

Telerik .NET Controls for Infragistics Users



```
oNewControl = REPLACE (oCurrentControl,  
"Ultra", "Rad") .
```



Consultingwerk Ltd.

- Independent IT consulting organization
- Focusing on **OpenEdge** and **related technology**
- Located in Cologne, Germany
- Customers in Europe, North America, Australia and South Africa
- Vendor of tools and consulting programs
- 25 years of Progress experience (V5 ... OE11)
- Specialized in GUI for .NET, OO, Software Architecture, Application Integration

Agenda

- **Introduction**
- .NET Framework/OpenEdge Versions
- High level Control comparison
- Base Forms
- Styling
- Telerik Presentation Foundation
- Access to generic methods
- Known issues



Introduction

- Progress Software released OpenEdge GUI for .NET in OpenEdge 10.2A in **late 2007**
- Based on Windows Forms (aka WinForms)
- Selected Infragistics as cooperation partner – one of the major control vendors (then and now)
- Reseller of the NetAdvantage for .NET WinForms Controls (today named Infragistics Windows Forms) as OpenEdge UltraControls
- 1st level technical support through Progress TS
- Demos and training material provided



WINDOWS FORMS CONTROLS

[View All Controls](#) / [Explore Pricing Options](#) / [View Sample Applications](#)

Charts & Gauges



Editors



Frameworks



Grids



Layouts



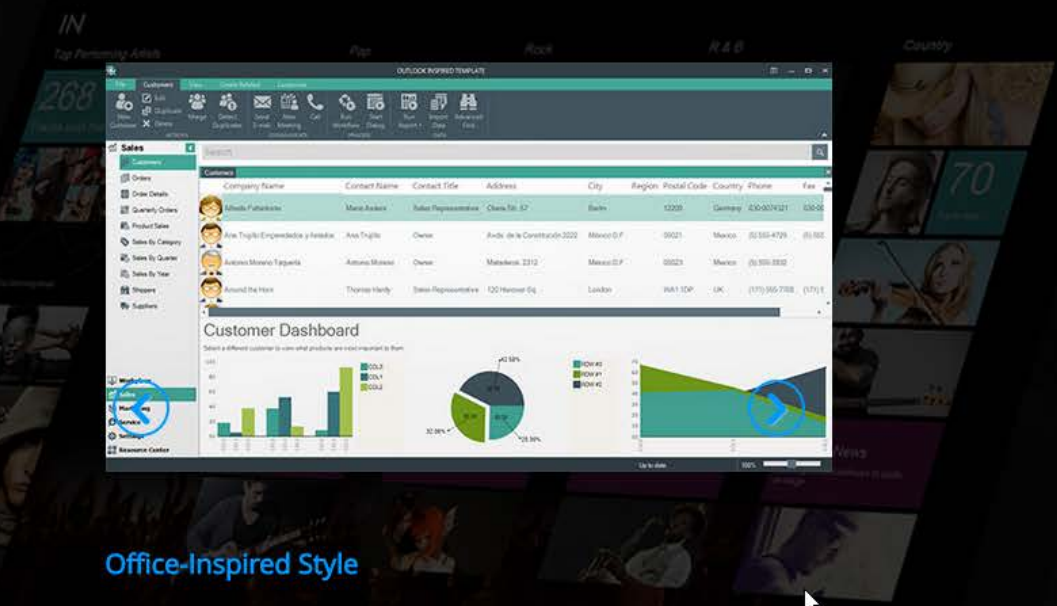
Menus & Lists



Styling & Themes



More Controls



Office-Inspired Style

Ensure app adoption when you create the experiences your customers already know, with Microsoft-inspired features that mimic Word, Excel, and Outlook.



DOWNLOAD FREE TRIAL

Introduction

- At the **end of 2014** Progress Software has acquired Telerik – also a vendor of user experience components including .NET WinForm Controls
- Telerik and Infragistics product palette has a huge overlap, you could call them a competitor
- Telerik was not acquired for their .NET Controls
- Telerik .NET Controls are called RadControls

UI for WinForms

Classic Windows Forms
Stunning user interface



UI for WinForms

Features

Controls

Demos

Support & Learning

New Features & Roadmap

Pricing

Try now

Features



Complete Set of Features and Controls

Comprehensive toolbox of 110+ WinForms UI controls to help you develop everything.



19 Built-In Professional-Looking Themes

A familiar look and feel for any scenario.



Unrivaled Performance and User Experience

Easy development of complex, high-performance apps for Desktop and Tablets.



Developer Friendly and Easy to Use

Get started immediately and enjoy an intuitive experience from day one.



Multi-Touch Support

Touch enabled Windows Forms for tomorrow-ready applications.



Integration With Telerik Analytics

Quickly access application usage data, including most popular features and run-time errors.



Document Processing

Process the most common text, spreadsheet, and PDF file formats without



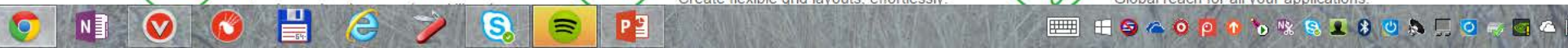
Flexible Architecture for Endless Customizations

Create flexible grid layouts, effortlessly.



Localization, Right-to-Left Language Support

Global reach for all your applications.



Demo

- Telerik Demo Application

Telerik UI for WinForms Q1 2015 SP1

HOME

110

CONTROLS THAT ENERGIZE YOUR APPS

- > Flexible Grids
- > Rich charts
- > Touch support

Featured

Photo	Name	Salary	Hire Date	Title
	Nancy Davolio	\$5,847.5	1/1992 12:00:00	Sales Representative
	Andrew Fuller	\$6,870	8/14/1992 12:00:00	Vice President, Sales
	Janet Leverling	\$1,312.4	1/1992 12:00:00	Sales Representative

GridView

Name	Product Number
Janet Leverling	
Janet Leverling	
Janet Leverling	

Zip libra

Introduction

- Telerik .NET Controls not yet fully OpenEdge'ed (not in the box like Infragistics, WebClient deployment)
- Progress Software TS does provide support, but still learning how
- OpenEdge K-Base already has some articles on Telerik .NET Controls, some **known issues**
- *There is no (official) plan to cancel the cooperation with Infragistics and drop the support for the OpenEdge UltraControls*
- *And even if... Infragistics would certainly survive*

Using both Control-Sets

- Technically possible to mix controls from two vendors in a single application
- However certain controls should all be from the same vendor
 - Editors, Ribbon, Grid, ...
- Look and feel needs to remain consistent across the application (colors, fonts, fading, shadows, ...)
- Easier to mix Charts, Scheduler Control, Container Controls like Carousel etc. from different vendors
 - Those controls provide individual look and feel

Using both Control-Sets

- Ideally you should choose the one control set as the primary that matches the most requirements
- Decision Infragistics vs. Telerik should be based on required features, not on PSC ownership
- There is no need to rush away from Infragistics
- Progress certainly won't remove the ability to use Infragistics on purpose
 - Infragistics and Telerik support based on same runtime and tooling features
- Currently fewer issues with Infragistics

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.NET Framework & OpenEdge Versions

- OpenEdge 10.2B supports .NET 2.0
- OpenEdge 11 support .NET 4.0 and 2.0 Controls

- OpenEdge 10.2B ships with Infragistics 2009.2
- OpenEdge 11.1 ships with Infragistics 2011.2, 11.5 ships 2014.2

- OpenEdge 10.2B with no Office 2010 style
- OpenEdge 11.1 with no Office 2013 style

.NET Framework & OpenEdge Versions

- As of 2012.2 Infragistics does no longer support .NET 2.0 runtime
- http://help.infragistics.com/doc/WinForms/2012.2/CLR4.0/?page=Win_Whats_New_in_2012_Volume_2.html
- Telerik still ships .NET 2.0 version of Controls in 2015
- Telerik would allow to use latest look and feel on OpenEdge 10.2B or OpenEdge 11.1



OpenEdge Editor

Resources

- Referenced Assemblies
 - System
 - System.Data
 - System.Drawing
 - System.Windows.Forms
 - System.Xml
 - Telerik.WinControls
 - Telerik.WinControls.Analyti
 - Telerik.WinControls.ChartVi
 - Telerik.WinControls.GridVie
 - Telerik.WinControls.PdfView
 - Telerik.WinControls.PivotGr
 - Telerik.WinControls.RadCha
 - Telerik.WinControls.RadDo

*SampleRadRibbonForm.cls (Design)

Type here SampleRadRibbonForm

Add New Tab...

radLabel1

Office 2013 Ribbon in OpenEdge Architect 10.2B

Outli... DB S... Pro...

SampleRadRibbonForm : Telerik.WinControls.L

Properties	Events
Size	300; 300
SizeGripStyle	Auto
SmallImageList	(Keine)
SmallImageScalin	0; 0
StartPosition	WindowsDefaultLocati
Tag	
Text	SampleRadRibbon1

[Apply current form's theme to controls.](#)

Text
Der dem Steuerelement zugeordnete Text.

office2013DarkTheme1

- Microsoft Controls
- OpenEdge Controls
- OpenEdge Ultra Controls
- Telerik
 - Pointer
 - RadLabel
 - Rad TextBox
- Telerik Themes
 - Pointer
 - Aqua Theme
 - Breeze Theme
 - Desert Theme
 - HighContrastBlack Theme
 - Office2007Black Theme
 - Office2007Silver Theme
 - Office2010Black Theme
 - Office2010Blue Theme
 - Office2010Silver Theme
 - Office2013Dark Theme
 - Office2013Light Theme
 - Rad Theme Manager
 - Telerik.MetroBlue Theme

Console Problems Tasks

ABL Console

OpenEdge AVM started successfully for 'RadControlSample'.

```
>/RadControlSample/Samples/SampleRadRibbonForm.cls (C:\Work\Telerik\102B\RadControlSample\
>/RadControlSample/Samples/SampleRadRibbonForm.cls (C:\Work\Telerik\102B\RadControlSample\
```

Adding Controls to Toolbox

Add Controls

Control Group: Telerik

Filter: RadPr

Browsed Assemblies Global Assemblies ABL Controls

<input type="checkbox"/>	Control Name	Namespace	Assembly	Directory
<input type="checkbox"/>	RadPrintDocument	Telerik.WinControls.UI.RadPrintDocument	Telerik.WinControls.UI (2015.1.331.20)	C:\Windows\assembly\GAC_MSIL\Telerik
<input type="checkbox"/>	RadPrintDocument	Telerik.WinControls.UI.RadPrintDocument	Telerik.WinControls.UI (2015.1.331.40)	C:\Windows\Microsoft.Net\assembly\GAC
<input type="checkbox"/>	RadProgressBar	Telerik.WinControls.UI.RadProgressBar	Telerik.WinControls.UI (2015.1.331.20)	C:\Windows\assembly\GAC_MSIL\Telerik
<input type="checkbox"/>	RadProgressBar	Telerik.WinControls.UI.RadProgressBar	Telerik.WinControls.UI (2015.1.331.40)	C:\Windows\Microsoft.Net\assembly\GAC
<input type="checkbox"/>	RadPropertyGrid	Telerik.WinControls.UI.RadPropertyGrid	Telerik.WinControls.UI (2015.1.331.20)	C:\Windows\assembly\GAC_MSIL\Telerik
<input checked="" type="checkbox"/>	RadPropertyGrid	Telerik.WinControls.UI.RadPropertyGrid	Telerik.WinControls.UI (2015.1.331.40)	C:\Windows\Microsoft.Net\assembly\GAC

Last digits of Control Version
 .20 = .NET 2.0 for OpenEdge 10.2B
 .40 = .NET 4.0 for OpenEdge 11.x

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High level Control comparison

- On a very high level both Control Sets provide similar features
 - Grid
 - Tree
 - Editors
 - Ribbons/Menu
 - Scheduler
 - Charts
 - Layout Elements
 - ...
 - Document exporting
 - Navigation Elements
 - html-like Formatted Text
 - Theming and Styling
 - Touch

Control Names

Infragistics Control Name	Telerik Control Name
Infragistics.Win.Misc.UltraButton	Telerik.WinControls.UI.RadButton
Infragistics.Win.UltraWinEditors.UltraTextEditor	Telerik.WinControls.UI.RadTextBox
Infragistics.Win.Misc.UltraLabel	Telerik.WinControls.UI.RadLabel
Infragistics.Win.UltraWinEditors.UltraCheckEditor	Telerik.WinControls.UI.RadCheckBox
Infragistics.Win.UltraWinEditors.UltraOptionSet	Telerik.WinControls.UI.RadRadioButton
Infragistics.Win.UltraWinEditors.UltraComboEditor Infragistics.Win.UltraWinGrid.UltraCombo	Telerik.WinControls.UI.RadDropDownList
Infragistics.Win.Misc.UltraPanel	Telerik.WinControls.UI.RadPanel
Infragistics.Win.Misc.UltraGroupBox	Telerik.WinControls.UI.RadGroupBox
Infragistics.Win.UltraWinTabControl. UltraTabControl	Telerik.WinControls.UI.RadPageView

```
oNewControl = REPLACE (oCurrentControl,
"Ultra", "Rad") .
```

RadGridView

- The Telerik Grid Control
- Features similar to Infragistics Grid
 - Column Reordering
 - Sorting
 - Editable
 - Grouping
 - Hierarchical structures
 - Export to different sources

Form1

Drag a column here to group by this column.

