

2 DAYS SOFTWARE DEVELOPMENT CONFERENCES 2014



THE DELPHI COMPANY

-est 1998-

Styles and customization with FireMonkey





SDC 1 and 2 december 2014

FireMonkey Styles

Styles and customization with FireMonkey



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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

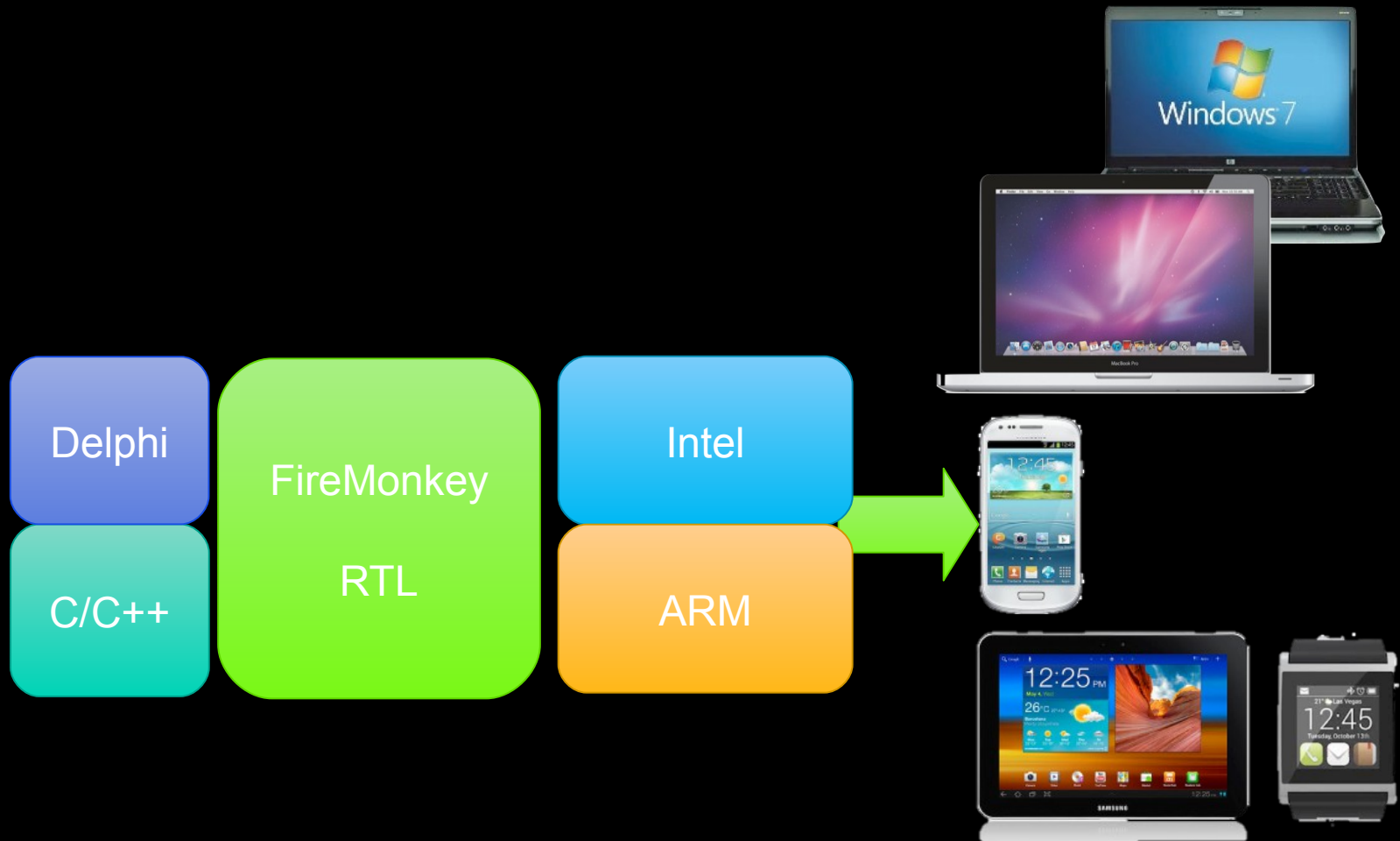


Cloud



Database

One Source To Rule Them All



VCL



Windows



64-bit



FireMonkey



Windows 8



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iOS



Android



RTL



Cloud



Database

FireMonkey Style Architecture

FireMonkey Controls with Vector style

Button1

Button1

TRectangle

GlowAnimation



VCL



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64-bit



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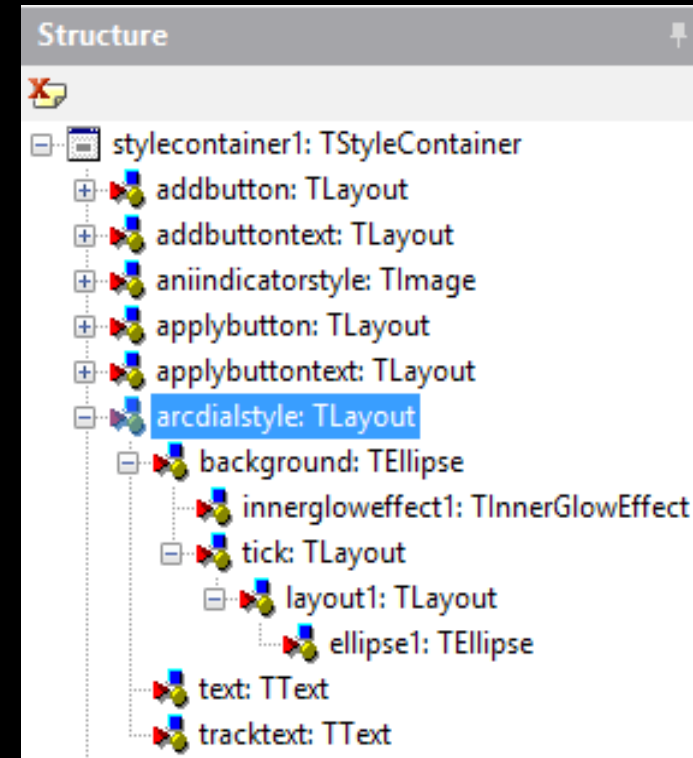
FireMonkey Vector Styles

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



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64-bit



FireMonkey



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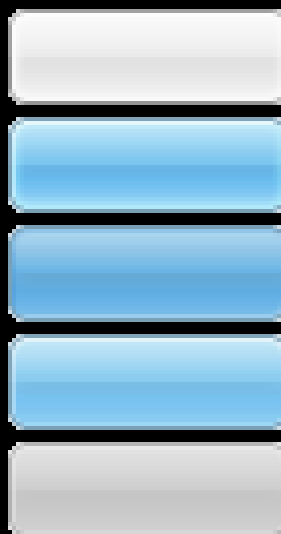
Database

FireMonkey Style Architecture

FireMonkey Controls with Bitmap style



Bitmaps



Runtime effects



TText



