



## **TMS Smooth Controls DEVELOPERS GUIDE**

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## Introduction

TMS Smooth Controls is a set of smoothly animated VCL components for Delphi & C++Builder with a consistent sophisticated visual appearance. Underlying technologies used are the Microsoft™ GDI+ API that has support for complex gradients, drawing with opacity and opacity gradients, PNG images with alpha transparency, picture & hatch fills and anti-aliasing. Various components also use a lightweight & fast HTML rendering engine for displaying text with HTML formatting capabilities such as specifying color, font, images, hyperlinks specifying. Both technologies are exposed via a class TGDIPFill that is internally reused in the components and that takes care of the drawing.

While the look of the components can be fully customized, it is often desirable to make the application look and feel consistent with Microsoft™ Office or Microsoft™ Windows styles. Therefore, most components in the TMS Smooth Controls have built-in presets for Microsoft™ Office 2003 and Microsoft™ Office 2007 color settings.

TMS Smooth Controls Pack components are designed for Windows XP, Windows 2003, Windows Vista, Windows 2008 and Windows 7. The components can also be used on Windows 2000 when the Microsoft™ GDIPLUS.DLL library is deployed along the application.

In this document you will find an overview of the components and their features, code snippets to quickly start using the components and overviews of properties, methods and events. For the more complex components, a more in-depth explanation of the visual design and programmatic use is provided.

TMS Smooth Controls components were designed for use with mouse, keyboard and finger on touch screens.

## Availability

TMS Smooth Controls are VCL components for Win32 application development. TMS Smooth Controls are available for CodeGear™ Delphi 6, 7, 2005, 2006, 2007, 2009 & CodeGear™ C++Builder 2006, 2007, 2009

## List of included components

- TAdvSmoothButton
- TAdvSmoothCalendar
- TAdvSmoothDatePicker
- TAdvSmoothLabel
- TAdvSmoothListBox
- TAdvSmoothImageListBox
- TAdvSmoothImageListBoxPicker
- TAdvSmoothPanel / TAdvSmoothExpanderPanel / TAdvSmoothExpanderButtonPanel / TAdvSmoothExpanderGroup
- TAdvSmoothProgressBar
- TAdvSmoothMenu
- TAdvSmoothSpinner
- TAdvSmoothTrackBar
- TAdvSmoothTabPage
- TAdvSmoothGauge
- TAdvSmoothJogWheel
- TAdvSmoothLedLabel
- TAdvSmoothStatusIndicator
- TAdvSmoothToggleButton
- TAdvSmoothComboBox
- TAdvSmoothSplashScreen
- TAdvSmoothMessageDialog
- TAdvSmoothTimeLine
- TAdvSmoothSlider
- TAdvSmoothScrollBar
- TAdvSmoothDock
- TAdvFormStyler
- TAdvAppStyler

## Online references

TMS software website:

<http://www.tmssoftware.com>

TMS Smooth Controls page:

<http://www.tmssoftware.com/site/advsmoothcontrols.asp>

TMS HTML rendering engine information:

<http://www.tmssoftware.com/site/minihtml.asp>

Article about using the TAdvFormStyler & TAdvAppStyler component:

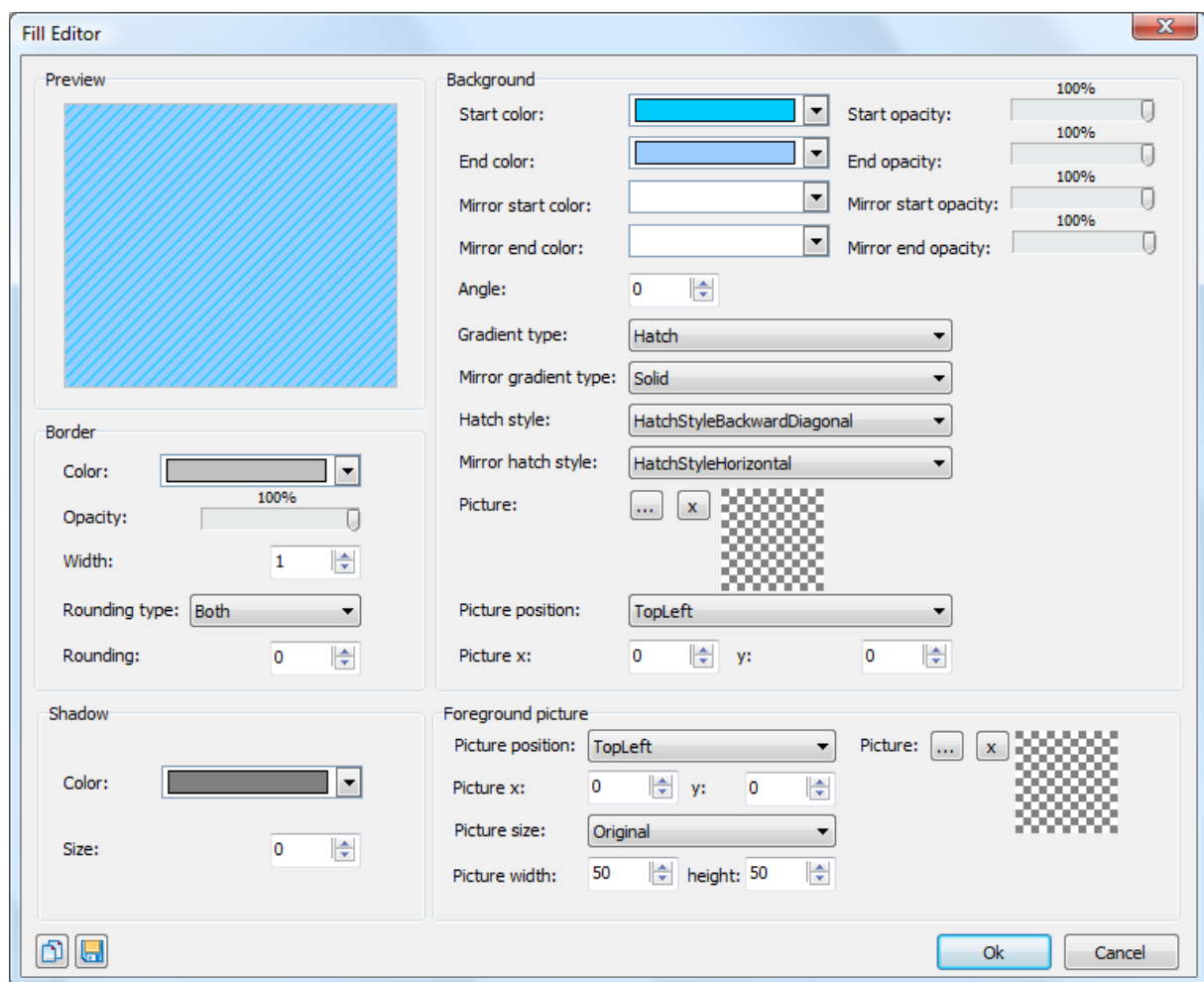
<http://www.tmssoftware.com/site/atbdev3.asp>