FirstNa...	Empl...	LastNa...	Title	TitleOf...	BirthD...	HireDate	Address	City	Region	Postal...	Country	Home...	Extensi...	Photo	Notes	Report...
* Click here to add a new row																
Nancy	1	Davolio	Sales Representative	Ms.	12/8/1948 12:00:00 AM	5/1/1992 12:00:00 AM	507 - 20th Ave. E. Apt. 2A	Seattle	WA	98122	USA	123555 9857	5467		Education includes a BA in psychology from Colorado State University in 1970. She also completed 'The...	2
Andrew	2	Fuller	Vice President, Sales	Dr.	2/19/1952 12:00:00 AM	8/14/1992 12:00:00 AM	908 W. Capital Way	Tacoma	WA	98401	USA	048555 9482	3457		Andrew received his BTS commercial in 1974 and a Ph.D. in international marketing from the University of...	
Janet	3	Leverling	Sales Representative	Ms.	8/30/1963 12:00:00 AM	4/1/1992 12:00:00 AM	722 Moss Bay Blvd.	Kirkland	WA	98033	USA	255555 3412	3355		Janet has a BS degree in chemistry from Boston College (1984). She has also completed a certificate progr...	2
Margaret	4	Peacock	Sales Representative	Mrs.	9/19/1937 12:00:00 AM	5/3/1993 12:00:00 AM	4110 Old Redmond Rd.	Redmond	WA	98052	USA	147556 8122	5176		Margaret holds a BA in English literature from Concordia College (1958) and an MA from the American Institu...	2
															Steven Buchanan graduated from	

Hierarchical structures

- Each level is represented by a “Template”
- Templates connected to own DataSource
- Supports creating a hierarchical Grid bound to multiple ProBindingSources and multiple Queries
- Allows for very flexible data access scenarios

- Infragistics requires all data from a single ProDataset and a single ProBindingSource

Drag a column here to group by this column.

	Order...	Bill To...	Carrier	Credit...	Cust N...	Instruc...	Ordered	Order...	PO	Promis...	Sales R...	Shipped	Ship T...	Terms	Wareh...
*	Click here to add a new row														
+	1	0	FlyByN...	Maste...	53	Handl...	23.01....	Shipped		28.01....	RDR	28.01....	0	Net30	0
+	2	0	Walke...	Visa	81		02.10....	Shipped		07.10....	HXM	07.10....	0	Net30	0
+	3	0	Stand...	Ameri...	66	lkjhlkj	20.09....	Shipped		25.09....	HXM	25.09....	0	Net30	0
+	4	0	Stand...	Visa	37		14.01....	Shipped		19.01....	HXM	19.01....	0	Net30	0

	Order...	Line N...	Discount	Extend...	Item N...	Order...	Price	Qty	Item Name
*	Click here to add a new row								
	4	1	5	4779,45	2	Shipped	64,5	78	Tennis rackets 08/15
	4	2	5	1543,28	30	Shipped	42,75	38	Wind Surfer
	4	3	5	53,09	43	Shipped	13,97	4	Exercise Mat
	4	4	5	4172,4	40	Shipped	61	72	Ice Skates
	4	5	5	196,51	8	Shipped	9,85	21	Runner's Vest
	4	6	5	808,16	53	Shipped	8,77	97	Swimming Trunks
	4	7	5	203,78	19	Shipped	2,75	78	Ski Wax - Red

+	5	0	Stand...	Visa	72	Test	11.02....	Shipped		14.02....	JAL	14.02....	0	Net30	0
+	7	0	Stand...	Maste...	51	Test	03.03....	Ordered		08.03....	KIK	08.03....	0	Net30	0
+	8	0	Stand...	Ameri...	12		15.09....	Shipped	kj	20.09....	DKP	20.09....	0	Net30	0
+	9	0	Stand...	Visa	12		19.02....	Shipped		24.02....	KIK	24.02....	0	Net30	0
+	10	0	FlyByN...	Maste...	11		18.01....	Shipped		23.01....	DKP	23.01....	0	Net30	0
+	11	0	Walke...	Ameri...	28		25.01....	Shipped		30.01....	DKP	30.01....	0	Net30	0
+	12	0	Walke...	Visa	37	dsfgsd	29.11....	Shipped		04.12....	GPE	04.12....	0	Net30	0
+	13	0	FlyByN...	Maste...	69		12.01....	Shipped		17.01....	DKP	17.01....	0	Net30	0
+	14	0	Stand...	Visa	82		03.12....	Shipped		08.12....	JAL	08.12....	0	Net30	0
+	15	0	Stand...	Visa	61		22.12....	Shipped		27.12....	DKP	27.12....	0	Net30	0
+	16	0	Stand...	Ameri...	11		06.11....	Shipped		11.11....	DKP	11.11....	0	Net30	0

HierarchicalGridForm

Drag a column here to group by this column.

	Bill To...	Carrier	Credit...	Cust N...	Instruc...	Ordered	Order...	Order...	PO	Promis...	Sales R...	Shipped	Ship T...
--	------------	---------	-----------	-----------	------------	---------	----------	----------	----	-----------	------------	---------	-----------

* Click here to add a new row

→ +

RadGridView-Aufgaben

Common Tasks:

- [New Theme Manager](#)
- [Edit UI Elements](#)
- Theme Name:

Data Binding:

Choose DataSource

Columns

Templates

Relations

Data Operations:

Filter Descriptors

Sort Descriptors

Group Descriptors

Specific Tasks:

- Enable Adding
- Enable Editing
- Enable Column Reordering

[Open Property Builder](#)

[Best Fit Columns](#)

[Undock in parent container](#)

Learning center:

GridViewTemplate-Auflistungs-Editor

Member:

- 0 OrderLineTemplate

Hinzufügen Entfernen

OrderLineTemplate-Eigenschaften:

AllowDeleteRow	True
AllowEditRow	True
AllowSearchRow	False
Columns	(Auflistung)
DataMember	
DataSource	bindingSource2
FilterDescriptors	(Auflistung)
GroupDescriptors	(Auflistung)
SortDescriptors	(Auflistung)
SummaryRowsBottom	(Auflistung)
SummaryRowsTop	(Auflistung)
Templates	(Auflistung)

Entwurf

OK Abbrechen

bindingSource1 bindingSource2

RadGridView Hierarchical

```
DEFINE QUERY qOrder      FOR Order      SCROLLING .
DEFINE QUERY qOrderLine  FOR OrderLine, Item SCROLLING .

CONSTRUCTOR PUBLIC HierarchicalGridForm ():

    SUPER().

    InitializeComponent().

    OPEN QUERY qOrder PRESELECT EACH Order WHERE Order.Ordernum < 1000 .

    OPEN QUERY qOrderLine PRESELECT EACH OrderLine WHERE OrderLine.Ordernum < 1000 ,
        FIRST Item OF OrderLine .

    bindingSource1:Handle = QUERY qOrder:HANDLE .
    bindingSource2:HANDLE = QUERY qOrderLine:HANDLE .

    CATCH e AS Progress.Lang.Error:
        UNDO, THROW e.
    END CATCH.

END CONSTRUCTOR.
```

Unbound Grid

- RadGridView may also be used with no DataSource at all
- Allows to create Columns, Rows and Cells “on the fly”
- Avoid need to define specific temp-tables in the View just to allow binding through ProDataSource
- Can be combined with hierarchical data access
- Much simpler than Infragistics virtual data access using UltraDataSource

Unbound Grid

- Create Column Definitions

```
METHOD PROTECTED VOID PrepareSalesrepGrid (poGrid AS RadGridView):  
  
    DEFINE VARIABLE oColumn AS GridViewTextBoxColumn NO-UNDO .  
  
    oColumn = NEW GridViewTextBoxColumn ("SalesRep", "SalesRep") .  
    oColumn:HeaderText = "Salesrep" .  
  
    poGrid:Columns:Add (oColumn) .  
  
    oColumn = NEW GridViewTextBoxColumn ("RepName", "RepName") .  
    oColumn:HeaderText = "Rep Name" .  
  
    poGrid:Columns:Add (oColumn) .  
  
    oColumn = NEW GridViewTextBoxColumn ("Region", "Region") .  
    oColumn:HeaderText = "Region" .  
  
    poGrid:Columns:Add (oColumn) .  
  
END METHOD .
```

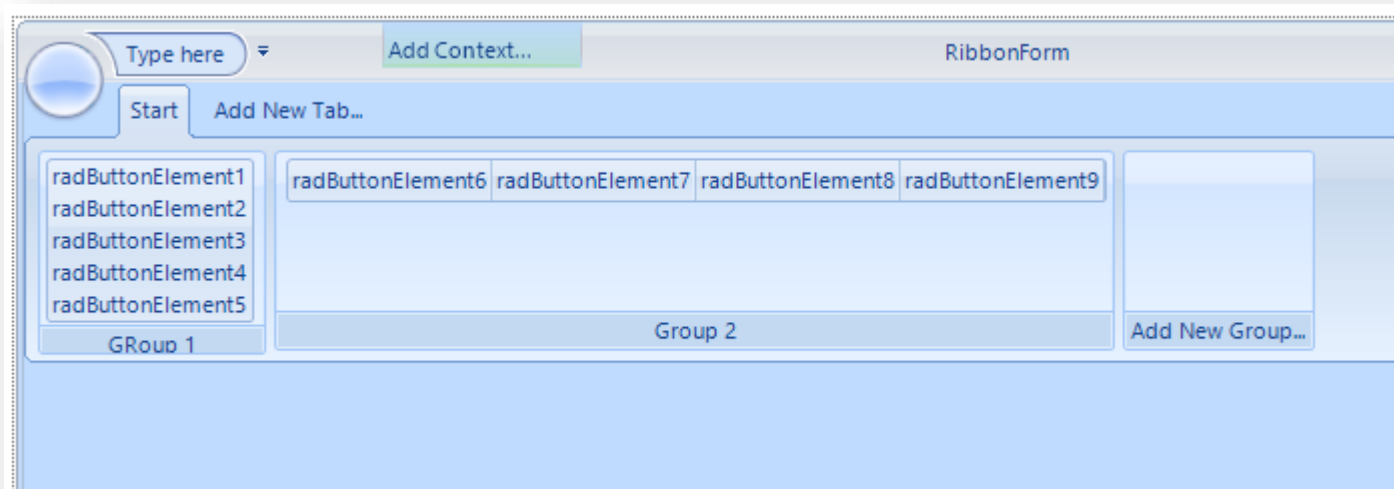
Unbound Grid

- Populates Grid rows based on System.Object[] of Values

```
/*-----  
  Purpose: Populates the Salesrep grid  
  Notes:  
-----*/  
METHOD PROTECTED VOID FillSalesrepTable ():  
  
  FOR EACH Salesrep:  
  
    leftGrid:Rows:Add (ArrayHelper:SystemArray (BOX (Salesrep.SalesRep),  
                                                  BOX (Salesrep.RepName),  
                                                  BOX (Salesrep.Region))) .  
  
  END.  
  
END METHOD .
```


RadRibbonBar

- Similar to Infragistics Grid – kind of 😊
- Less strict in terms of Microsoft Style Guide for the Ribbon
- Infragistics restricts to 3 buttons in a column, fills up vertically