TFloatAnimation



TGlowlEffect



TInnerGlowEffect



VCL



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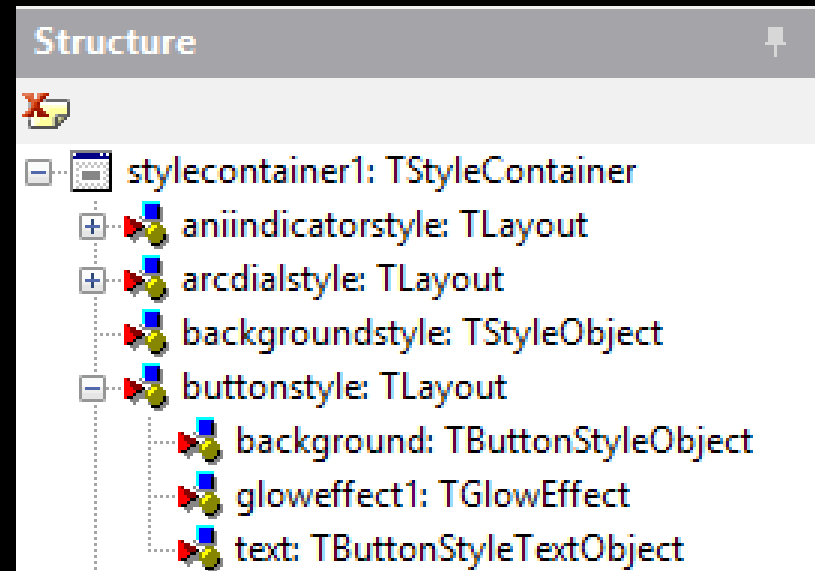
FireMonkey Bitmap Styles

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



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64-bit



FireMonkey



Windows 8



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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



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64-bit



FireMonkey



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RTL



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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



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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



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Database

FireMonkey Styles Internals

Platform Native Controls → TPresentedControl

- class(TStyledControl)

public

TControlType = (Styled, Platform);



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RTL

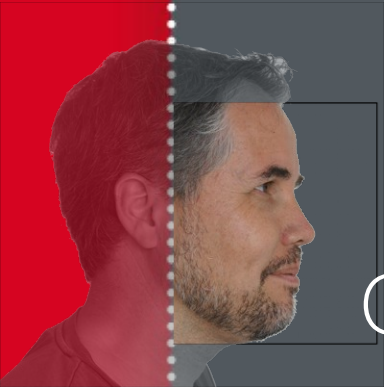


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Questions?

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