## TGDIPFill class

The core class of the TMS Smooth Controls Pack that performs the drawing is the TGDIPFill class. Most visual elements in the components are drawn via this class. The TGDIPFill class has a lot of properties for a fine-grained & flexible control over the visual appearance.

### TGDIPFill Designer

For this class, a designer is provided that can be used at design-time as well as at run-time. Every time you want to change the appearance of a visual element in a component, this editor with built-in preview allows you to fully customize the look of the element:



In different groups, different categories of properties of the fill can be set: properties of the border, a shadow, the background and a foreground.



### TGDIPFill properties

Properties to control the border:

- **BorderColor**: the color of the border of the fill.
- **BorderOpacity**: the opacity of the border of the fill.
- **BorderWidth**: the width of the border of the fill.
- **Rounding**: the rounding of the fill, set Rounding = 0 to have a rectangular shape and a higher value to have more rounded corners.
- **RoundingType**: the type of rounding of the fill. In some cases it can be useful to only set the top corners of the fill to be rounded, only the bottom corners or all 4 corners.

Properties to control the background:

A background can be divided in a top and bottom part and each part can have its gradient.

- **Color**: the start color of the top part gradient (if the GradientType is gtSolid, Color is the only property used).
- **ColorTo**: the end color of the top part gradient.
- **ColorMirror**: when ColorMirror is set to a color different from clNone the fill will be split up in 2 parts: the top part and the mirror bottom part. ColorMirror is the start color of the mirror bottom part.
- **ColorMirrorTo**: the end color of the mirror bottom part.
- **Opacity**: the opacity of the start color of the top part.
- **OpacityTo**: the opacity of the end color of the top part.
- **OpacityMirror**: the opacity of the start color of the mirror bottom part.
- **OpacityMirrorTo**: the opacity of the end color of the mirror bottom part.
- **GradientType**: the type of gradient to apply: Horizontal, Vertical, Angle, Hatch... for the top part (or full background if mirror colors are set to clNone)
- **GradientMirrorType**: the type of gradient of the mirror bottom part.
- **Angle**: the angle of the gradient in case GradientType is set to gtAngle.
- **HatchStyle**: the hatchstyle in case GradientType is set to gtHatch for the top part (or full background if mirror colors are set to clNone)
- **HatchStyleMirror**: the hatchstyle of the mirror bottom part.
- **BackgroundPicture**: the background picture in case GradientType gtTexture is chosen. The background picture can be stretched or positioned on the fill.

- **BackgroundPicturePosition:** the position of the backgroundpicture.
- **BackgroundPictureLeft:** when the position is set to custom the left position can be set with this property
- **BackgroundPictureTop:** the top position of the backgroundpicture when the position is set to custom.

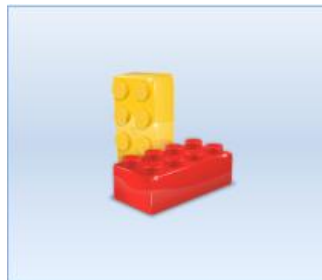
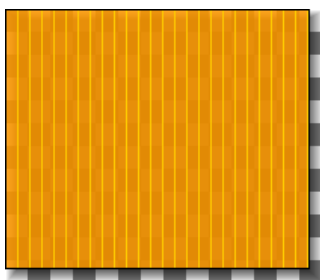
Properties to control the foreground picture:

- **Picture:** you can always set a picture that is not bound to the rectangle of the fill. In other words you can draw a picture which overlaps the fill.
- **PicturePosition:** the position of the foreground picture.
- **PictureLeft:** the left position of the picture in case pictureposition is set to custom.
- **PictureTop:** the top position of the picture in case pictureposition is set to custom.
- **PictureSize:** it can be useful to resize the picture to a different size when it is too large. Set picturesize to custom and use picturewidth and pictureheight to change the size of the picture.
- **PictureWidth:** the width of the picture in case the picturesize is set to custom.
- **PictureHeight:** the height of the picture in case the picturesize is set to custom.

Properties to control the shadow:

- **ShadowColor:** the color of the shadow of the fill.
- **ShadowOffset:** the offset of the shadow of the fill.

Some examples of fill styles:



### Copying fill styles

At design-time or run-time, a style can be easily applied to many components or many visual elements of components. The 2 speedbuttons in the lower left corner of the fill editor can be used to copy and paste fills. When creating complex fills in a project with many different components

that implement the TGDIPFill class, you can copy the TGDIPFill settings on the clipboard and paste from the clipboard for another component or visual element. To do the same in code, a TGDIPFill class can be assigned to another TGDIPFill class:

Example:

```
procedure TForm2.Button1Click(Sender: TObject);  
begin  
  Advsmoothlistbox2.Header.Fill.Assign(Advsmoothlistbox1.Header.Fill);  
end;
```

In this code snippet, the fill from one TAdvSmoothListBox header is copied to another TAdvSmoothListBox header.