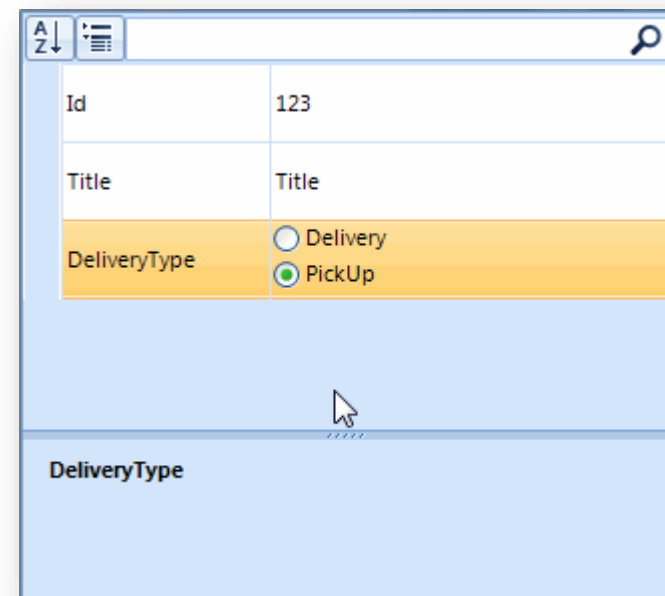


UltraToolbarsManager vs. Telerik

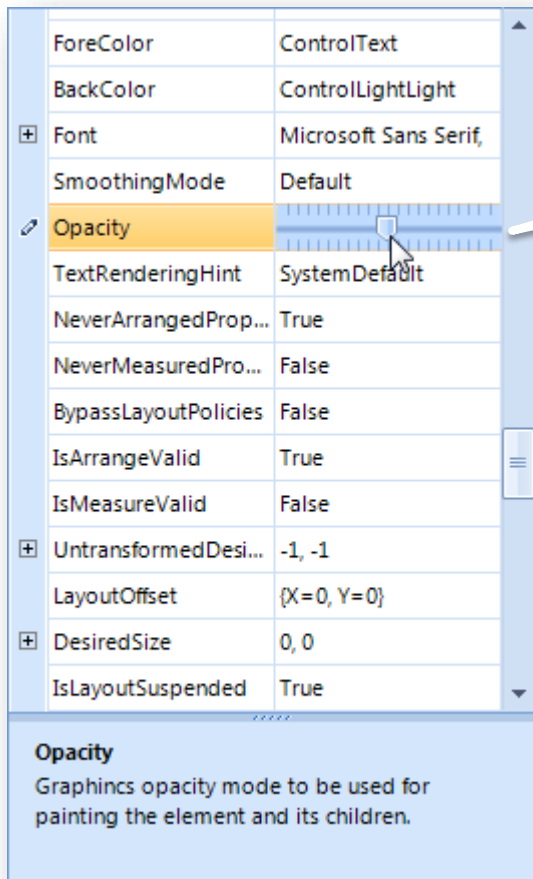
- Infragistics Ribbon realized using UltraToolbarsManager component
- Component renders also
 - Application Menu bar
 - Toolbar
 - Context Menu
- Telerik needs separate Controls/Components for each
- No common RootTools Collection: Need to subscribe lots of event, event when tool reappears

RadPropertyGrid

- Similar to Microsoft PropertyGrid
- Allows inspection and manipulation of property values of .NET objects
- Similar to PropertyGrid in Visual Designer
- Themable
- Search Box
- Support for custom item types using TPF, ability to custom presentation of a cell

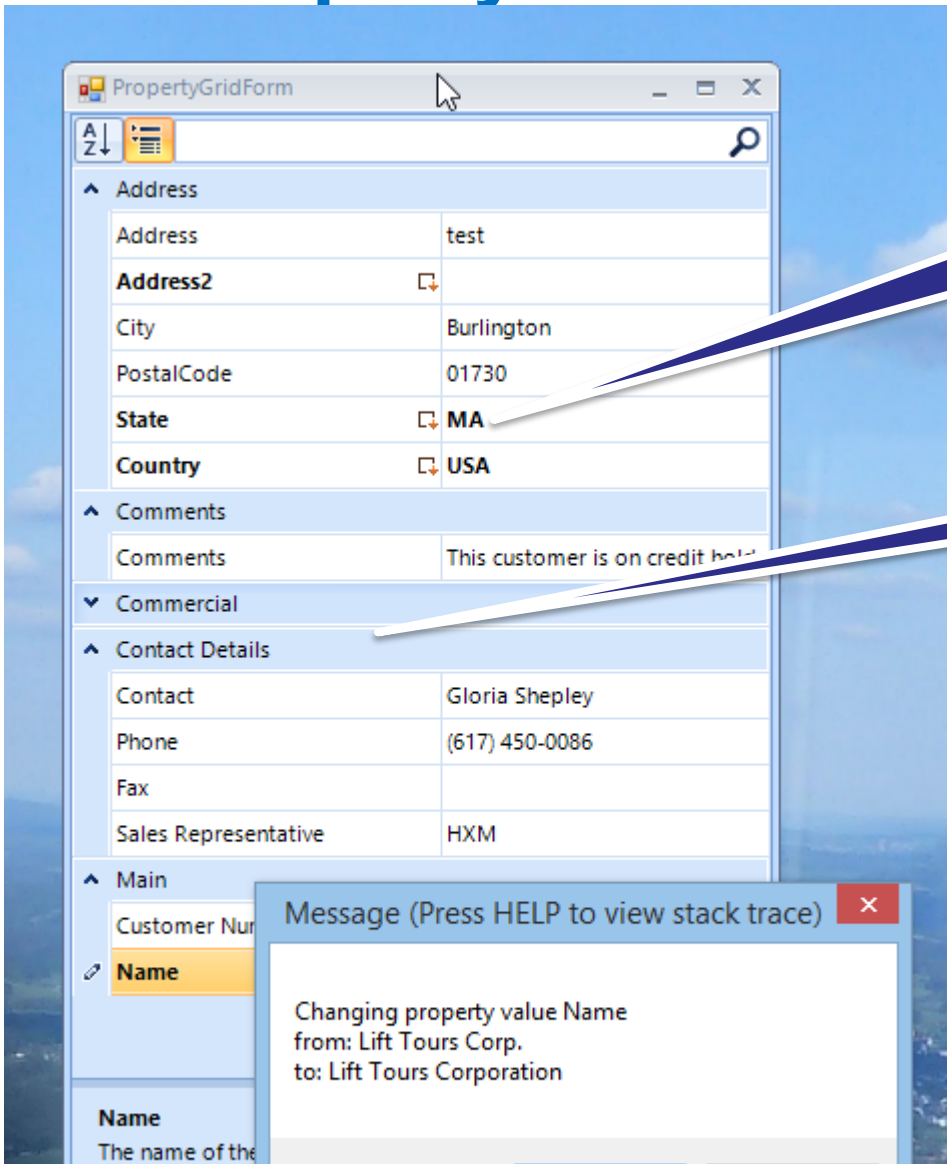


Property Editor customization



Custom Property Editor

RadPropertyGrid as a compact viewer



Updated Property Value

Opened / Closed Category

Demo / Code Review

- RadPropertyGrid to display Customer record

```
METHOD PROTECTED System.Object InitializePropertyStore ():

    DEFINE VARIABLE oObject AS RadPropertyStore NO-UNDO .
    DEFINE VARIABLE oItem AS PropertyStoreItem NO-UNDO .

    oObject = NEW RadPropertyStore () .

    oItem = NEW PropertyStoreItem (Progress.Util.TypeHelper:GetType ("System.Int32"),
        "CustNum",
        BOX (Customer.CustNum),
        "The Customer Number is the unique identifier of a customer",
        "Main",
        TRUE) .

    oItem:Label = "Customer Number" .
    oObject:Add (oItem) .

    oItem = NEW PropertyStoreItem (Progress.Util.TypeHelper:GetType ("System.String"),
        "Name",
        BOX (Customer.Name),
        "The name of the customer as it appears onm their letterhead",
        "Main",
        FALSE) .

    oObject:Add (oItem) .
```


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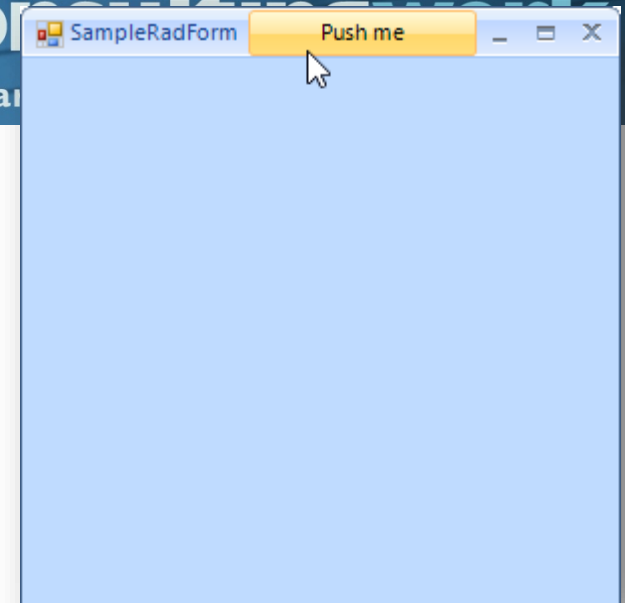
Base Forms

- RadControls provides three base forms for application forms
 - RadForm
 - RadRibbonForm
 - ShapedForm
- Those Forms extent (inherit from) *System.Windows.Forms.Form*

RadForm

- Styleable and themeable Form
 - Office 2007, Office 2010, Office 2013
 - Metro
 - Visual Studio
 - ...
- Entry point into Telerik Presentation Foundation, Element model
- Custom TitleBar Element
- Allows adding custom contents to title bar

RadForm








```
CONSTRUCTOR PUBLIC SampleRadForm ():  
  
    DEFINE VARIABLE oButtonInTitleBar AS RadButtonElement NO-UNDO .  
  
    SUPER().  
  
    InitializeComponent().  
  
    oButtonInTitleBar = NEW RadButtonElement() .  
    oButtonInTitleBar:Text = "Push me" .  
  
    THIS-OBJECT:FormElement:TitleBar:Children[2]:Children:Add (oButtonInTitleBar) .  
  
    CATCH e AS Progress.Lang.Error:  
        UNDO, THROW e.  
    END CATCH.  
  
END CONSTRUCTOR.
```

RadForm Example

Change Theme About

Drag a column here to group by this column.

Photo	Last Name	First Name	Title	Hire Da...	City
	Davolio	Nancy	Sales Re...	5/1/199...	Seattle
	Fuller	Andrew	Vice Pre...	8/14/19...	Tacoma
	Leverling	Janet	Sales Re...	4/1/199...	Kirkland
	Peacock	Margaret	Sales Re...	5/3/199...	Redm...
	Buchanan	Steven	Sales M...	10/17/1...	London

Buttons

RadButton1

RadButton2

RadButton3

Check Boxes

Radio Buttons

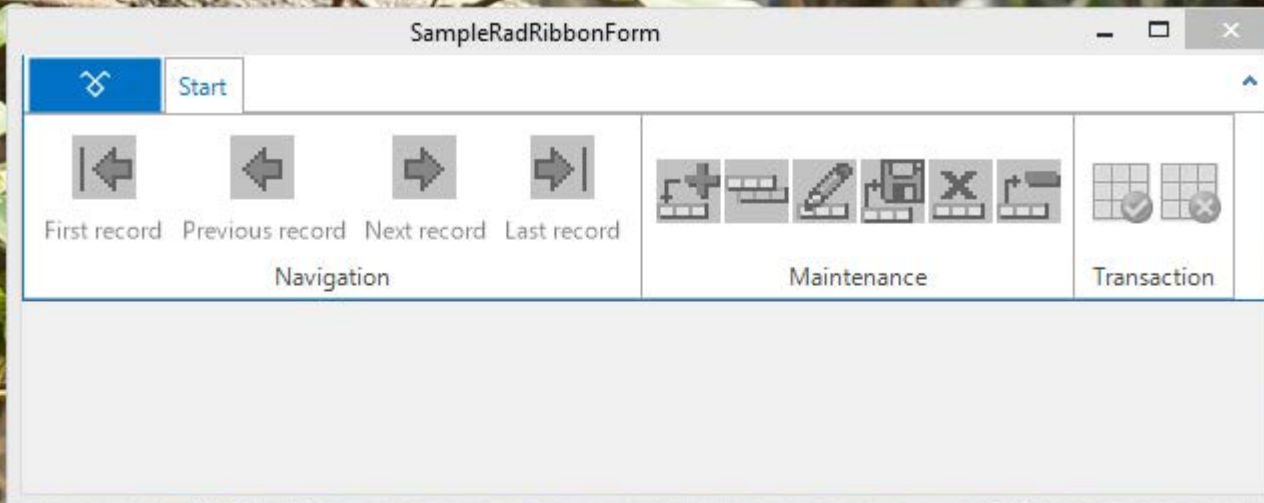
Page 1 of 1 | Words: 2 | Saving... Check for errors | English (US)

