally
    MyNotification.DisposeOf;
  end;
end;
```



Camera

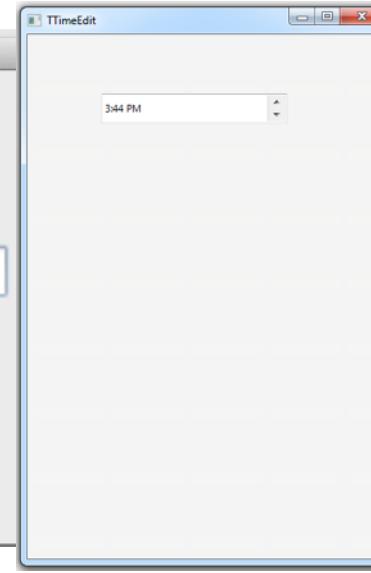
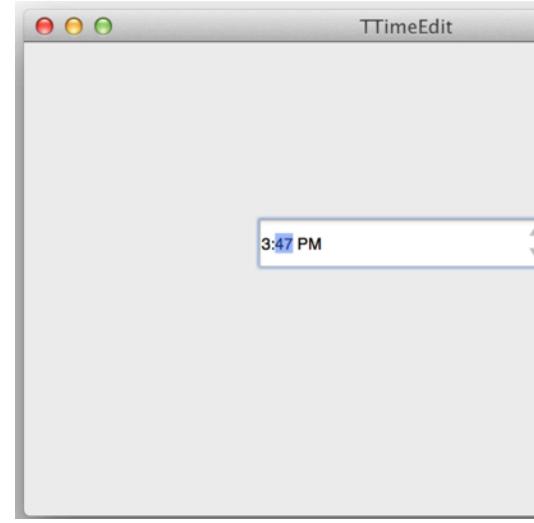
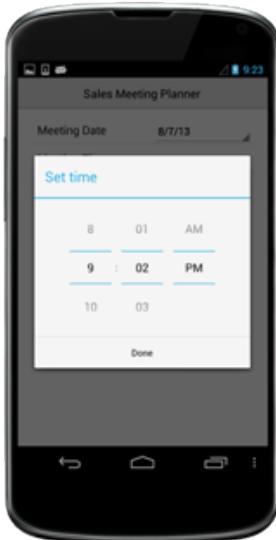
Provides access to camera sensors:

- activate flash
- get sensor position etc.
- access front/back camera
- take pictures



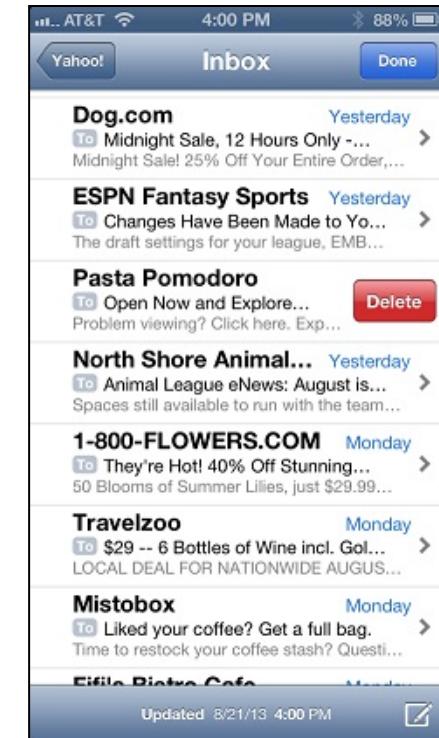
TTimeEdit

- New FireMonkey Component in XE5
- Supported on Windows, Mac, iOS and Android
 - Native pickers on iOS and Android



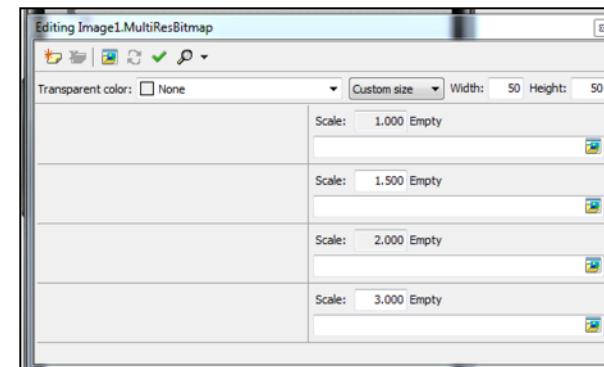