#### Using the fill editor at runtime

It is easy to use the fill editor at runtime. To do this, add the unit AdvSmoothFillEditor to the uses list and add following code:

```
var  
  filldlg :TAdvSmoothFillEditorDialog;  
begin  
  filldlg := TAdvSmoothFillEditorDialog.Create(self);  
  filldlg.Fill := AdvSmoothListbox1.Footer.Fill;  
  filldlg.Execute;  
end;
```

With this code snippet, the TAdvSmoothListBox footer fill will be edited at runtime.

## GDI+ Picture Container

### Using the TGDIPictureContainer component

The TGDIPictureContainer makes it easy to use and embed PNG, JPEG, GIF, ICO, BMP and WMF images in your applications from the IDE without needing to resort to resource files. Note that the TGDIPictureContainer does not require any additional library or code to handle these image formats.

Suppose the images with names SOUNDS, SEARCH, PRINTER and MAIL have been added, then the images can be shown via HTML formatted text with following tags :

First image <IMG src="SOUNDS"> , second image <IMG src="PRINTER">, etc ...

assuming of course the TGDIPictureContainer is assigned to the HTML enabled control. When a HTML enabled control cannot find a picture with the name referenced in the PictureContainer it will display no image.

It is equally possible to add pictures to the TGDIPictureContainer at run-time. Below is a code snippet that shows how an image is loaded from file and added to the TGDIPictureContainer and subsequently used for display in a TAdvSmoothListBox control:

```
with GDIPictureContainer.Items.Add do  
begin  
    Picture.LoadFromFile('myimage.png');  
    Name := 'NEW';  
end;
```

```
AdvSmoothListBox.Items.Add.Caption := 'This uses the new image : <IMG  
src="NEW">';
```

To remove a picture from the TGDIPictureContainer later:

```
with GDIPictureContainer.Items.Items[0].Free;
```

To control size of the picture displayed, additional tags WIDTH and HEIGHT can be used :

New image <IMG src="NEW" width="24" height="24">

## HTML rendering engine

Another core technology used among many components in the TMS Smooth Controls Pack is a small fast & lightweight HTML rendering engine. This engine implements a subset of the HTML standard to display formatted text. It supports following tags :

### **B : Bold tag**

`<B>` : start bold text

`</B>` : end bold text

Example : This is a `<B>test</B>`

### **U : Underline tag**

`<U>` : start underlined text

`</U>` : end underlined text

Example : This is a `<U>test</U>`

### **I : Italic tag**

`<I>` : start italic text

`</I>` : end italic text

Example : This is a `<I>test</I>`

### **S : Strikeout tag**

`<S>` : start strike-through text

`</S>` : end strike-through text

Example : This is a `<S>test</S>`

### **A : anchor tag**

`<A href="value">` : text after tag is an anchor. The 'value' after the href identifier is the anchor. This can be an URL (with ftp,http,mailto,file identifier) or any text.

If the value is an URL, the `shellexecute` function is called, otherwise, the anchor value can be found in the `OnAnchorClick` event `</A>` : end of anchor

Examples : This is a `<A href= "mailto:myemail@mail.com ">test</A>`

This is a `<A href="http://www.tmssoftware.com">test</A>`

This is a `<A href="somevalue">test</A>`

### **FONT : font specifier tag**

`<FONT face='facevalue' size='sizevalue' color='colorvalue' bgcolor='colorvalue'>` : specifies font of text after tag.

with

- face : name of the font
- size : HTML style size if smaller than 5, otherwise pointsize of the font
- color : font color with either hexadecimal color specification or Borland style color name, ie `clRed,clYellow,clWhite ...` etc
- bgcolor : background color with either hexadecimal color specification or Borland style color name `</FONT>` : ends font setting

Examples : This is a <FONT face="Arial" size="12" color="clred">test</FONT>  
 This is a <FONT face="Arial" size="12" color="#FF0000">test</FONT>

#### **P : paragraph**

<P align="alignvalue" [bgcolor="colorvalue"] [bgcolorto="colorvalue"]> : starts a new paragraph, with left, right or center alignment. The paragraph background color is set by the optional bgcolor parameter. If bgcolor and bgcolorto are specified, a gradient is displayed ranging from begin to end color.  
 </P> : end of paragraph

Example : <P align="right">This is a test</P>

Example : <P align="center">This is a test</P>

Example : <P align="left" bgcolor="#ff0000">This has a red background</P>

Example : <P align="right" bgcolor="clYellow">This has a yellow background</P>

Example : <P align="right" bgcolor="clYellow" bgcolorto="clred">This has a gradient background</P>\*

#### **HR : horizontal line**

<HR> : inserts linebreak with horizontal line

#### **BR : linebreak**

<BR> : inserts a linebreak

#### **BODY : body color / background specifier**

<BODY bgcolor="colorvalue" [bgcolorto="colorvalue"] [dir="v|h"] background="imagefile specifier"> : sets the background color of the HTML text or the background bitmap file

Example : <BODY bgcolor="clYellow"> : sets background color to yellow

<BODY background="file:///c:/test.bmp"> : sets tiled background to file test.bmp

<BODY bgcolor="clYellow" bgcolorto="clWhite" dir="v"> : sets a vertical gradient from yellow to white

#### **IND : indent tag**

This is not part of the standard HTML tags but can be used to easily create multicolumn text

<IND x="indent"> : indents with "indent" pixels

Example :

This will be <IND x="75">indented 75 pixels.