RadRibbonForm

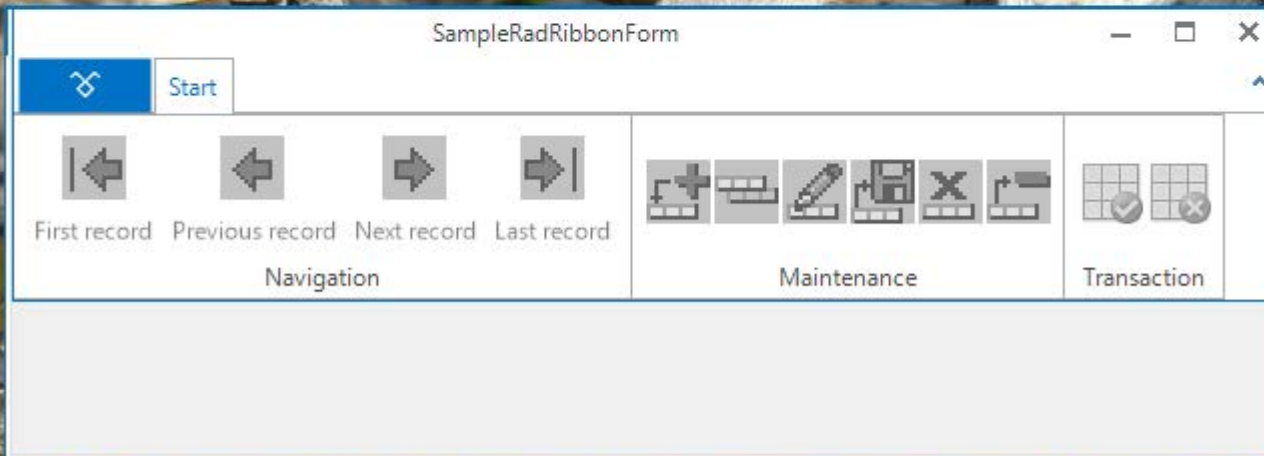
- RadForm containing a RadRibbonBar
- Foundation for Office 2007 UI
- Provides AllowAero property to allow Form title bar styling

RadRibbonForm

AllowAero=TRUE

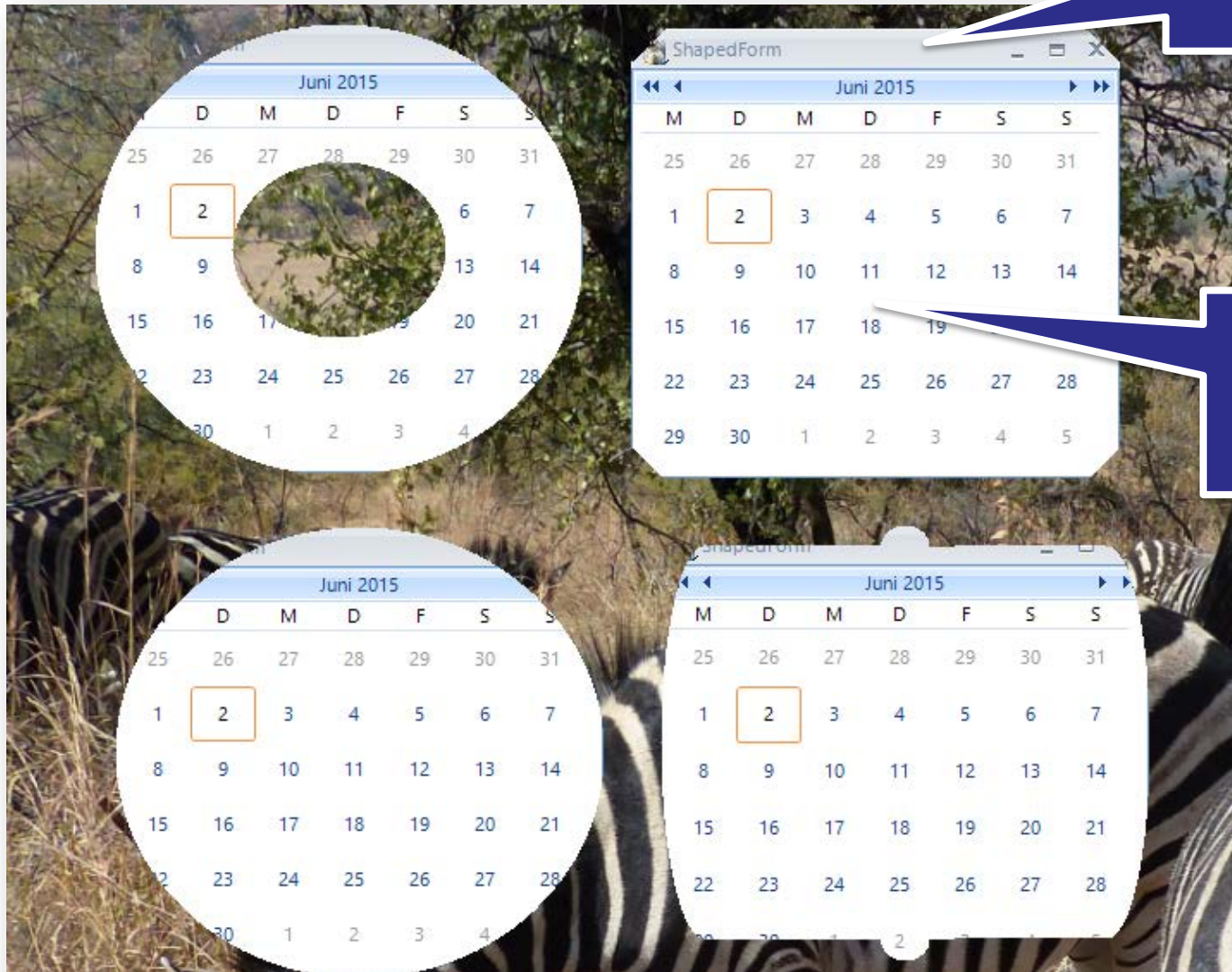


AllowAero=FALSE



ShapedForm Sample

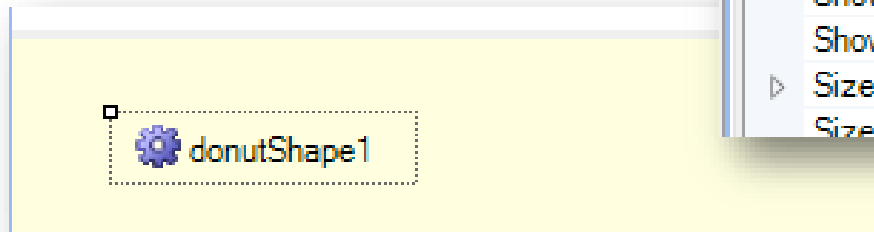
Optionally add RadTitleBar Control



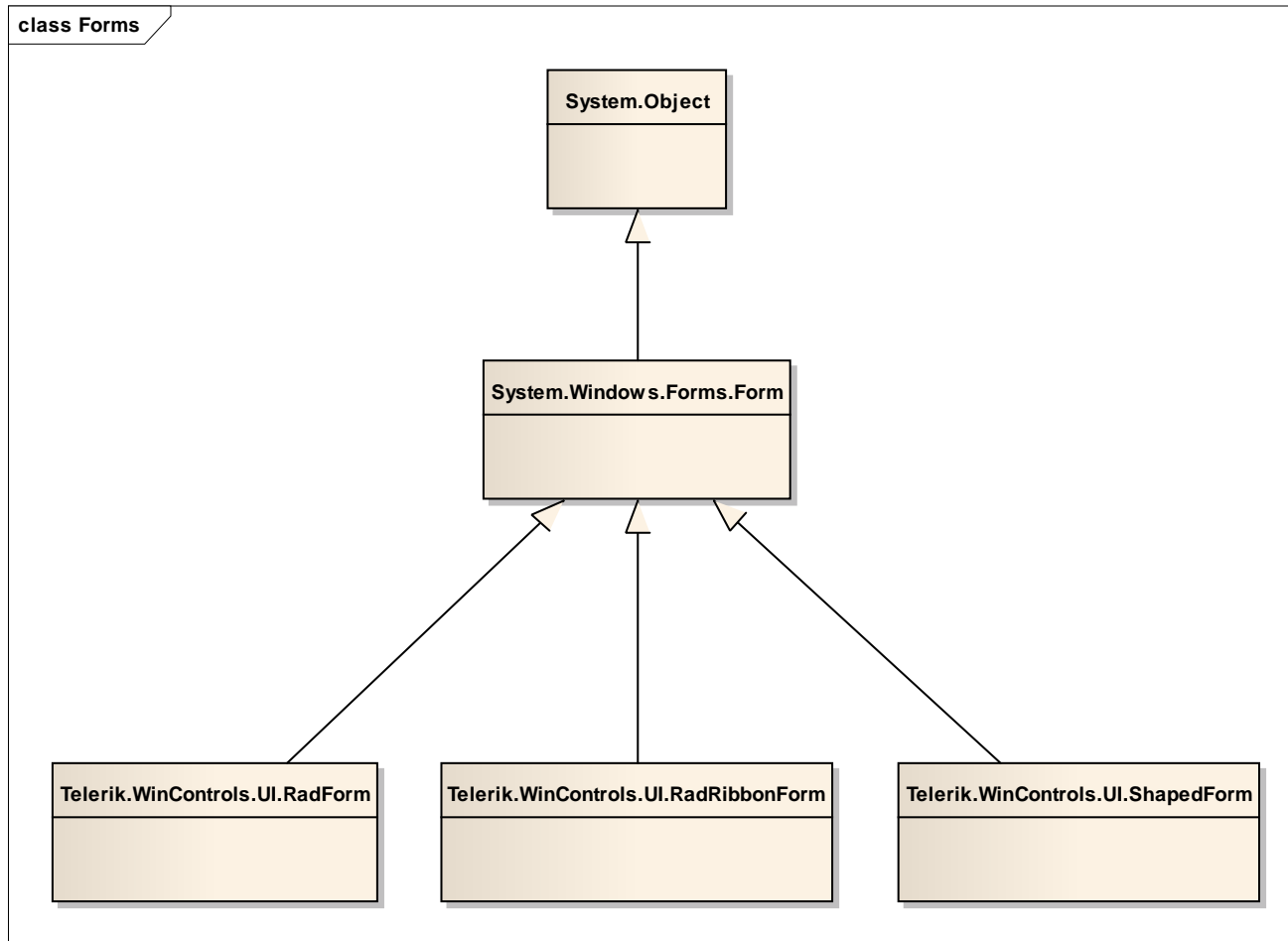
Sample Form contents

RightToLeftLayout	False
▶ Shape	donutShape 1
ShowIcon	(none)
ShowInTaskbar	ChamferedRectShape
▶ Size	CustomShape
SizeGripStyle	DonutShape
StartPosition	MediaShape
Tag	EllipseShape
Text	OfficeShape
	ShapedForm

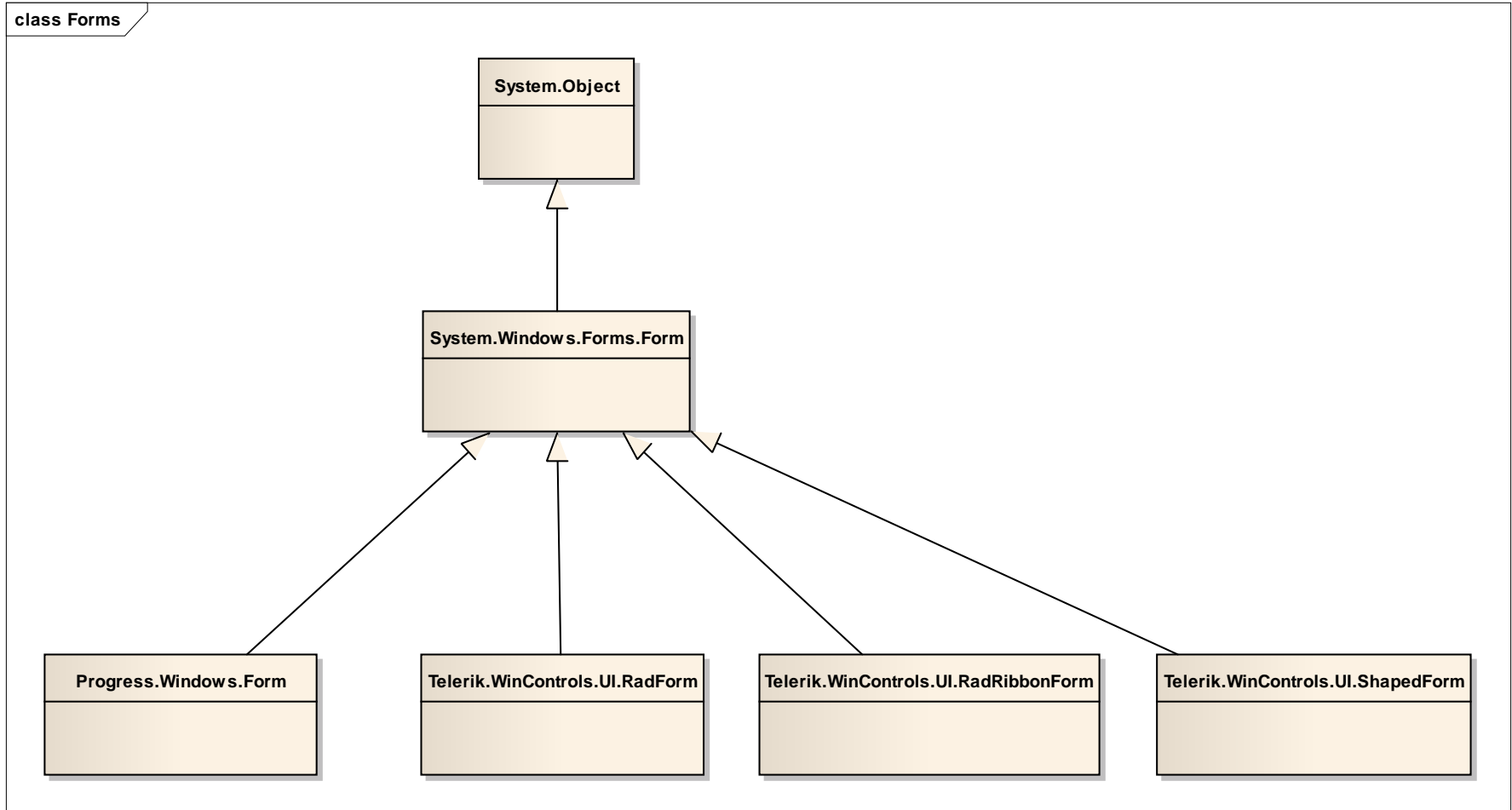
RightToLeft	No
RightToLeftLayout	False
▶ Shape	donutShape 1
(Name)	donutShape 1
GenerateMember	True
Modifiers	Private
Thickness	80
ShowIcon	True
ShowInTaskbar	True
▶ Size	284; 261
SizeGripStyle	Auto



