

# 2 DAYS SOFTWARE DEVELOPMENT CONFERENCES 2014



THE DELPHI COMPANY

-est 1998-

Styles and customization with FireMonkey



THE DELPHI COMPANY

-est 1998-

SDC 1 and 2 december 2014

# FireMonkey Styles

Styles and customization with FireMonkey



# Danny Wind

Embarcadero MVP  
Delphi Developer  
Delphi Trainer



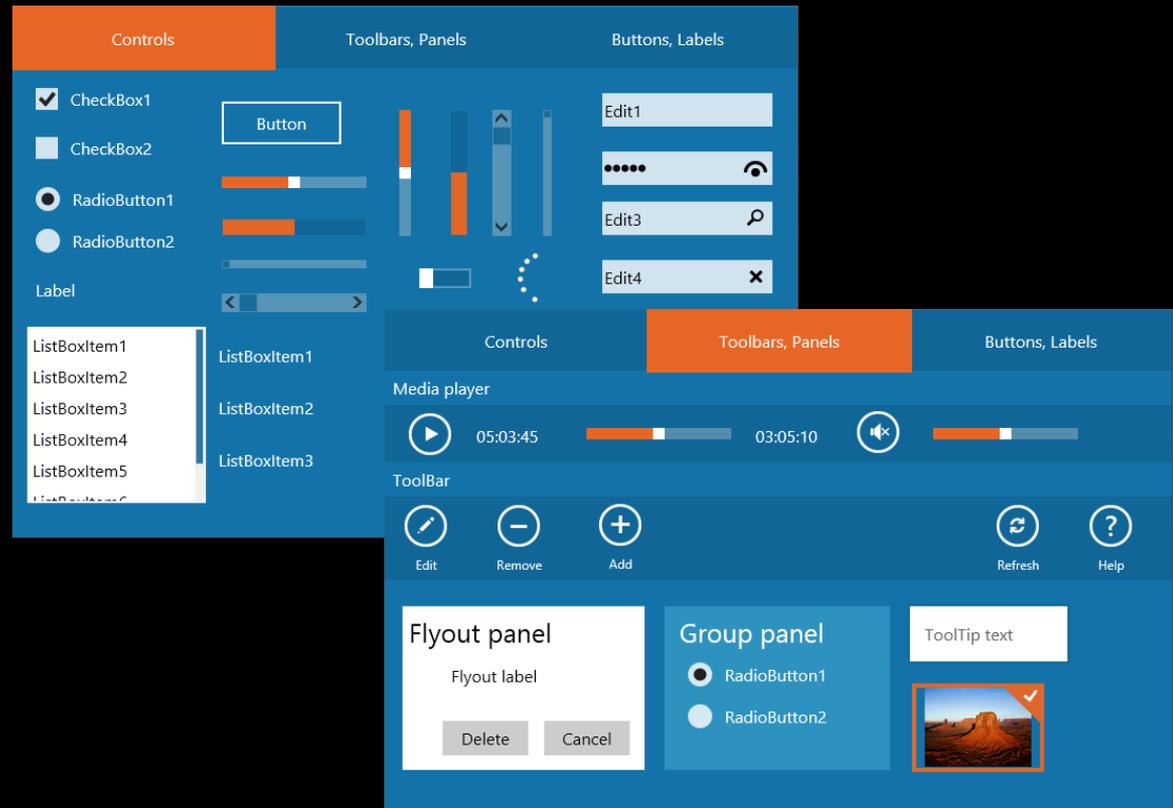
<http://www.delphicompany.nl>  
<http://www.dannywind.nl>  
[dwind@delphicompany.nl](mailto:dwind@delphicompany.nl)