#### **IMG : image tag**

<IMG src="specifier:name" [align="specifier"] [width="width"] [height="height"] [alt="specifier:name"]> : inserts an image at the location

specifier can be : idx : name is the index of the image in the associated imagelist

file : name is the full filename specifier

res : name of a resource bitmap (not visible at design time)

no specifier : name of image in a TGDIPPictureContainer

Optionally, an alignment tag can be included. If no alignment is included, the text alignment with

respect to the image is bottom. Other possibilities are: align="top" and align="middle"

The width & height to render the image can be specified as well. If the image is embedded in anchor tags, a different image can be displayed when the mouse is in the image area through the Alt attribute.

Examples : This is an image <IMG src="idx:1" align="top">

This is an image <IMG src="file:///c:/my documents/test.bmp">

This is an image <IMG src="res://BITMAP1">

This is an image <IMG src="name">

#### **SUB : subscript tag**

<SUB> : start subscript text

</SUB> : end subscript text

Example : This is <SUP>9</SUP> / <SUB>16</SUB> looks like 9/16

#### **SUP : superscript tag**

<SUP> : start superscript text

</SUP> : end superscript text

#### **UL : list tag**

<UL> : start unordered list tag

</UL> : end unordered list

Example : <UL>

<LI>List item 1

<LI>List item 2

<UL>

<LI> Sub list item A

<LI> Sub list item B

</UL>

<LI>List item 3

</UL>

#### **LI : list item**

<LI> : new list item

#### **SHAD : text with shadow**

<SHAD> : start text with shadow

</SHAD> : end text with shadow

#### **Z : hidden text**

<Z> : start hidden text

</Z> : end hidden text

### **Special characters**

Following standard HTML special characters are supported :

&lt; : less than : <

&gt; : greater than : >

&amp; : &

&quot; : "

&nbsp; : non breaking space

&trade; : trademark symbol

&euro; : euro symbol

&sect; : section symbol

&copy; : copyright symbol

&para; : paragraph symbol



## Component styles and application-wide or form-wide styler components

While the appearance of the TMS Smooth Controls pack can be fully customized, it is often desirable to make the application look and feel consistent with Microsoft™ Windows or Microsoft™ Office. To make it easier and faster, most components of the TMS Smooth Controls pack have built-in presets for Office 2003 and Office 2007 colors. To access the presets at design-time, right click the component and choose Styles from the context menu. At run-time, the style can also be set in code. To do this, add the unit AdvStyleIF to the uses clause and call:

```
Component.SetComponentStyle(style)
```

Current available styles are:

Office 2003:

tsOffice2003Blue: Office 2003 style on a blue XP theme

tsOffice2003Silver: Office 2003 style on a silver XP theme

tsOffice2003Olive: Office 2003 style on an olive XP theme

tsOffice2003Classic: Office 2003 style on a non-themed XP or pre-XP operating system

Office 2007:

tsOffice2007Luna: Office 2007 Luna style

tsOffice2007Silver: Office 2007 Silver style

tsOffice2007Obsidian : Office 2007 Obsidian style

Windows:

tsWindowsXP: Windows XP dialogs style

Custom:

tsCustom: do not force style

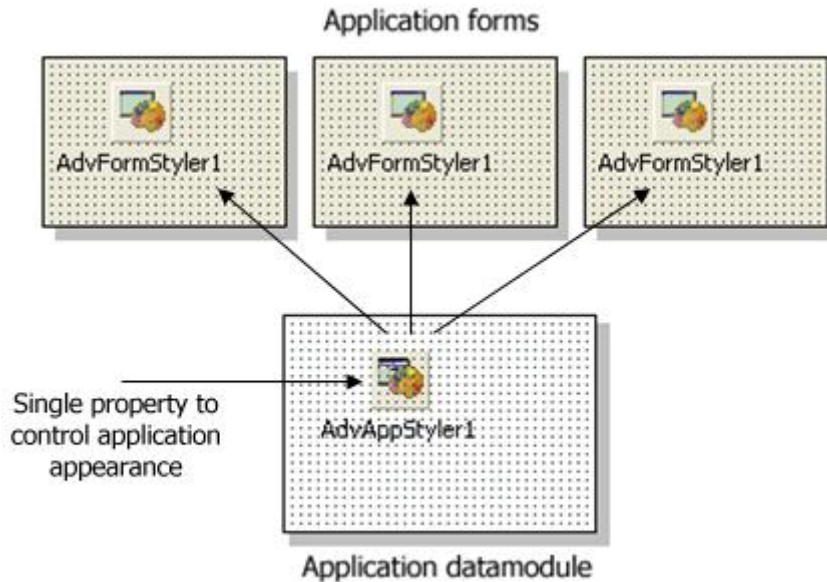
We have spent quite some effort to further simplify form-wide and application-wide appearance control for TMS components and possibly also your custom controls. To do this, two new components have been designed:

TAdvFormStyler

TAdvAppStyler

A TAdvFormStyler is supposed to be dropped on a form and it will control the style of the TMS components on the form. A TAdvFormStyler will only affect components on the form itself. For application-wide appearance control, in addition to a TAdvFormStyler on a form, a TAdvAppStyler component can be dropped on a datamodule and is connected to the TAdvFormStyler components on the forms. By setting then a single property in TAdvAppStyler on the datamodule, the complete application appearance can change, both at design-time but also dynamically at run-time.

## Scenario



The component TAdvFormStyler has a property style. Setting this style property causes all components on the form that support the interface to set the style to change to the selected style. Similarly, setting the style property for the TAdvAppStyler on a central data module invokes all TAdvFormStyler style changes and thus the style of all TMS controls on the form that implement the ITMSStyle interface. The TAdvFormStyler component has an event OnApplyStyle that can be used to prevent that for certain components a standard style is applied.