Form Inheritance



Form Inheritance



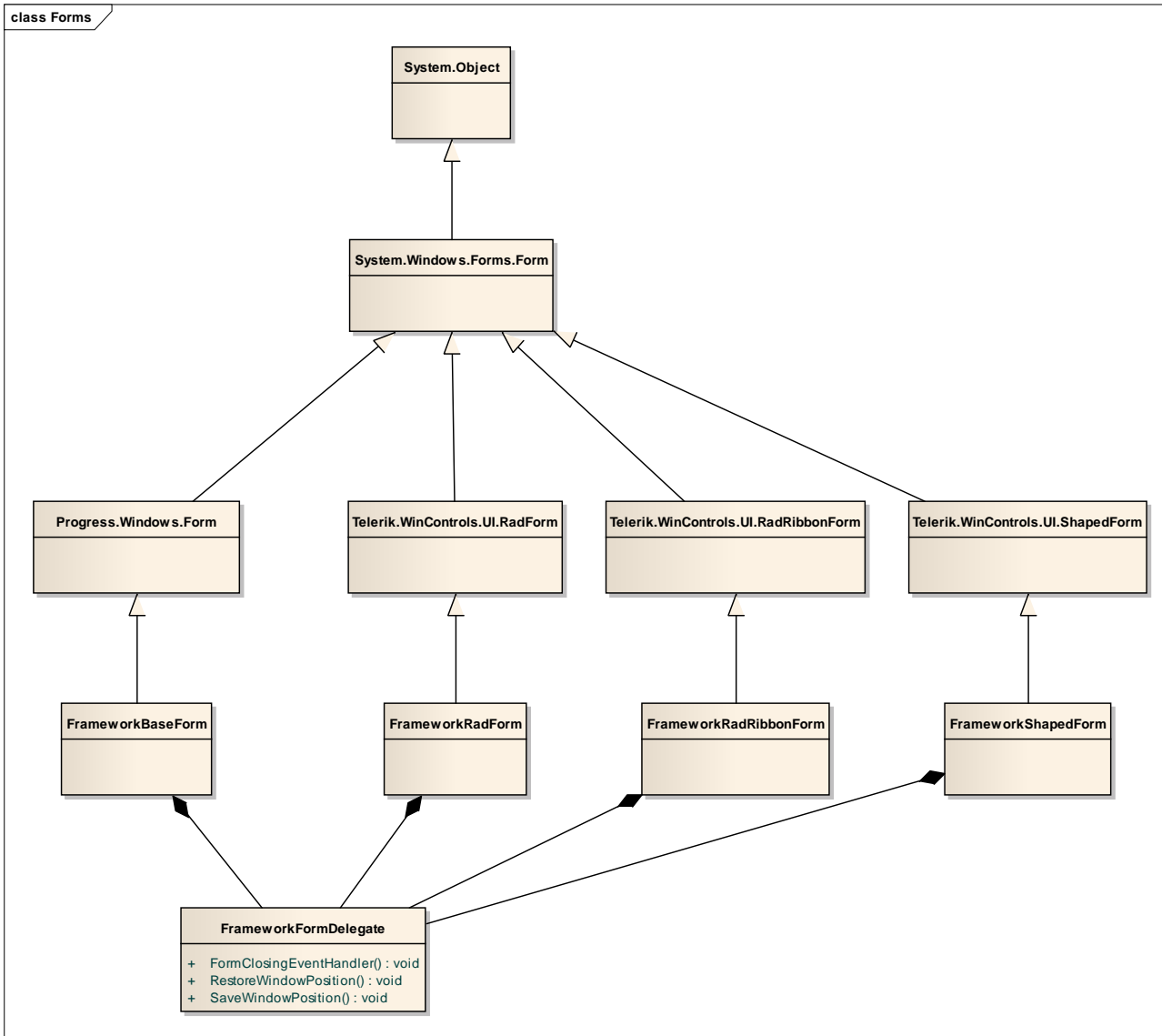
No Progress.Windows.Form features (yet)

- RadForm, RadRibbonForm and ShapedForm do not inherit from *Progress.Windows.Form*
- Lacks features of interoperability with ABL GUI
- TOP-MOST, Form/Window Parenting
- SESSION:SET-WAIT-STATE Cursor
- Sequence while closing Forms/Windows
- **Planned enhancement for OE11.6 by creating three Progress specific RadForms**
- <http://knowledgebase.progress.com/articles/Article/000057521>

Framework BaseForms

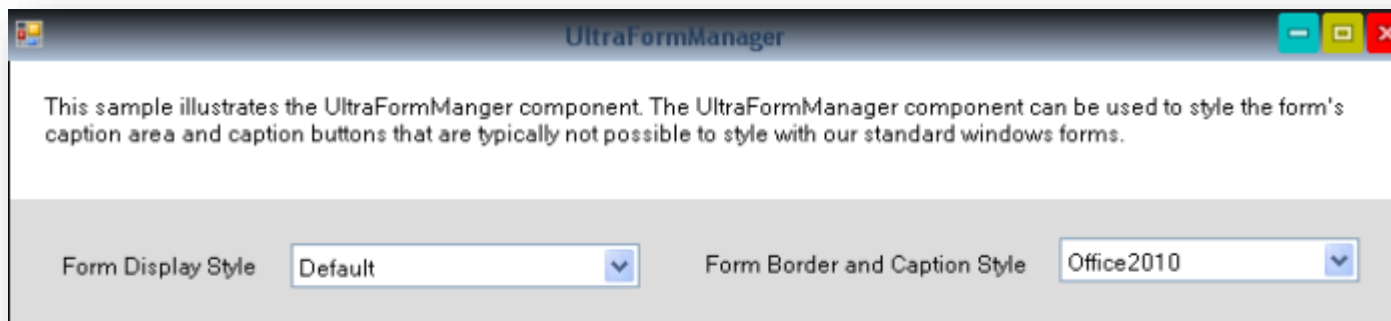
- Common pattern to implement base form with Framework specific functionality
- “Are you sure that you want to close the form?”
- Save settings on close
 - Window Position and Size, Splitter Bars
 - Ribbon Quick Access Toolbar
 - Custom Settings
- Restore settings on open
- Should be “delegated” from custom base forms to Delegate class to avoid code duplication

Framework BaseForms



Base Forms

- Infragistics does not provide a base form at all
- The Ribbon provides styling to the owning Form
 - System.Windows.Forms.Form
 - Progress.Windows.Form
 - Custom Framework BaseForm
- UltraFormManager can provide styling to Form without a Ribbon



Agenda

- Introduction
- .NET Framework/OpenEdge Versions
- High level Control comparison
- Base Forms
- **Styling**
- Telerik Presentation Foundation
- Access to generic methods
- Known issues



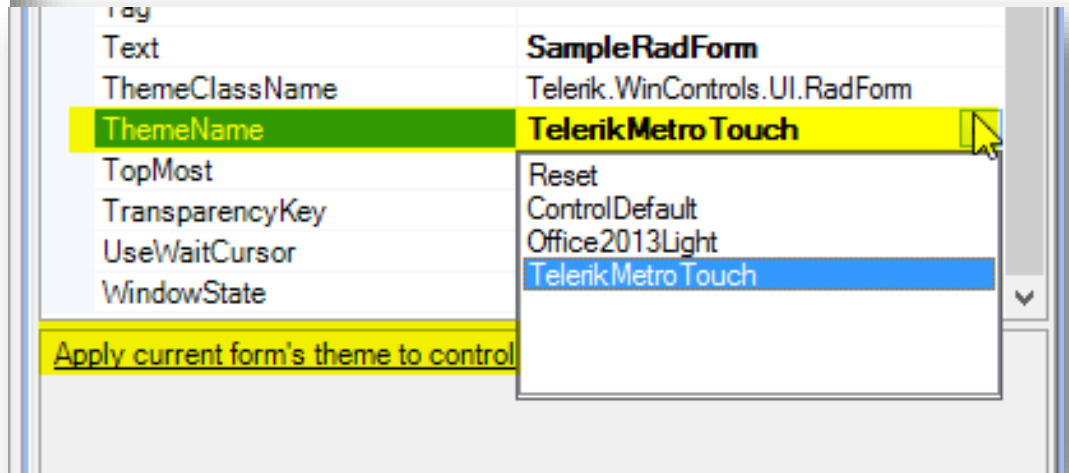
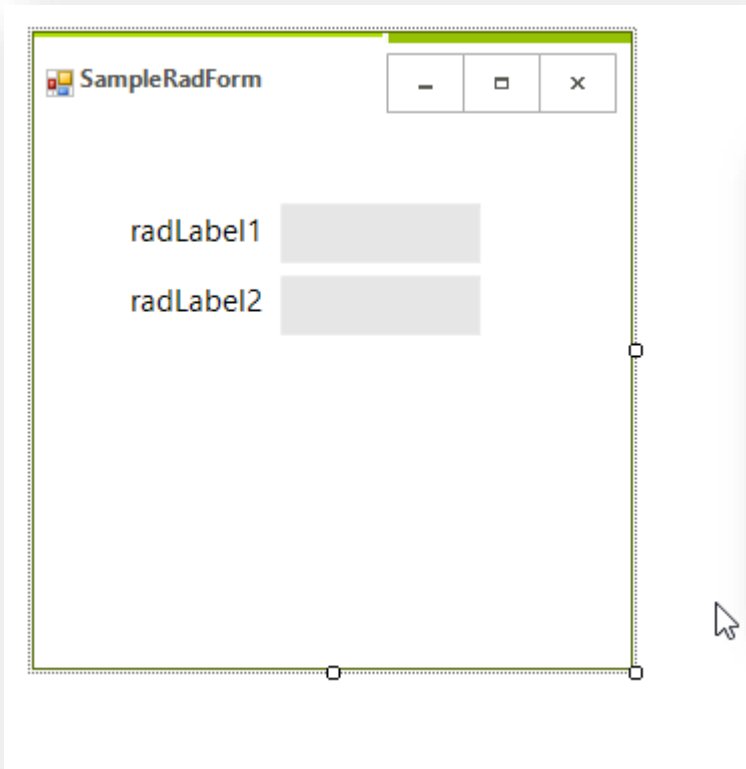
Styling

- Similar to Infragistics AppStyling
- Libraries of Styles define common look of Controls
- Style Libraries may be dropped from toolbox as Component into Visual Designer, WYSIWYG in the Visual Designer
- Default Styles provided as resources in Assemblies