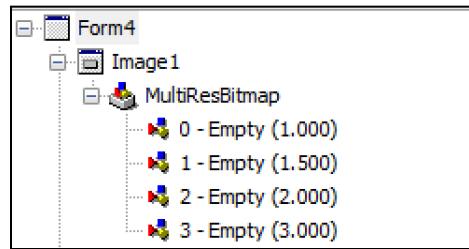
TListView Features in XE5

- Swipe to Delete functionality built-in
- Multiple Display and Edit Modes
- Various List Accessory Styles
- Edit Mode Animations
- Search filtering enabled
- LiveBindings enabled



Multi-Resolution Image Support

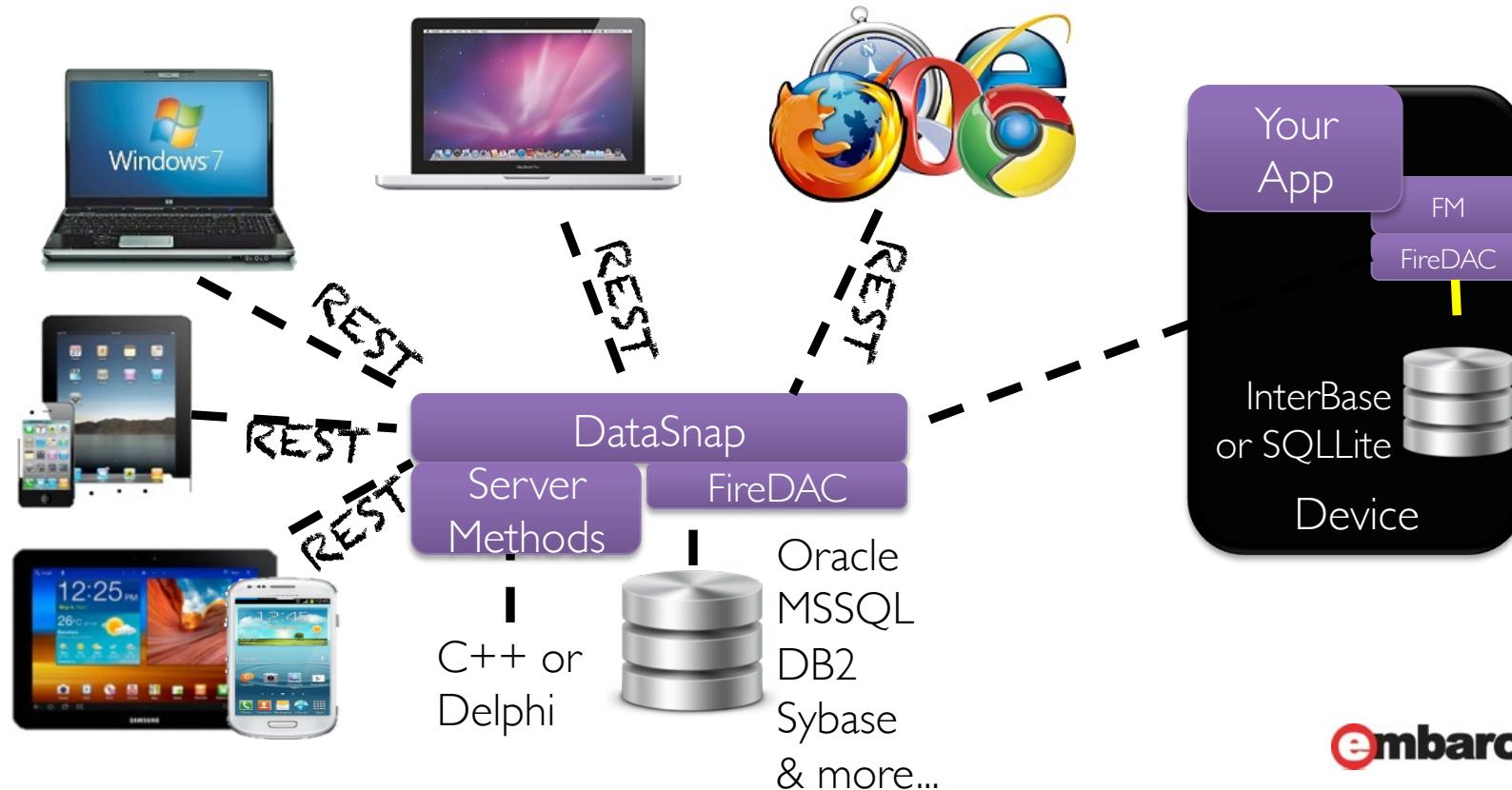
- TImage has been updated
- MultiResBitmap property has been added
- 1x and 2x options are shown by default
- Users can easily add their own resolutions, i.e. 1.5x, 3x etc.