## Example:

This code snippet prevents that the style will be set for any TAdvSmoothListBox instance on the form by the TAdvFormStyler component:

```
procedure TForm2.AdvFormStyler1ApplyStyle(Sender: TObject;
  AComponent: TComponent; var Allow: Boolean);
begin
  Allow := not (AComponent is TAdvSmoothListBox);
end;
```

You can make your own controls also easily TAdvFormStyler, TAdvAppStyler aware so that your controls also automatically change their appearance when the application and/or form style changes. To do this, it is sufficient to add and implement the ITMSStyle interface to your control. This code snippet shows a sample custom control that was made TMS style aware:

```
interface
uses
  Classes, AdvStyleIF;
```

```
type
  TMyCustomControl = class(TCustomControl, ITMSStyle)
  public
    procedure SetComponentStyle(AStyle: TTMSStyle);
  end;

{ TMyCustomControl }

procedure TMyCustomControl.SetComponentStyle(AStyle: TTMSStyle);
begin
  case AStyle of
    tsOffice2003Blue: // set properties correct here for the selected style
    tsOffice2003Silver:
    tsOffice2003Olive:
    tsOffice2003Classic:
    tsOffice2007Luna:
    tsOffice2007Obsidian:
    tsOffice2007Silver:
    tsWindowsXP:
    tsCustom:
  end;
end;
```

## TAdvSmoothButton



### TAdvSmoothButton description

TAdvSmoothButton is an iPhone style button component. Its behaviour is similar to a standard VCL TButton component.

### TAdvSmoothButton features

- iPhone style rounded button with complex gradient fill
- Fully automatic gradient color calculation from single color property
- Button can have image and/or caption text
- Supports PNG images with alpha transparency
- Supports anti-aliased caption
- Optional status indicator on top of button
- Control of positioning of caption versus image

### TAdvSmoothButton use

TAdvSmoothButton has default a bevel, set with TAdvSmoothButton.Bevel, a customizable bevel color set with TAdvSmoothButton.BevelColor, a background with automatic calculated complex gradient from a single color property TAdvSmoothButton.Color. A PNG, JPEG, GIF or BMP picture can be set with TAdvSmoothButton.Picture. TAdvSmoothButton.Appearance controls position of picture versus caption as well as caption font and spacing between picture and caption.

### Adding a statusindicator

The code snippet below shows how you can add a status indicator for the button. The TAdvSmoothButton internally uses the TGDIPStatus class that is shared among many other components to allow the user to add extra information to the button:

```
AdvSmoothButton1.Status.Visible := true;  
AdvSmoothButton1.Status.Appearance.Fill.BorderColor := clBlack;  
AdvSmoothButton1.Status.Appearance.Font.Size := 11;  
AdvSmoothButton1.Status.Appearance.Font.Style := [fsbold];  
AdvSmoothButton1.Status.Caption := '2 new emails';
```



## TAdvSmoothCalendar & TAdvSmoothDatepicker



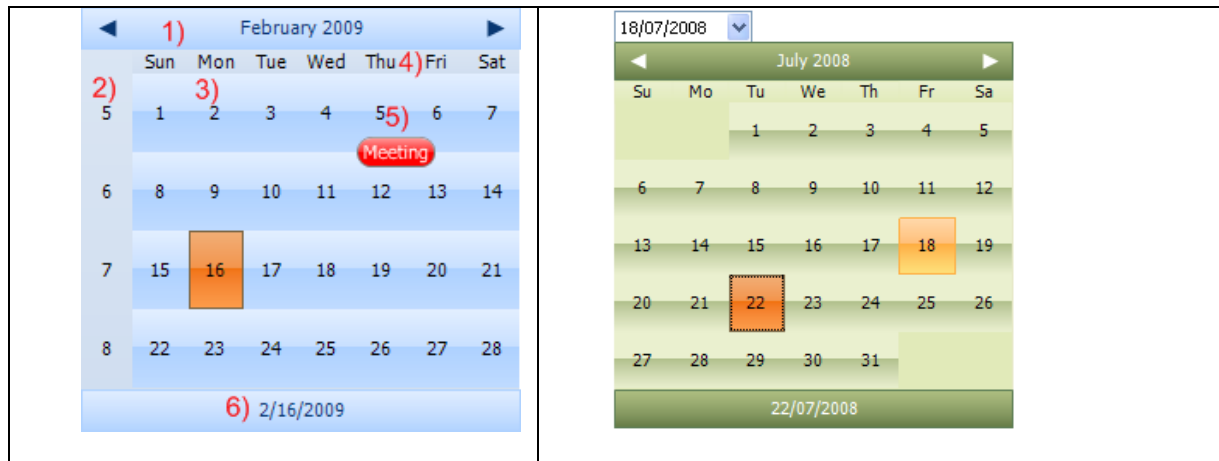
### TAdvSmoothCalendar - TAdvSmoothDateDatePicker description

TAdvSmoothCalendar - TAdvSmoothDatePicker offer calendar controls designed to smoothly navigate through days, months and years with animated transitions and complex visuals to improve the look and feel.

### TAdvSmoothCalendar - TAdvSmoothDatePicker features

- Calendar with sophisticated opacity and fill
- Includes month selector, year selector views
- Single date select or date range selection
- Support for background images, texture fill, gradients, hatch
- Built-in color settings for Office 2003 / Office 2007 styles
- Optional animation between next/prev month, month selector, year selector
- Optionally shows ISO calculated week numbers
- Optional Today indication and "Go to today" footer
- Optional shadow
- Anti aliasing support
- Optionally shows day of previous and next month
- TMS TAdvFormStyler compatible for instant switch between Office 2003 / Office 2007 styles

## TAdvSmoothCalendar - TAdvSmoothDatePicker visual organisation



- 1) Header: The header shows the current month, year, or year selection depending on the current mode
- 2) Week numbers: display week numbers.
- 3) Day, month, and year display: according to the mode you will see the days of the current month, the months of the current year, and the years from a year selection.
- 4) You can visualize the day names: Monday until Sunday. With the property StartDay, you can choose the first column in the calendar.
- 5) With the events OnDateFill, OnDateHint and OnDateStatus you can dynamically change the look of a specific day with a status indicator, a fill or a customized hint.
- 6) Footer: The footer show the current day, you can click on the footer to easily navigate to the month, year of that day.