OS (C:) > Programme (x86) > Telerik > UI for WinForms Q1 2015 > Bin40

"Bin40" durchsuch

Name	Änderungsdatum	Typ	Größe
Telerik.WinControls.SpellChecker	31.03.2015 19:15	XML-Datei	13 KB
Telerik.WinControls.Themes.Aqua.dll	31.03.2015 19:14	Anwendungserwe...	275 KB
Telerik.WinControls.Themes.Breeze.dll	31.03.2015 19:14	Anwendungserwe...	471 KB
Telerik.WinControls.Themes.Desert.dll	31.03.2015 19:14	Anwendungserwe...	622 KB
Telerik.WinControls.Themes.HighContrastBlack.dll	31.03.2015 19:14	Anwendungserwe...	207 KB
Telerik.WinControls.Themes.Office2007Black.dll	31.03.2015 19:14	Anwendungserwe...	568 KB
Telerik.WinControls.Themes.Office2007Silver.dll	31.03.2015 19:14	Anwendungserwe...	597 KB
Telerik.WinControls.Themes.Office2010Black.dll	31.03.2015 19:14	Anwendungserwe...	681 KB
Telerik.WinControls.Themes.Office2010Blue.dll	31.03.2015 19:14	Anwendungserwe...	728 KB
Telerik.WinControls.Themes.Office2010Silver.dll	31.03.2015 19:14	Anwendungserwe...	784 KB
Telerik.WinControls.Themes.Office2013Dark.dll	31.03.2015 19:14	Anwendungserwe...	178 KB
Telerik.WinControls.Themes.Office2013Light.dll	31.03.2015 19:14	Anwendungserwe...	172 KB
Telerik.WinControls.Themes.TelerikMetro.dll	31.03.2015 19:14	Anwendungserwe...	547 KB
Telerik.WinControls.Themes.TelerikMetroBlue.dll	31.03.2015 19:14	Anwendungserwe...	526 KB
Telerik.WinControls.Themes.TelerikMetroTouch.dll	31.03.2015 19:14	Anwendungserwe...	552 KB
Telerik.WinControls.Themes.VisualStudio2012Dark.dll	31.03.2015 19:14	Anwendungserwe...	205 KB
Telerik.WinControls.Themes.VisualStudio2012Light.dll	31.03.2015 19:15	Anwendungserwe...	207 KB
Telerik.WinControls.Themes.Windows7.dll	31.03.2015 19:15	Anwendungserwe...	535 KB
Telerik.WinControls.Themes.Windows8.dll	31.03.2015 19:15	Anwendungserwe...	205 KB
Telerik.WinControls.UI.Design.dll	31.03.2015 19:15	Anwendungserwe...	2.200 KB



telerikMetroBlueTheme1

telerikMetroTouchTheme1

telerikMetroBlueTheme2

highContrastBlackTheme1

Default Application Style

- During Application Startup:

```
DEFINE VARIABLE oDefaultTheme AS Telerik.WinControls.Themes.Office2013DarkTheme NO-UNDO .  
  
/* Initialize Theme */  
oDefaultTheme = NEW Office2013DarkTheme () .  
  
Telerik.WinControls.ThemeResolutionService:ApplicationThemeName = "Office2013Dark" .
```

- Similar to Infragistics StyleManager

Agenda

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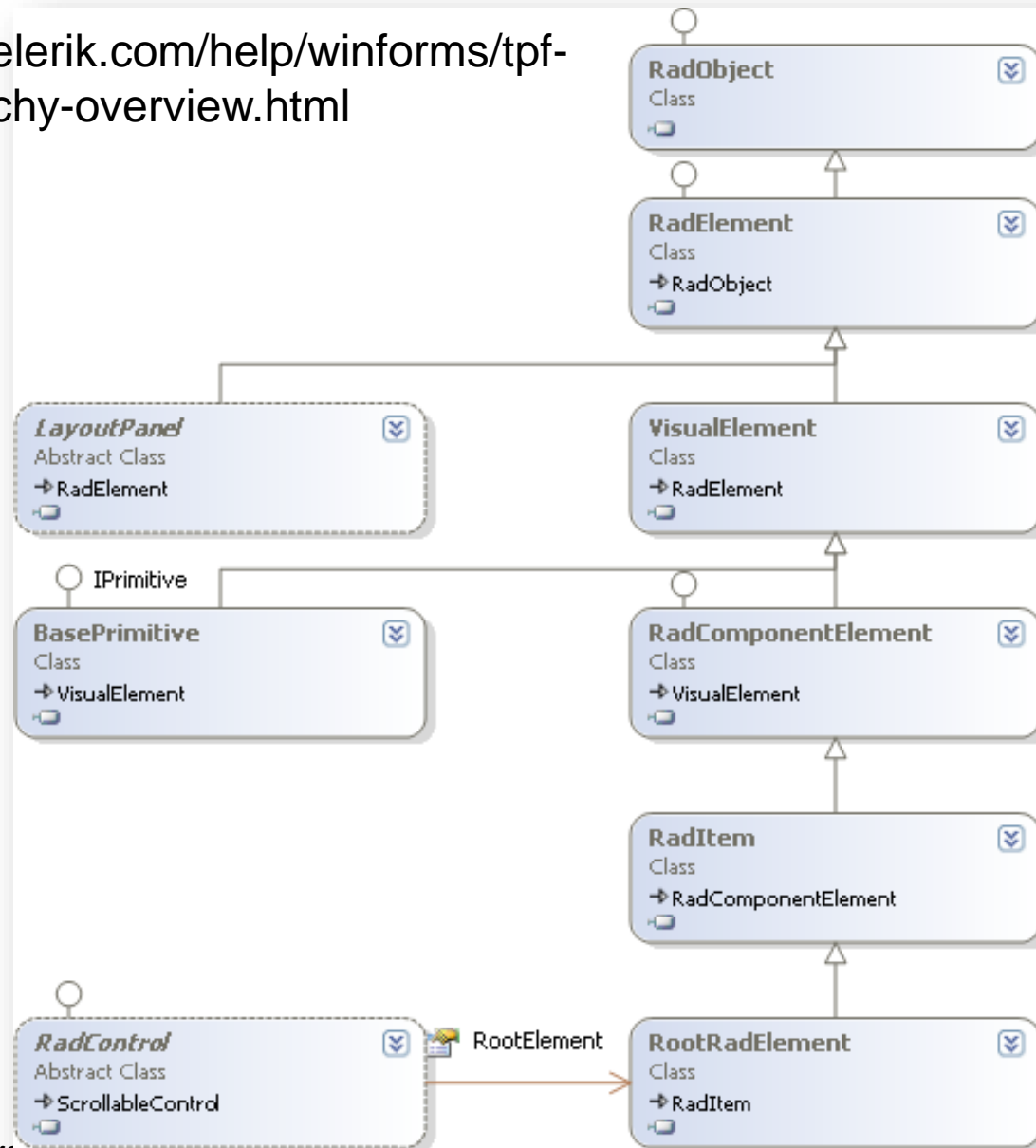
Telerik Presentation Foundation

- “WPF for Windows Forms” (Marketing term)
- Provides common services for theming, animation and property binding to all Telerik Controls, allows to build own controls
- All Telerik Controls are built from a few basic elements (term element known in WPF)
- Controls provide reference to Elements/tree
- Property inheritance in a element tree
- At first sight similar to Infragistics UI Elements, but more powerful, more customizable

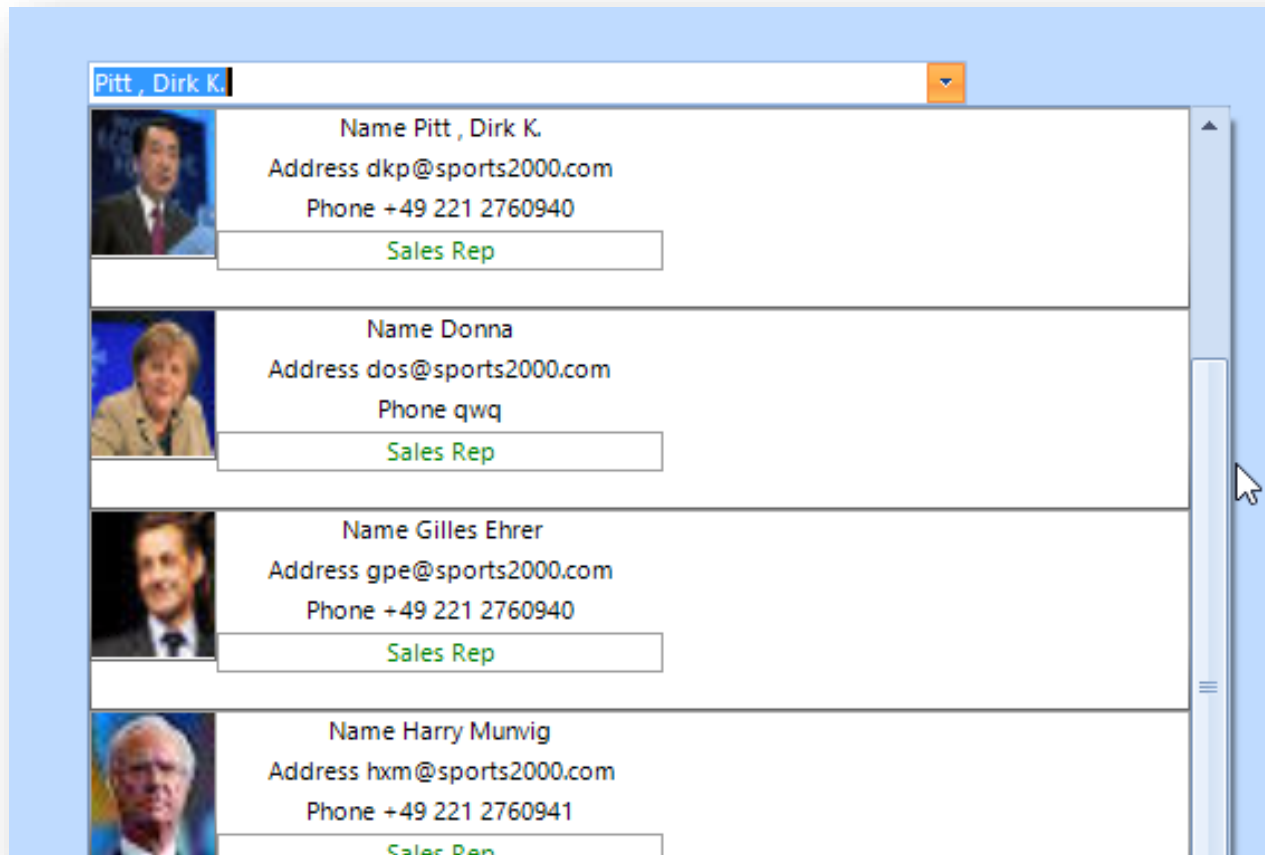
Telerik Presentation Foundation

- 3 types of basic Elements
- **Layout Elements:** Arrange other elements, e.g. DockLayoutPanel, StackLayoutElement
- **Painted Elements** (primitives): Responsible for drawing, provide Paint method, e.g. BorderPrimitive, CheckPrimitive, FillPrimitive, ImagePrimitive, LinePrimitive, TextPrimitive, LightVisualElement
- **Component Elements:** Provide user interaction, represent Controls

<http://www.telerik.com/help/winforms/tpf-class-hierarchy-overview.html>



Sample: Custom DropDownList



<http://www.telerik.com/help/winforms/dropdown-and-listcontrol-dropdownlist-customizing-items.html>

Sample: Custom DropDownList

- In the Form, subscribe to CreatingVisualListItem event of the RadDropDownList Control

```
/*-----  
Purpose: Event handler for the CreatingVisualListItem event of the radDropDownList1  
Notes:  
@param sender The reference to the object that raised the event  
@param args The CreatingVisualListItemEventArgs with the data for this event  
-----*/  
METHOD PRIVATE VOID radDropDownList1_CreatingVisualListItem (sender AS System.Object,  
                                                             args AS Telerik.WinControls.UI.CreatingVisualListItemEventArgs):  
  
/* Assign custom Visual Item */  
args:VisualItem = NEW CustomVisualItem (CAST (radDropDownList1:DataSource, Progress.Data.BindingSource)) .  
  
END METHOD .
```

- Event allows to provide your own Element to realize the data bound combo-box items

```
/*-----*/  
Purpose: Constructor for the CustomVisualItem class  
Notes:  
-----*/  
CONSTRUCTOR PUBLIC CustomVisualItem (poBindingSource AS Progress.Data.BindingSource):  
SUPER ().  
  
oBindingSource = poBindingSource .  
  
oSalesRepDescriptor = oBindingSource:GetItemProperties():Item["SalesRep"] .  
oRepNameDescriptor = oBindingSource:GetItemProperties():Item["RepName"] .  
oEmailDescriptor = oBindingSource:GetItemProperties():Item["Email"] .  
oSmallImageDescriptor = oBindingSource:GetItemProperties():Item["SmallImage"] .  
oPhoneDescriptor = oBindingSource:GetItemProperties():Item["PhoneOffice"] .  
  
END CONSTRUCTOR.
```

METHOD PROTECTED OVERRIDE VOID CreateChildElements ():

```
SUPER:CreateChildElements() .
```

```
mainContainer = new DockLayoutPanel() .  
leftColumn = new StackLayoutElement().  
rightColumn = new StackLayoutElement().  
titleElement = new LightVisualElement().  
photoElement = new LightVisualElement().  
nameElement = new LightVisualElement().  
addressElement = new LightVisualElement().  
phoneElement = new LightVisualElement().
```