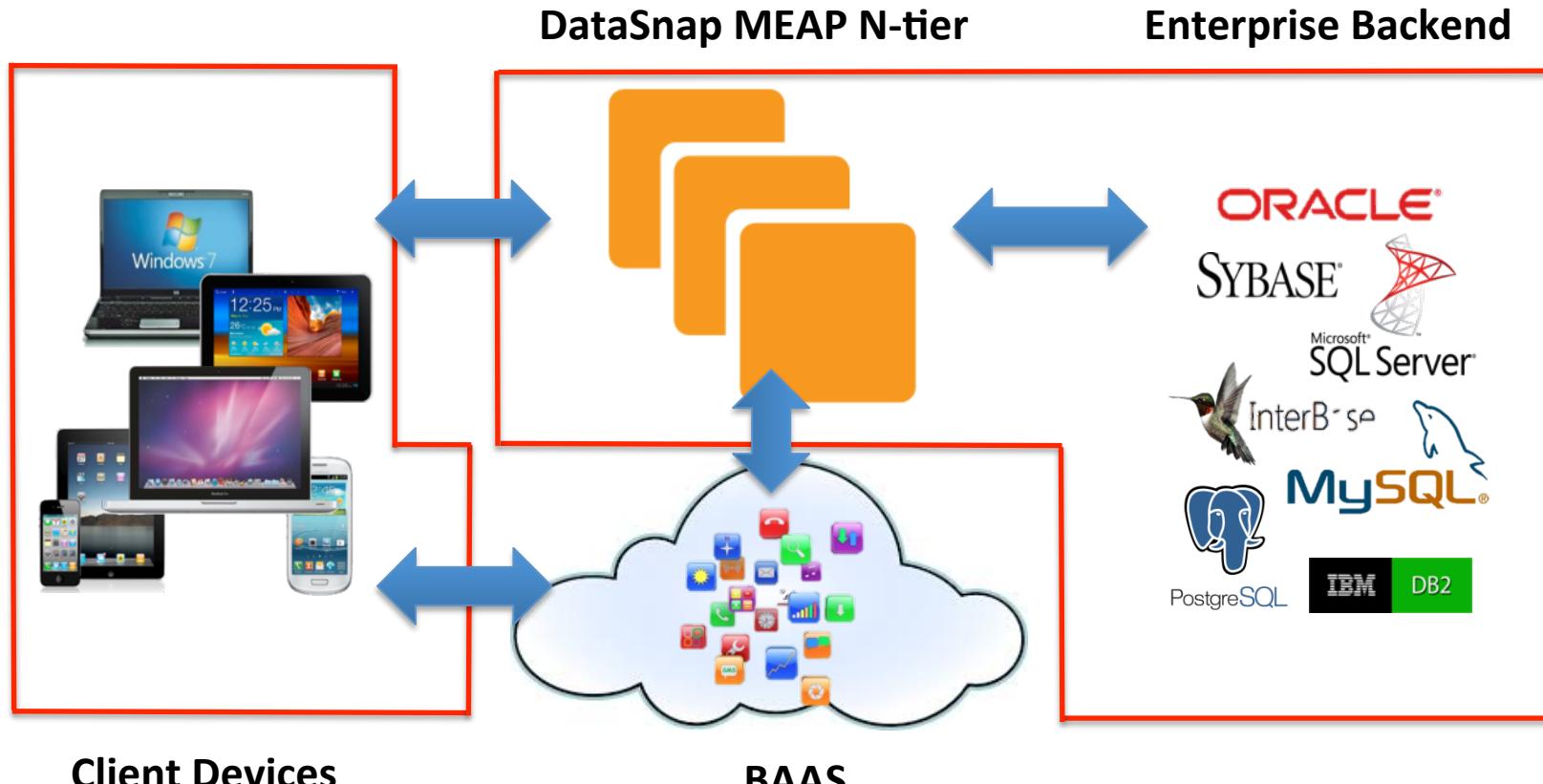


More mobile Components

- **TWebBrowser** for embedded web browsing
- **TMagnifier** used with text editing, but can be used with other components as well
- **TCamera** - access front/back camera, flash etc.