Rightmost image is the TAdvSmoothDatePicker. The TAdvSmoothDatePicker shows you the calendar in after clicking on the dropdown button. When a date is selected the TAdvSmoothDatePicker will be updated with the selected date.

## TAdvSmoothCalendar - TAdvSmoothDatePicker use

### Selected Date

To set or get the selected date you can use the code below.

```
AdvSmoothCalendar1.SelectedDate := EncodeDate(2008, 12, 25);
```

## Select multiple dates

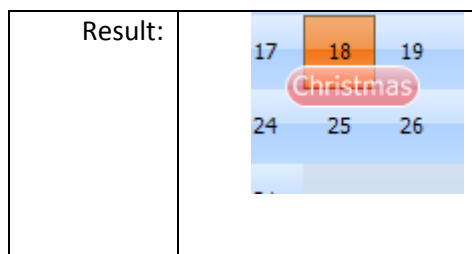
To allow selection a range of dates, set the property `MultiSelect` to `true`. Click the first day of the range and shift-click to select the last day. To set or get the start date and end date of a range of selected days, following code can be used:

```
AdvSmoothCalendar1.StartDate := EncodeDate(2008, 12, 20);
AdvSmoothCalendar1.EndDate := EncodeDate(2008, 12, 25);
```

## Custom Status Indicator

You can add a Status Indicator on each day of the month. This is done dynamically via the `OnDateStatus` event. Set the parameter `StatusMessage` to a non empty string to display the Status Indicator. With the `Fill` parameter, the appearance of the Status Indicator can be customized.

```
procedure TForm1.AdvSmoothCalendar1DateStatus(Sender: TObject;
    Date: TDateTime; var StatusMessage: string; Fill: TGDIPStatus; var
    OffsetX,
    OffsetY: Integer);
begin
    if Date = EncodeDate(2008, 12, 25) then
        begin
            Fill.Fill.Opacity := 100;
            Fill.Fill.BorderColor := clWhite;
            Fill.Font.Size := 10;
            StatusMessage := 'Christmas';
        end;
end;
```



## Set Month and Year

By default the month and year will be set to the current month and current year. You can set the month and year to a different value with the code below.



```
AdvSmoothCalendar1.Year := 2009;  
AdvSmoothCalendar1.Month := 1;
```

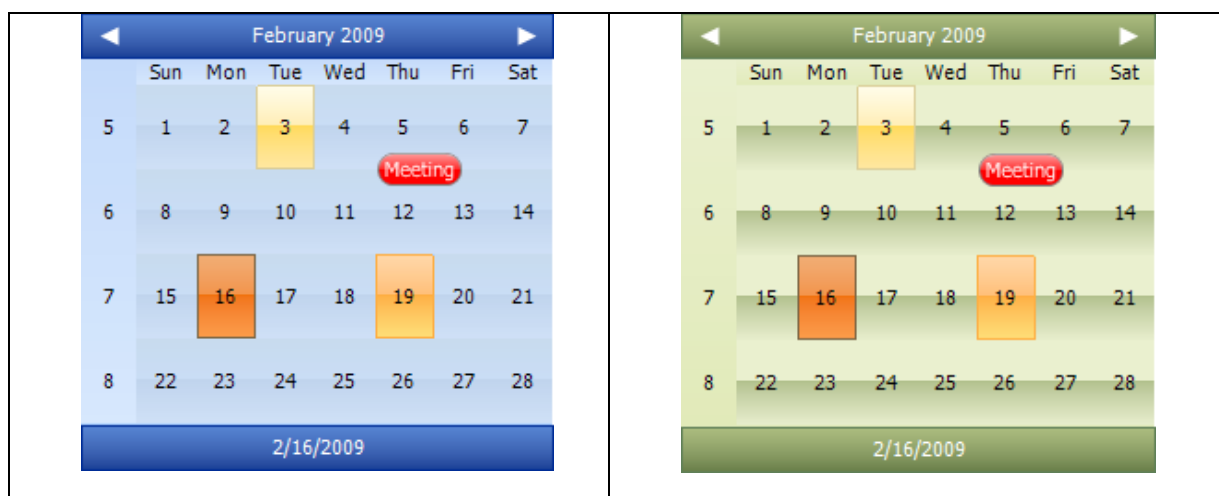
### Choose a different color for arbitrary days

With the event OnDateFill that is triggered for each day of the displayed month, the appearance of a single day can be dynamically changed. In the code snippet below, the holidays December 25 and January 1st are displayed in a different color:

```
procedure TForm2.AdvSmoothCalendar1DateFill(Sender: TObject; AFill: TGDIPFill;  
    AFont: TFont; Date: TDateTime; DateKind: TAdvSmoothCalendarDateKind);  
begin  
    if (Date = EncodeDate(2009,12,25)) or (Date = EncodeDate(2010,1,1)) then  
    begin  
        AFill.Color := clRed;  
        AFill.ColorTo := clWhite;  
        AFill.GradientType := gtVertical;  
        AFill.ColorMirror := clNone;  
        AFill.ColorMirrorTo := clNone;  
        AFill.BorderColor := clWhite;  
    end;  
end;
```

### Calendar styles

TAdvSmoothCalendar & TAdvSmoothDatePicker have built-in office 2003 and office 2007 styles. Just right-click on the component at design-time and choose Styles or call AdvSmoothCalendar.SetComponentStyle(tsOffice2007Luna) for example.



