

Operator Overloading in Delphi Native

inttroduction

Jeroen Pluimers better office benelux jpluimers@better-office.com





Microsoft^o .NET

Some introductory notes

- Originally needed for .NET
 - Delphi has introduced operator overloading for .NET interoperability
 - The same was done for "helpers"
- Very convenient in Delphi Native too
- Examples from the internet
- Historic use in Delphi RTL/VCL/FMX
- My own example: Nullable types







.NET

- TFraction example
 - http://www.delphi-treff.de/tutorials/objectpascal/das-ueberladen-von-operatoren/die-funktionsweise-am-beispiel/
- Smart framework for running XPath queries

 http://members.adug.org.au/2012/08/17/dances-with-xml/
- Don't use when not needed
 - http://stackoverflow.com/questions/9546433/overload-operator-and-conversion-type
- Overuse of "Implicit" operator
 - http://www.pritaeas.net/view/articles/delphi-operator-overloading
 - · Looks smart, but isn't



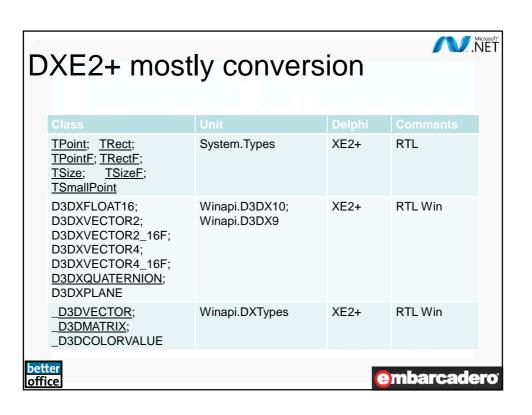




Original for .	NET suppo	ort	Microsoft . Nil
Class		Delphi	Comments
TldStream	IdStream	2005+	Indy .NET
TComplex	Vassbotn.Vcl.Complex	2006+	Demo Win32
<u>TBcd</u>	Borland.Vcl.FMTBcd Data.FMTBcd	2006 XE+	.NET VCL
TSQLTimeStamp	Borland.Vcl.SqlTimSt	2006	.NET VCL
TMethod; Currency; TDateTime; AnsiString	Borland.Delphi.System	2006	.NET RTL
TStream	Borland.Vcl.Classes	2006	.NET RTL
TComplex	Borland.Vcl.Complex	2006	.NET RTL
TConvert	Borland.Vcl.Convert	2006	.NET RTL
VariantHelper; OleVariantHelper	Borland.Vcl.Variants	2006	.NET RTL

D2009+ mostly conversion					
Class	Unit	Delphi	Comments		
TCMDockNotification; TCMPopupHWndDestroy; TCMCreatePopup	Controls Vcl.Controls	2009-XE XE2+	VCL		
TlmageListHandle	ImgList VCL.ImgList	2010-XE XE2+	VCL		
TValue	Rtti System.Rtti	2010-XE XE2+	RTL		
TTimeSpan	Timespan System.TimeSpan	2010-XE XE2+	RTL		
D2D_RECT_F; D2D_MATRIX_3X2_F; D2D_POINT_2F	D2D1 Winapi.D2D1	2010-XE XE2+	RTL Win		
TGUID	System	XE+	RTL		
TKeyModifier;	KeyboardTypes	XE XE21	VCL Touch		

OXE2+ mos	stly convers	sion	Micr. N
Class		Delphi	Comments
TColorRec; TAlphaColorRec	System.UITypes	XE2+	RTL
TCFArray; TCFBoolean; TCFData; TCFDictionary; TCFNumber; TCFString; TCFPropertyList	System.Mac.CFUtils System.SysUtils	XE2+	RTL Mac OSX CFString impl
TSingleRec; TDoubleRec; TExtended80Rec	System	XE2+	RTL x64 conversion
tter fice		(mbarcade



Microsoft® DXE2+ mostly conversion VCL TTextFormatFlags Vcl.Graphics XE2+ TImageListHandle Vcl.ImgList XE2+ VCL VCL TStyleElementEdges; Vcl.Themes XE2+ TStyleElementEdgeFlags TThemeServicesClassHe TTypeInfoFieldAccessor System.TypInfo XE3+ RTL _tagpropertykey Winapi.ActiveX XE3 RTL Win better office **embarcadero**