# FireMonkey Styles

# Firemonkey Styles Intro

All controls in FireMonkey are styled

Any style  
is possible



VCL



Windows



64-bit



FireMonkey



Windows 8



Mac



iOS



Android



RTL

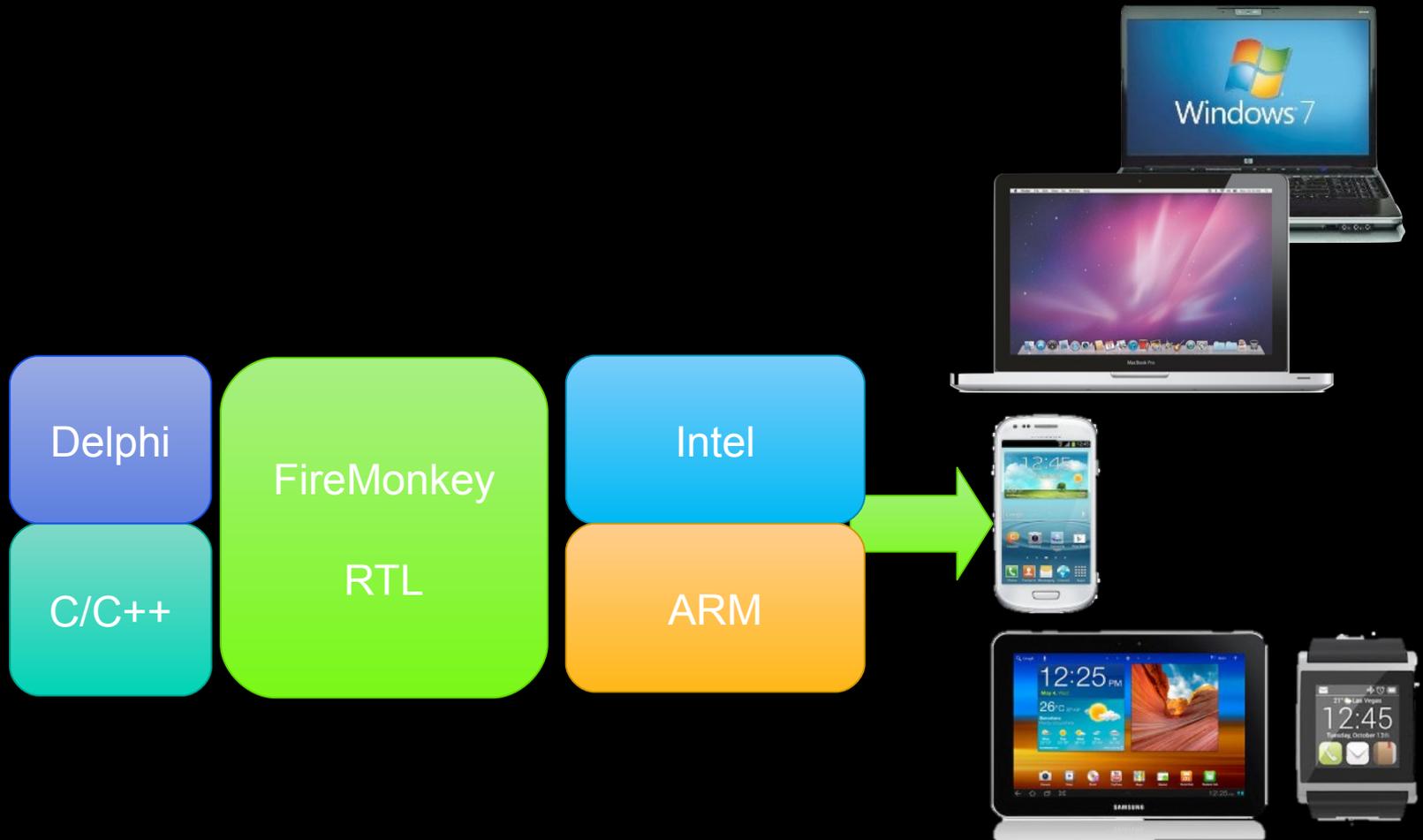


Cloud



Database

# One Source To Rule Them All



VCL



Windows



64-bit



FireMonkey



Windows 8



Mac



iOS



Android



RTL



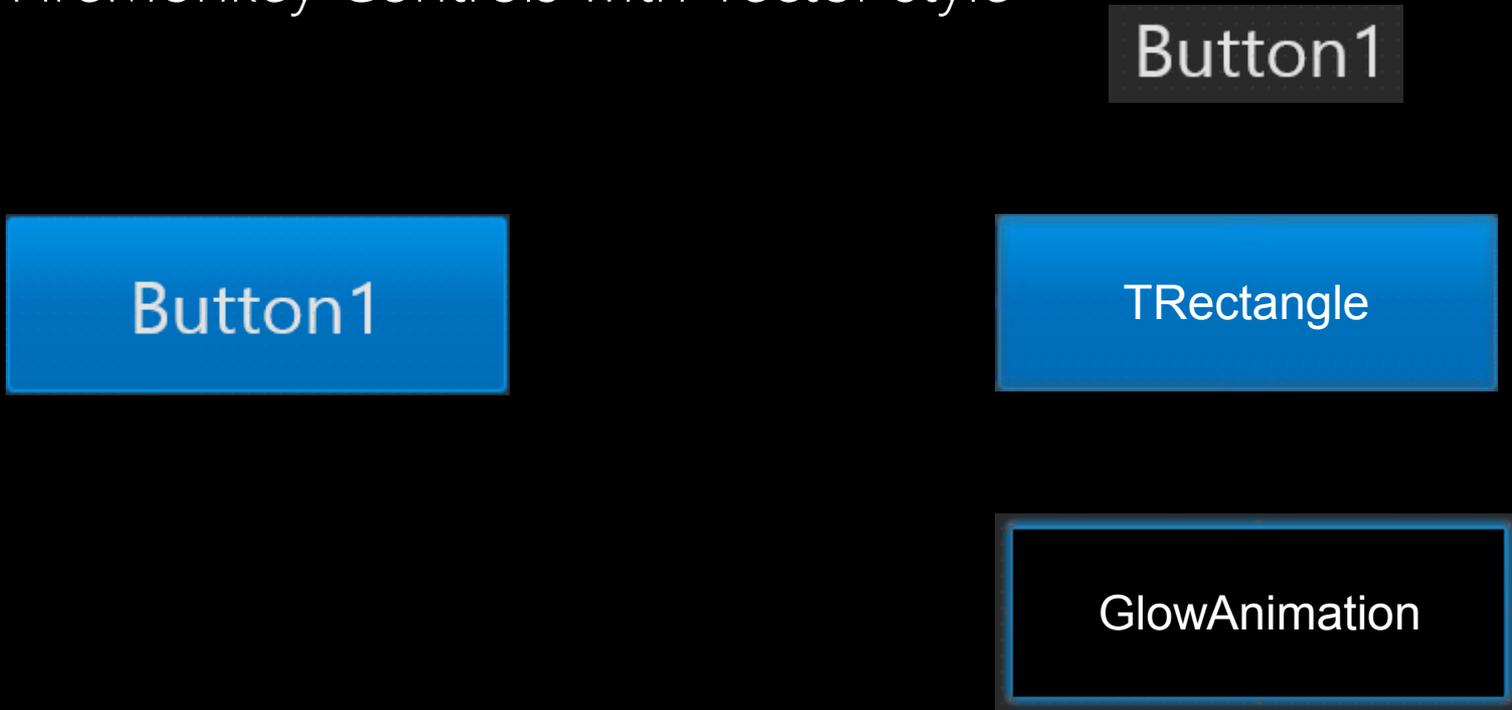
Cloud



Database

# FireMonkey Style Architecture

FireMonkey Controls with Vector style



VCL



Windows



64-bit



FireMonkey



Windows 8



Mac



iOS



Android



RTL



Cloud



Database

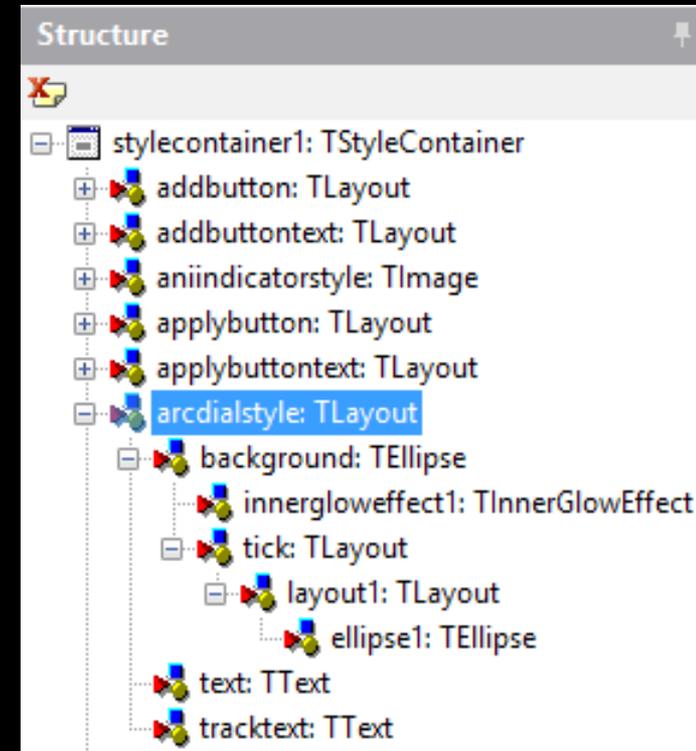
# FireMonkey Vector Styles

## FireMonkey Controls with Vector style

- built from primitives (TText, TEllipse, etc.)
- with animations and effects

## FireMonkey Primitives paint themselves

- vector based
- uses Canvas.Paint



VCL