### Adding a status message for a day

Adding a status message is done by using the event `OnDateStatus`. In this event, the text can be set for a status message for each day with the parameter `StatusMessage`. A parameter of this event is `Fill` and this allows to choose a different appearance from the default status message appearance set by `TAdvSmoothCalendar.StatusAppearance`.

This code snippet shows how to add a status message for today in the default color and for the 15th of the month in green color:

```
procedure TForm1.AdvSmoothCalendar1DateStatus(Sender: TObject; Date:
TDateTime;

    var StatusMessage: string; Fill: TGDIPStatus; var OffsetX,
OffsetY: Integer);

var

    da,mo, ye: word;

begin

    if date = int(now) then

        begin

            statusmessage := 'Now';

            fill.Assign(AdvSmoothCalendar1.StatusAppearance);

        end;

    decodedate(date, ye, mo, da);

    if da = 15 then

        begin

            statusmessage := 'halfway';

            fill.Fill.Color := clLime;

            fill.Fill.ColorTo := clGreen;

            fill.Fill.ColorMirror := clNone;

            fill.Fill.ColorMirrorTo := clNone;

        end;

    end;
```

## TAdvSmoothLabel



### TAdvSmoothLabel description

TAdvSmoothLabel is a label to display text with complex gradient and texture fills.

### TAdvSmoothLabel features

- Font with support for gradient, texture, hatch fills
- Transparent background or background fill
- Sophisticated opacity selection & background fill, including gradient, texture, hatch fills
- Optional shadow on background fill
- Optional rounded corners

### TAdvSmoothLabel use

#### Adding a texture to fill the text

```
AdvSmoothLabel1.Caption.Text := 'AdvSmoothLabel with Texture      Fill !';  
//The texture you want to use  
AdvSmoothLabel1.Caption.Picture.LoadFromFile('stone.jpg');  
AdvSmoothLabel1.Caption.Font.Size := 30;  
AdvSmoothLabel1.Caption.Font.Style := [fsBold];  
//Add the unit AdvSmoothGDIP  
AdvSmoothLabel1.Caption.GradientType := gtTexture;
```

Result:

**AdvSmoothLabel with Texture Fill !**

## TAdvSmoothListBox



### TAdvSmoothListBox description

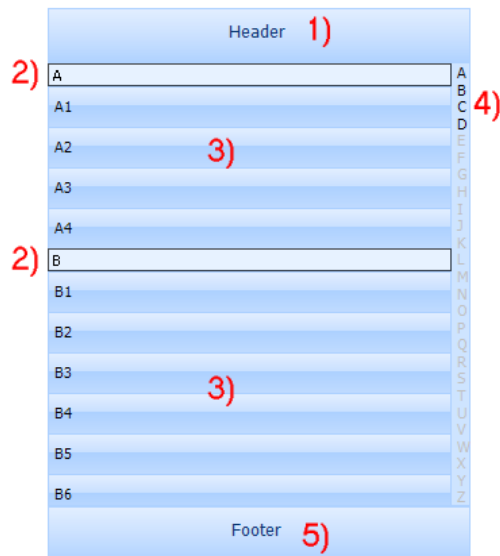
TAdvSmoothListBox is designed to easily navigate through fully customizable list items with many built-in features from item grouping and sections to keyboard lookup and animated mouse scrolling.

### TAdvSmoothListBox features

- iPhone-style smoothly animated listbox
- Listbox items can have Caption, Info text as well as HTML formatted notes with hyperlink & image support
- Listbox items can have checkbox, radiobutton, image, detailimage,...
- Header & footer with sophisticated fills and image support
- Keyboard lookup support
- Smooth mouse slide effects
- Lookup indicator for instant lookup in alphabet
- Support for Item groups with splitter between items
- Detail control per item or global detail control with animation to show detail
- All elements feature sophisticated gradient, texture, hatch fills with optional opacity control
- Built-in support for using BMP, JPEG, GIF and PNG images with alpha transparency
- Anti-aliased drawing
- TMS TAdvFormStyler compatible for instant switch between Office 2003 / Office 2007 styles

### TAdvSmoothListBox visual organisation

TAdvSmoothListBox is a component with the following main visual elements:



1) The header can contain information on how the items are organised or which types of items are in the ListBox. For example: "Contact list". The header can also contain HTML text and images. The header can be visible or not.

2) In case you define the ListBox as a "Contact list" you can set the item sections visible. This allows you to group the items under the section of the same category. The categories which are currently available are alphabetical and numeric.

3) These are the ListBox items which can be fully customized in many ways: HTML text, images graphics, controls ...

4) When you want to search an item you can easily navigate to the first item with the letter you clicked at the lookup bar.

5) The optional footer is identical to the header and allows displaying extra information at the bottom of the list, such as summary information for example like "Number of contacts: ..."

The ListBox item can be customized in many ways: various text elements, graphics, and controls. Below is an overview of the important visual elements of the ListBox item.



1) The item can contain a graphic on the left and the right side. The type of graphic can be changed with the property `GraphicLeftType` or `GraphicRightType`.

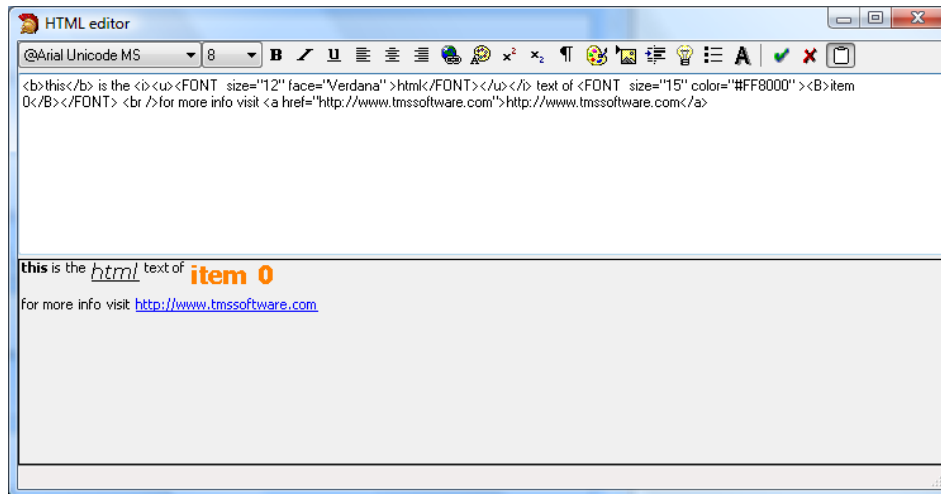
The types you can choose from are listed below. In case of `gtDetailImage` the image can be clicked to enter the details. When choosing `gtCommonImage` or `gtCommonDetailImage`, the function is the same as the `gtImage` or `gtDetailImage` type, but only uses a global image defined on `TAdvSmoothListBox` level that can be used for all items.