- **TListBox** for short lists with no or minimal scrolling, header/footer/group/search styling
- **TListView** for long, scrollable, data-bound lists
- **TSwitch** for on/off selections
- **TProgressBar** for flexible progress control visualization
- **TSpeedButton** with variety of iOS-like icon options
- ... and more!

Enterprise Ready





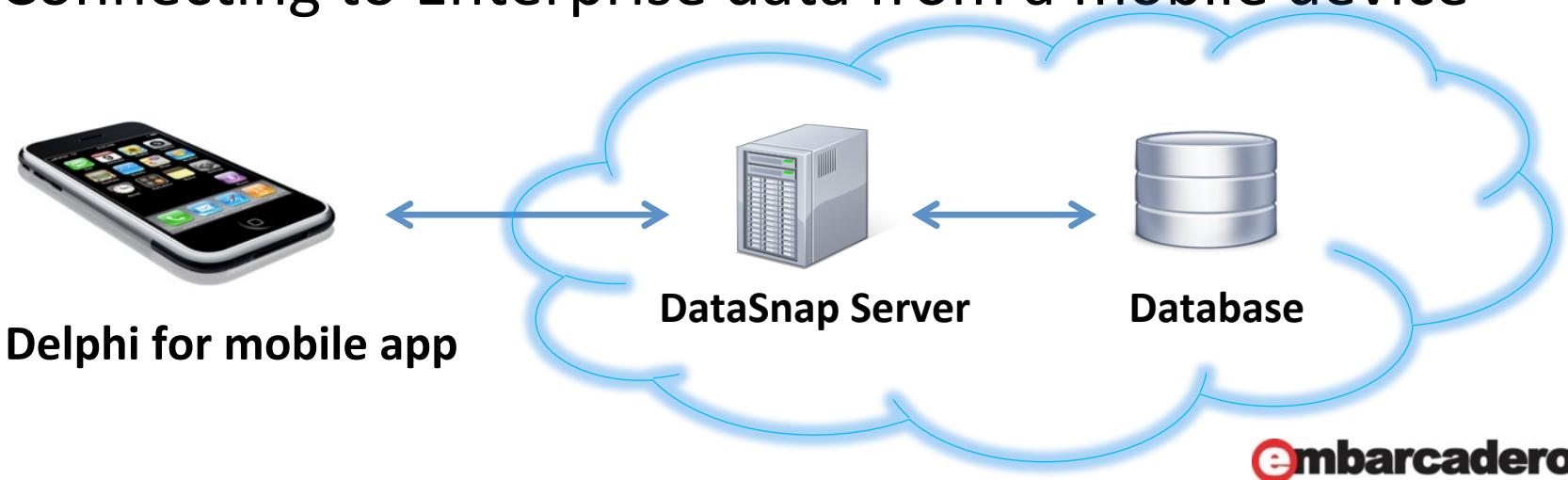
Client Devices

BAAS

embarcadero

Multitier with DataSnap

- Accessing remote on-premise or cloud-hosted services via REST/JSON or SOAP
- Connecting to Enterprise data from a mobile device



FireDAC

- A set of Universal Data Access Components
 - for developing any database application
 - for Delphi and C++Builder
- High-performance, easy-to-use, enterprise connectivity
- Universal Data Access
 - But with many database specific features

Local Databases

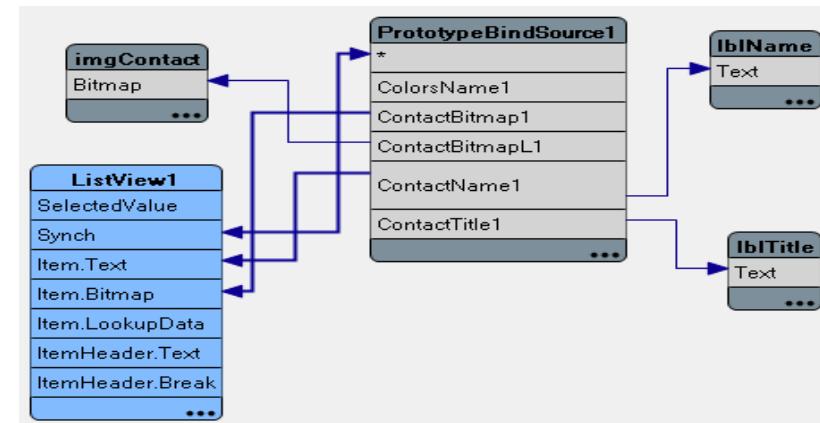
SQLite	IBLite	InterBase ToGo
Free	Free	Commercial
Feature light	Feature light	Fully featured