Windows



64-bit



FireMonkey



Windows 8



Mac



iOS



Android



RTL



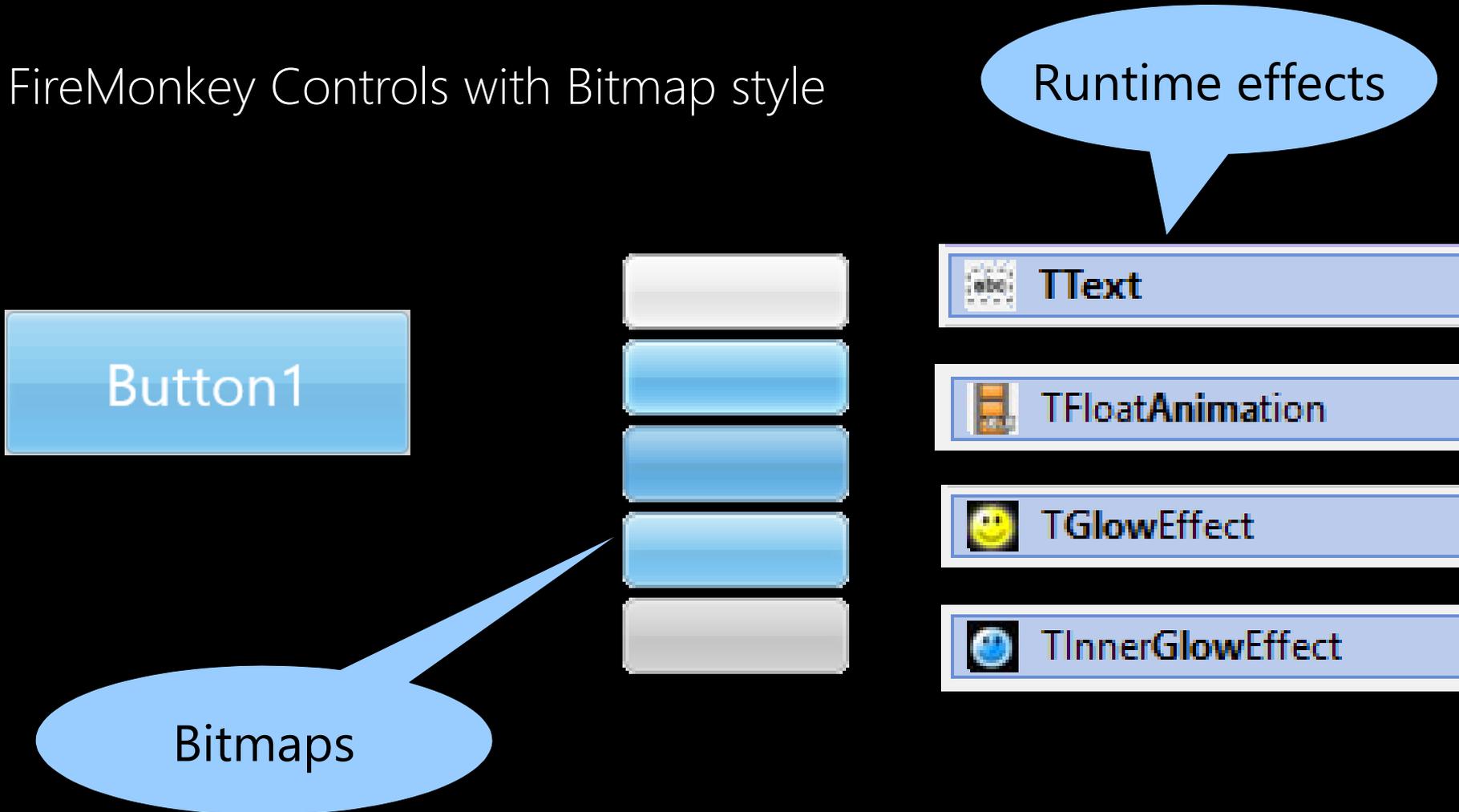
Cloud



Database

# FireMonkey Style Architecture

FireMonkey Controls with Bitmap style



VCL



Windows



64-bit



FireMonkey



Windows 8



Mac



iOS



Android



RTL



Cloud



Database

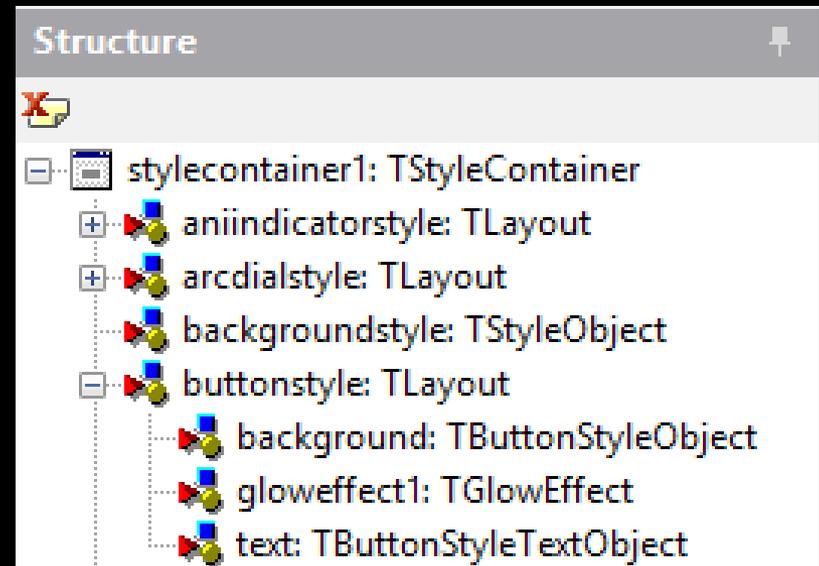
# FireMonkey Bitmap Styles

## FireMonkey Controls with Bitmap style

- built with Bitmaps for faster pixel perfect styling
- uses Style Objects
- with animations and effects

## FireMonkey Style Objects

- multi-res bitmaps
- painting in code using these bitmaps
- e.g. TButtonStyleObject has NormalLink / PressedLink / HotLink



VCL



Windows



64-bit



FireMonkey



Windows 8



Mac



iOS



Android



RTL



Cloud



Database

# Stylebook

# FireMonkey Stylebook

- FireMonkey Stylebook
  - .VSF = editable bitmap style