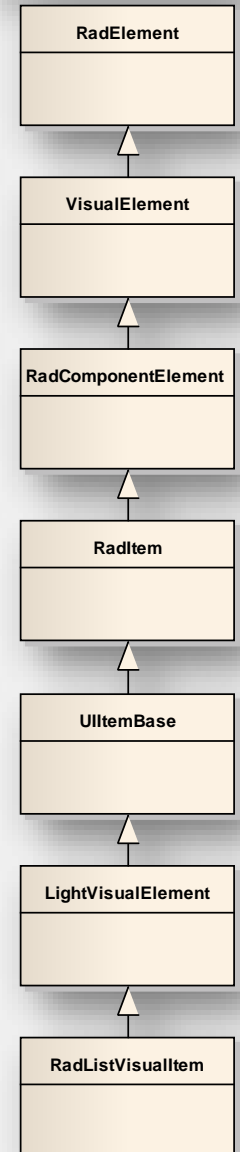
```
THIS-OBJECT:Children:Add(mainContainer).  
mainContainer:LastChildFill = TRUE.
```

```
leftColumn:Orientation = Orientation:Vertical.  
leftColumn:Children:Add(photoElement).  
photoElement:DrawBorder = TRUE.
```

```
rightColumn:Orientation = Orientation:Vertical.
```

```
rightColumn:Children:Add(nameElement).  
rightColumn:Children:Add(addressElement).
```

class Telerik.WinControls.UI



Access to Bound Data Source Fields

- Need to query PropertyDescriptor from BindingSource to query field values of current “Item” (aka current record)

```
DEFINE VARIABLE oSalesRepDescriptor AS PropertyDescriptor NO-UNDO .
DEFINE VARIABLE oRepNameDescriptor AS PropertyDescriptor NO-UNDO .
DEFINE VARIABLE oEmailDescriptor AS PropertyDescriptor NO-UNDO .
DEFINE VARIABLE oSmallImageDescriptor AS PropertyDescriptor NO-UNDO .
DEFINE VARIABLE oPhoneDescriptor AS PropertyDescriptor NO-UNDO .
```

```
oSalesRepDescriptor = oBindingSource:GetItemProperties():Item["SalesRep"] .
oRepNameDescriptor = oBindingSource:GetItemProperties():Item["RepName"] .
oEmailDescriptor = oBindingSource:GetItemProperties():Item["Email"] .
oSmallImageDescriptor = oBindingSource:GetItemProperties():Item["SmallImage"] .
oPhoneDescriptor = oBindingSource:GetItemProperties():Item["PhoneOffice"] .
```

```
METHOD OVERRIDE PUBLIC VOID Synchronize ():
```

```
    SUPER:Synchronize().
```

```
    THIS-OBJECT:Text = System.String:Empty .
```

```
    THIS-OBJECT:nameElement:Text = "Name " + UNBOX (oRepNameDescriptor:GetValue (THIS-OBJECT:Data:DataBoundItem)) .
```

```
    THIS-OBJECT:addressElement:Text = "Address " + UNBOX (oEmailDescriptor:GetValue (THIS-OBJECT:Data:DataBoundItem)) .
```

```
    THIS-OBJECT:phoneElement:Text = "Phone " + UNBOX (oPhoneDescriptor:GetValue (THIS-OBJECT:Data:DataBoundItem)) .
```

```
    THIS-OBJECT:titleElement:Text = "Sales Rep " + UNBOX (oSalesRepDescriptor:GetValue (THIS-OBJECT:Data:DataBoundItem)) .
```

```
Tele END METHOD .
```


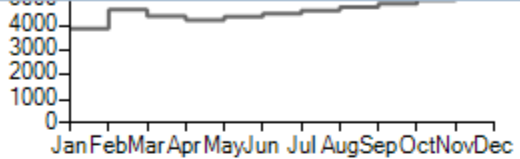
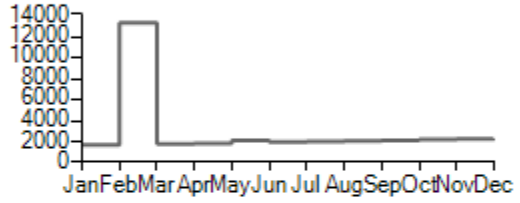

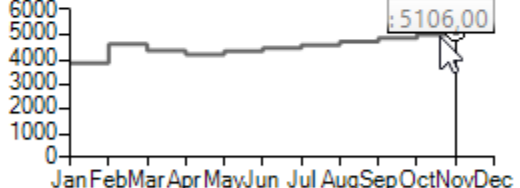


Demo

- Demo
- Code Review

Sample: Chart in Grid Cell

RadCharInGridForm

Drag a column here to group by this column.

	Image	Sales Rep	Rep Name	E-Mail	Quota
+		KIK	Kari Iso-Kauppinen	kik@sports2000.com	
+		MLI	Liewehr, Mike		
→ +		RDR	Robert Roller	rdr@sports2000.com	
+		SLS	Smith, Spike Louise	sls@sports2000.com	

Adding custom Elements to Grid cell

```

/*-----
Purpose: [ Event handler for the CreateCell event of the radGridView1
Notes:
@param sender The reference to the object that raised the event
@param e The GridViewCreateCellEventArgs with the data for this event
-----*/
METHOD PRIVATE VOID radGridView1_CreateCell (sender AS System.Object,
                                             e AS Telerik.WinControls.UI.GridViewCreateCellEventArgs):

    IF NOT VALID-OBJECT (e:Column) THEN
        RETURN .

    IF NOT e:Column:Name = "column1":U THEN
        RETURN .

    IF NOT VALID-OBJECT (e:Row) THEN
        RETURN.

    IF e:Row:Data:Index < 0 THEN RETURN .

    e:CellElement = NEW GridDataCellElement (e:Column, e:Row) .

    THIS-OBJECT:CreateChart (e:CellElement, e:Row:Data:DataBoundItem) .

    CATCH err AS Progress.Lang.Error :
        ErrorHandler:ShowErrorMessage (err) .
    END CATCH.

END METHOD .

```

```
METHOD PUBLIC VOID CreateChart (poParent AS RadElement, poDataItem AS System.Object):
```

```
    DEFINE VARIABLE oDataPoints AS "CategoricalDataPoint[]" NO-UNDO .
    DEFINE VARIABLE oSeries AS SteplineSeries NO-UNDO .
    DEFINE VARIABLE oPoint AS CategoricalDataPoint NO-UNDO .
    DEFINE VARIABLE i AS INTEGER NO-UNDO .

    DEFINE VARIABLE oElement AS RadChartElement NO-UNDO .

    DEFINE VARIABLE cMonth AS CHARACTER NO-UNDO EXTENT 12
        INIT ["Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul", "Aug", "Sep", "Oct", "Nov", "Dec"].

    oElement = NEW RadChartElement () .
    oElement:SIZE = poParent:Size.

    oDataPoints = {Consultingwerk/new-array.i Telerik.Charting.CategoricalDataPoint 12} .

    oSeries = NEW SteplineSeries () .

    DO i = 1 TO 12:
        oPoint = NEW CategoricalDataPoint () .
        oPoint:Value = UNBOX (oQuotaDescriptor[i]:GetValue(poDataItem)) .
        oPoint:Label = oPoint:Value .
        oPoint:Category = BOX (cMonth[i]) .

        oDataPoints:SetValue(oPoint, i - 1) .
    END.

    oSeries:DataPoints:AddRange (oDataPoints) .

    oElement:View:Series:Add (oSeries) .

    oElement:View>ShowPanZoom = TRUE .
    oElement:View>ShowTrackBall = TRUE .

    poParent:Children:Add (oElement) .

    oElement:Location = NEW System.Drawing.Point (-50, -50) .
```

```
END METHOD .
```

Code Review

- Access to PropertyDescriptors for Array fields
- Create Chart Element

TPF vs. Infragistics Customization

- Infragistics AppStyling based on standardized Appearance objects which separates styling from any functional attributes
- Infragistics UIElement tree fixed for Controls
- Infragistics Control Customization requires using draw filters and low level GDI methods
- Draw filters invoked during painting of Control, lots of “traffic” (traffic jam) on the AVM to .NET bridge, pretty performance critical

```
// To return FALSE from this method indicates that the element should draw itself as normal.
// To return TRUE from this method indicates that the element should not draw itself.
bool UIElementDrawFilter.DrawElement( DrawPhase drawPhase, ref UIElementDrawParams drawParams )
{
    // Get the column header to which the sort indicator belongs.
    ColumnHeader header = drawParams.Element.GetContext( typeof( ColumnHeader ) ) as ColumnHeader;

    // Just to be safe...
    if( header == null || header.Column == null )
        return false;

    // Find out if the column associated with the column header is being sorted ascending or descending.
    bool sortAscending = ( header.Column.SortIndicator == SortIndicator.Ascending );

    // Comments elided for clarity...
    Rectangle rect = drawParams.Element.Rect;
    rect.Inflate( +1, -1 );
    rect.Offset( -2, 0 );

    // Setup an ImageAttributes and ColorMap so that the blank white area
    // surrounding the sort indicator image is painted transparently.
    ImageAttributes imageAttr = new ImageAttributes();
    ColorMap[] colorMap = new ColorMap[1];
    colorMap[0] = new ColorMap();
    colorMap[0].OldColor = Color.White;
    colorMap[0].NewColor = Color.Transparent;
    imageAttr.SetRemapTable( colorMap );

    try
    {
        // Get the bitmap to use and then render it.
        using( Bitmap bmp = new Bitmap( sortAscending ? this.ascendingImage : this.descendingImage ) )
        {
            drawParams.Graphics.DrawImage(
                bmp,
                rect,
                0,
                0,
                bmp.Width,
                bmp.Height,
                GraphicsUnit.Pixel,
                imageAttr
            );
        }
    }
    catch( Exception ex )
    {
        Debug.Assert(
            false,
            "An exception occurred while trying to render a custom sort indicator:\n" + ex.Message,
            "Was one of the images used for the custom sort indicators deleted or renamed?"
        );

        // If something went wrong (ex. the image file was deleted) then let the default rendering occur.
        return false;
    }

    // If we get to this point then our custom sort indicator was successfully rendered.
    // Returning true prevents the normal sort indicator from being rendered on top of what we just drew.
    return true;
}
}
```

<http://devcenter.infragistics.com/Support/KnowledgeBaseArticle.aspx?ArticleID=5873>

Agenda

- Introduction
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- High level Control comparison
- Base Forms
- Styling
- Telerik Presentation Foundation
- **Access to generic methods**
- Known issues



Access to generic methods

- Telerik RadControls provides a few generic methods
- Those may be required for advanced features of the Controls
- ABL only supports generic methods in generic Types (e.g. `System.Collections.Generic.List<T>`)
- ABL does not allow access to generic methods in non generic Types
- No plan to fix this for OpenEdge 11.6
- Generic methods allow return type overloading

Sample Grid View Drag and Drop

- <http://www.telerik.com/help/winforms/gridview-rows-drag-and-drop.html>

[C#]

```
public DragAndDropRadGrid()
{
    this.MultiSelect = true;

    //handle drag and drop events for the grid through the DragDrop service
    RadDragDropService svc =
        this.GridViewElement.GetService<RadDragDropService>();
```

[-] Collapse All [+] Code: All

Telerik UI for WinForms

RadGridViewElement.GetService(T) Method

[RadGridViewElement Class](#) [See Also](#)  Send Feedback

Namespace: [Telerik.WinControls.UI](#)

Assembly: Telerik.WinControls.GridView (in Telerik.WinControls.GridView.dll) Version: 2015.1.331.40 (2015.1.331.40)