No security	No security	Secure Encryption
Simple Data Storage	Full SQL-92 RDBMS	Full SQL-92 RDBMS
Single read/write	Fast multi read/write	Fast multi read/write



Visual LiveBindings



- Bind controls to data
- Rapid Prototyping



BaaS?

- Backend as a Service
 - REST client stack
 - BAAS abstraction
 - Kinvey implementation
 - Parse implementation
 - e.g Push Notifications

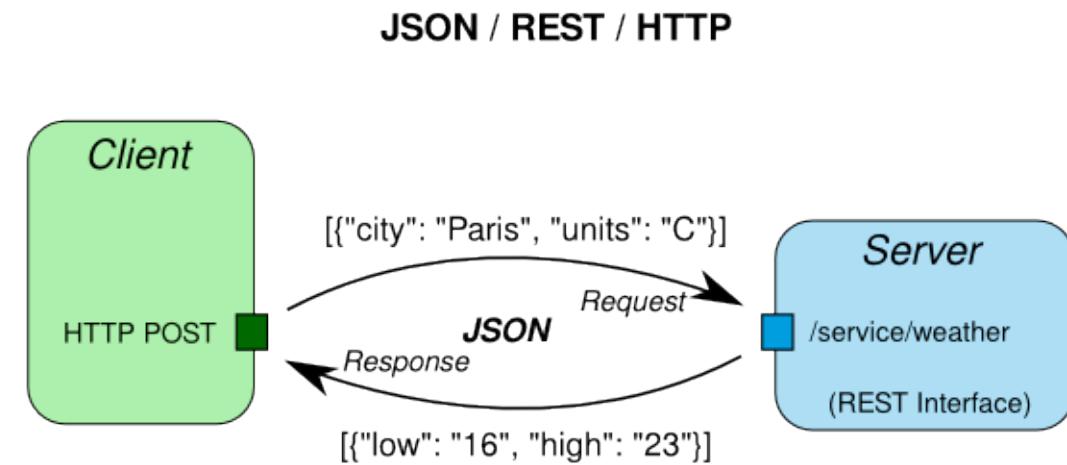


XE5 Rest Client Stack

- REST components
 - For developing REST client application
- RESTDemos.exe
 - Uses REST components to access a few different providers
- RESTDebugger.exe
 - Uses REST components to execute ad hoc requests

REST component features

- Comprehensive HTTP client
 - Asynchronous execution
 - Proxy connection
 - HTTPS
- Authentication
 - Basic, OAuth1, OAuth2
- JSON
 - Parsing, Formatting
 - JSON to TObject, TObject to JSON
- Rapid Prototyping
 - LiveBindings
 - Design time execution





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Thank you