  - .Style = FireMonkey Vector/Bitmap style
  - Stored In / Loaded From DFM
- How does a Control find its Style?
  - Naming convention  
Button → buttonstyle  
Edit → editstyle
  - StyleLookup, StyleName
  - FindStyleResource
- FireMonkey Styles
  - For Win7, Win8, MacOS, iOS, Android



VCL



Windows



64-bit



FireMonkey



Windows 8



Mac



iOS



Android



RTL



Cloud



Database

# Style Internals

# FireMonkey Styles Internals

## Painting

- Style objects added as children with control as parent
- Controls paint themselves by painting their children
- Works same for both bitmap and vector styles:
  - Bitmap styles children: Style Objects
  - Vector styles children: primitive shapes, animations



VCL



Windows



64-bit



FireMonkey



Windows 8



Mac



iOS



Android



RTL



Cloud



Database

# FireMonkey Styles Internals

Customizing painting

- OnPaint still works but is a simplistic overlay
- Run-time manipulation using FindResource
- Primitives only
- just accept vector styles
- properties exposed to influence style  
(TextSettings, Tint (mobile))



VCL



Windows



64-bit



FireMonkey



Windows 8



Mac



iOS



Android



RTL



Cloud



Database

# FireMonkey Styles Internals

Platform Native Controls → TPresentedControl

- class(TStyledControl)

public

TControlType = (Styled, Platform);



VCL



Windows



64-bit



FireMonkey



Windows 8



Mac



iOS



Android



RTL



Cloud



Database

2 DAYS SOFTWARE  
DEVELOPMENT  
CONFERENCES 2014



THE DELPHI COMPANY

-est 1998-

<http://www.delphicompany.nl>

<http://www.dannywind.nl>

[dwind@delphicompany.nl](mailto:dwind@delphicompany.nl)

Questions?



THE DELPHI COMPANY

-est 1998-

Questions?



<http://www.delphicompany.nl>

<http://www.dannywind.nl>

[dwind@delphicompany.nl](mailto:dwind@delphicompany.nl)