Syntax

C#

```
public T GetService<T>()
where T : RadService
```

Access generic methods using Reflection

- <https://github.com/consultingwerk/ReflectionHelperOSS>

```
DEFINE VARIABLE oRadGridView AS RadGridView NO-UNDO .
DEFINE VARIABLE oRadGridViewElement AS RadGridViewElement NO-UNDO.

DEFINE VARIABLE oService AS RadGridViewDragDropService NO-UNDO .

/* ***** Main Block ***** */

oRadGridView = NEW RadGridView () .
oRadGridViewElement = oRadGridView:GridViewElement .

/* C#: oService = oRadGridViewElement<RadGridViewDragDropService> ();
Note that C# does not require to CAST the return value due to the
dynamic and at the same time static nature of the generic method
return type definition. */
oService = CAST (ReflectionHelper:InvokeGenericMethod (oRadGridViewElement,
                                                       "GetService":U,
                                                       "Telerik.WinControls.UI.RadGridViewDragDropService":U),
                RadGridViewDragDropService) .
```

```
oMethodTypeOfArray:SetValue (Progress.Util.TypeHelper:GetType (pcMethodOfType), 0) .
oMethodType = poTarget:GetType () .

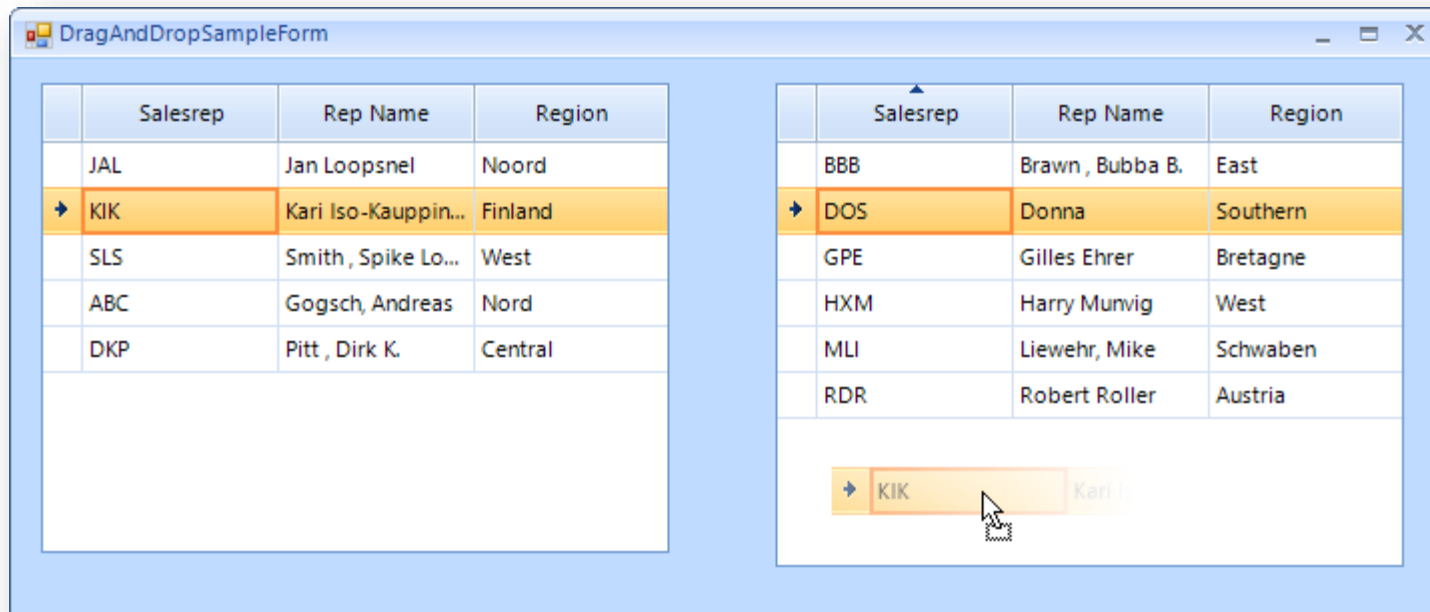
IF piNumParameters > 0 THEN
    oMethodInfo = oMethodType:GetMethod (pcMethodName, oParameterTypes) .
ELSE
    oMethodInfo = oMethodType:GetMethod (pcMethodName) .

oGenericMethodInfo = oMethodInfo:MakeGenericMethod (oMethodTypeOfArray) .

RETURN oGenericMethodInfo:Invoke (poTarget, oParameters) .
```

Drag and Drop sample

- Demo & Code Review
 - Using generic method with ReflectionHelper
 - Unbound Grid's



Demo

- Code Review

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Known issues Telerik .NET with OpenEdge

- Various known issues in K-Base already
- Some issues with ProBindingSource (add/delete)
- Visual Inheritance Issues (Code Serialization)
- <http://knowledgebase.progress.com/articles/Article/000057521>
- Typically issues are targeted for 11.6

ProBindingSource OffEnd Event

- Scrolling in a RadGridView (mouse wheel or scroll bar) does not raise the OffEnd event of the BindingSource
- Clicking into last row of Grid raises event but causes disturbing UI effects
- Major blocker for AppServer bound UI
- Defect PSC00333842
- <http://knowledgebase.progress.com/articles/Article/BindingSource-OffEnd-Event-not-firing-properly-with-Telerik-RadGridView>

ProBindingSource OffEnd Event

RadGridViewForm

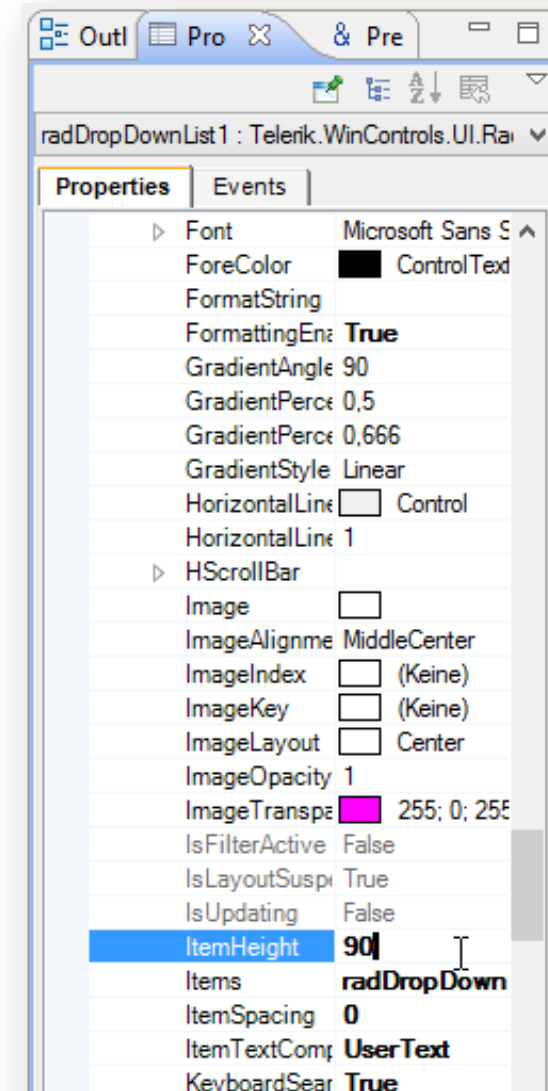
Drag a column here to group by this column.

Click here to add a new row

	Address	Address...	Balance	City	Comm...	Contact	Country	Credit...	Cust N...	Discount	Email	Fax	Name	Phone	Postal...	Sales R...	State	Terms
*	Click here to add a new row																	
▶	114 N...		1589.98	Blacks...		C Hatala	USA	18000	1171	5			Sport...	(540)...	24060	SLS	VA	Net30
▶	2077...		0	Charle...		John T...	USA	20300	1172	10			Prime...	(304)...	25389	BBB	WV	Net30
▶	MEAD...		13642.5	Bridge...		Albert...	USA	39700	1173	20			Koeni...	(304)...	26330	RDR	WV	Net30
▶	ROUT...		31973...	Bassett		John...	USA	49400	1174	25			Rakes...	(540)...	24055	HXM	VA	Net30
▶	97 MA...		0	Brattle...		Jeffrey...	USA	8200	1175	25			Burro...	(802)...	05301	GPE	VT	Net30
▶	651 M...		0	Benni...		Nadin...	USA	9200	1176	25			Tomas...	(802)...	05201	GPE	VT	Net30
▶	51 SM...		0	Barre		K Trudel	USA	1600	1177	25			Thyge...	(802)...	05641	GPE	VT	Net30
▶	101 M...		0	Cabin...		Nina Y...	USA	8100	1178	25			Sports...	(304)...	25035	BBB	WV	Net30
▶	205 W...		24747...	Beloit		John...	USA	37200	1179	20			T & T...	(608)...	53511	BBB	WI	Net30
▶	1040...		0	Beckley		Paul...	USA	41200	1180	25			In Sea...	(304)...	25801	DOS	WV	Net30
▶	86 N...		0	Barre		James...	USA	48500	1181	25			Locker...	(802)...	05641	DOS	VT	Net30
▶	319 M...		0	Beaver...		Orah F...	USA	4900	1182	20			Dam S...	(414)...	53916	JAL	WI	Net30
▶	THRAS...		0	Ascutn...		A Batis...	USA	23600	1183	10			Sports...	(802)...	05030	BBB	VT	Net30
▶	HIGH...		35985...	Ashland		Amy L...	USA	42700	1184	25			Bodin...	(715)...	54806	JAL	WI	Net30
▶	555 N...		0	Applet...		Steph...	USA	5700	1185	25			Denis...	(414)...	54915	DOS	WI	Net30
▶	2156 S...		0	Adams		Maria...	USA	28200	1186	10			Big Riv...	(608)...	53910	DOS	WI	Net30
▶	3101...		37737...	Belling...		I Yen	USA	41100	1187	25			Yeage...	(360)...	98225	SLS	WA	Net30
▶	14340...		0	Bellevue		Nancy...	USA	8200	1188	5			Wilder...	(206)...	98007	GPE	WA	Net30
▶	1 BELL...		0	Belling...		Chin Lin	USA	8900	1189	5			Big 5 S...	(360)...	98226	BBB	WA	Net30

Code Serialization issues: RadDropDownList

- Value of DropDownListElement: ListElement:ItemHeight not saved in source code
- Value works fine when set in source code
- Logged with Progress Support



Code Serialization issues: RadDropDownList

- When changing the value of DropDownStyle the radDropDownList1 variable moves from class header into InitializeComponents ...
- Switching value back does not fix this ...

The screenshot shows the Visual Studio IDE with the following components:

- Class Browser:** Shows the project structure with `DropDownListSampleForm.cls`.
- Design View:** Displays the `DropDownListSampleForm` control on a light blue background.
- Toolbox:** Lists control categories: Microsoft Controls, OpenEdge Controls, OpenEdge Ultra Controls, and Telenk.
- Properties Window:** Shows the properties for `radDropDownList1`. The `DropDownStyle` property is set to `DropDown` and is currently selected in a dropdown menu. Other visible properties include `DisplayMember` (RepName), `Dock` (None), `DropDownAnima` (InQuad), `DropDownAnima` (True), `DropDownAnima` (1), `DropDownHeigh` (106), `DropDownListEl`, `DropDownMaxSi` (0; 0), `DropDownMinSi` (0; 0), `DropDownSizing` (UpDownAndRight B), `EnableAlternatin` (Drop Down), `EnableAnalytics` (Drop Down List), `EnableCodedUIT` (raise), and `Enabled` (True).

Code Serialization issues: RadDropDownList

```

CLASS Demo.RadDropDownList.DropDownListItemForm INHERITS RadForm:

    DEFINE PRIVATE VARIABLE bindingSource1 AS Progress.Data.BindingSource NO-UNDO.
    DEFINE PRIVATE VARIABLE components AS System.ComponentModel.IContainer NO-UNDO.
    DEFINE PRIVATE VARIABLE radDropDownList1 AS Telerik.WinControls.UI.RadDropDownList
    DEFINE PRIVATE VARIABLE textBox1 AS System.Windows.Forms.TextBox NO-UNDO.
    DEFINE QUERY qSalesRep FOR Salesrep SCROLLING .
    
```



```

CLASS Demo.RadDropDownList.DropDownListItemForm INHERITS RadForm:

    DEFINE PRIVATE VARIABLE bindingSource1 AS Progress.Data.BindingSource NO-UNDO.
    DEFINE PRIVATE VARIABLE components AS System.ComponentModel.IContainer NO-UNDO.
    DEFINE PRIVATE VARIABLE textBox1 AS System.Windows.Forms.TextBox NO-UNDO.

    DEFINE QUERY qSalesRep FOR Salesrep SCROLLING .
    
```

```

METHOD PRIVATE VOID InitializeComponent ():
    
```

/* NOTE: The following method is automatically generated.

We strongly suggest that the contents of this method only be modified using the Visual Designer to avoid any incompatible modifications.

Modifying the contents of this method using a code editor will invalidate any s

```

THIS-OBJECT:components = NEW System.ComponentModel.Container().
    
```

```

DEFINE VARIABLE radDropDownList1 AS Telerik.WinControls.UI.RadDropDownList NO-UNDO
@VisualDesigner.FormMember (NeedsInitialize="true":U).
    
```

```

DEFINE VARIABLE radListItem1 AS Telerik.WinControls.UI.RadListItem NO-UNDO
    
```


Known issues Telerik .NET with OpenEdge

- Too many as of today ☹️
- We are not going to continue the implementation of Telerik .NET in our Framework **for now**
- Some issues do not allow to workaround
- We will continue testing the controls and log with Progress whatever we run into
- **Expecting to be able to continue adoption with next service pack or 11.6**



Recommendation

- Telerik .NET Controls provide a bunch of interesting features
- I trust that OpenEdge and Telerik will get the integration right very soon
- Test the controls you may need in your application yourself
- Report all issues to PSC to ensure they get on the list of issues to get fixed!
- Or use a framework that will allow you to use both Control sets interchangeable 😊

Questions



Don't miss my other presentations

- Monday 11.00: **Telerik .NET for Infragistics Users**
- Monday 16.45: **DIY: Lists, Enumerators, Enumerations, Serialization**
- Tuesday 11.00: **Modernization – the SmartComponent Library**
- Tuesday 14.15: **Structured Error Handling**
- Wednesday 11.00: **Telerik Kendo UI with WebSpeed**

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