Supported types:

- `gtButton`, `gtSmoothButton`: button is displayed on the item
- `gtCheckBox`: checkbox is displayed on the item
- `gtRadioButton`: radiobutton is displayed on the item
- `gtImage`: image is displayed on the item
- `gtDetailImage`: image that shows detail control on click is displayed
- `gtCommonImage`: common listbox image is displayed on the item
- `gtCommonDetailImage`: common listbox detail image is displayed on the item
- `gtNone`: nothing is displayed

2) The caption text of the item. The caption can optionally be clicked and triggers the `OnItemCaptionClick` event.

3) The HTML notes text of the item can be formatted with a design time HTML editor. The HTML can contain images listed in a `TGDIPictureContainer` or a `TImageList`. When clicking on an anchor of the HTML text the event `OnAnchorClick` is called.



- 4) The info of the item can contain extra information of the info and when clicked will trigger the OnItemInfoClick event.

#### TAdvSmoothListBox use

In design time the AdvSmoothListBox has some items by default. Below you can see how to add items in code and in some cases extra properties can be set to change the item appearance.

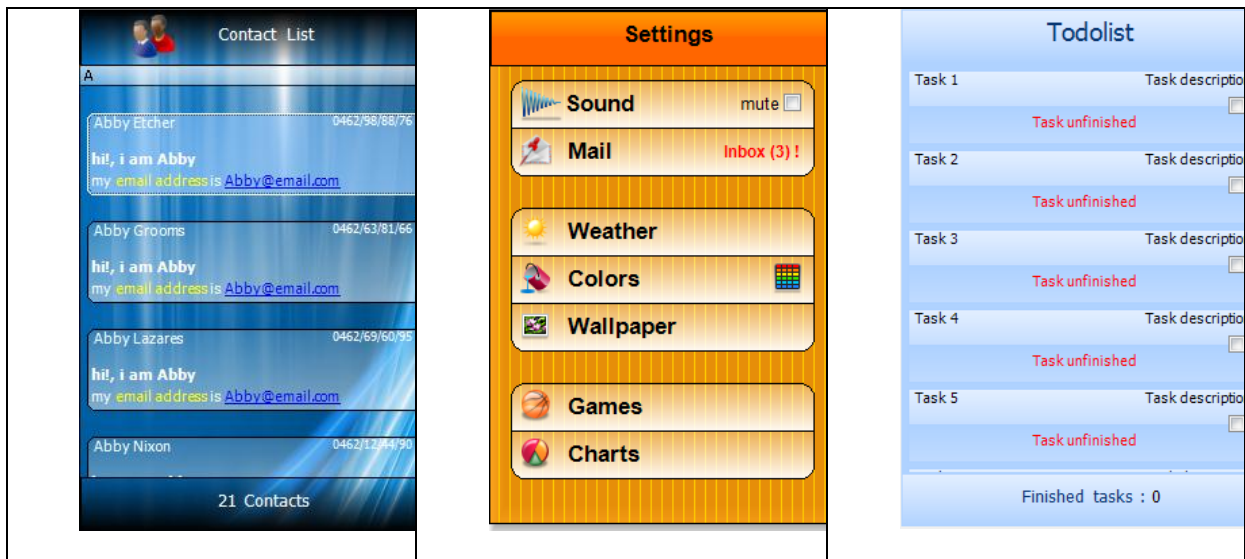
```
procedure TForm1.AddItems;
var
    i: integer;
begin
    //Adds 20 items
    for i := 0 to 20 do
        begin
            with AdvSmoothListBox.Items.Add do
                begin
                    Enabled := True; //If enabled false then the item will be
drawn in disabled fill
                    GraphicLeftType := gtCheckBox
                    Checked := False; //the item will be checked if the type is a
checkbox or a radiobutton
                    Caption := 'Item ' + inttostr(i);
                    Info := 'Info ' + inttostr(i);
                    Notes := 'Notes ' + <a
href="http://www.tmssoftware.com">link</a>
                    Splitter := false; //if splitter is true a empty space will be
drawn between 2 items
                    DetailControl := Panell1 //depending on the action chosen to
visualize the details the detailcontrol will be shown.
                    Level := 1; //Set the level property to allow expanding and
collapsing item groups
```

```

        Indent := 30; //Set the indent property to visually indent the
item.
    end;
end;
end;

```

Some screenshots of the TAdvSmoothListBox after applying different styles:



## TAdvSmoothListBox methods and properties

### Categories

On the right or left side of the control, a lookup bar can be shown with categories to navigate to the first item of that specific clicked category. You can choose between two types of categories: the built-in alphanumeric categories or custom categories. When you choose the custom category type you can add custom category items to the TAdvSmoothListBox.Categories collection. Each category has a category ID, text and imageindex to optionally show an image from the TAdvSmoothListBox imagelist. An item of the TAdvSmoothListBox can be simply assigned to a category by setting the item's CategoryID property. Below is a sample after you apply custom categories.

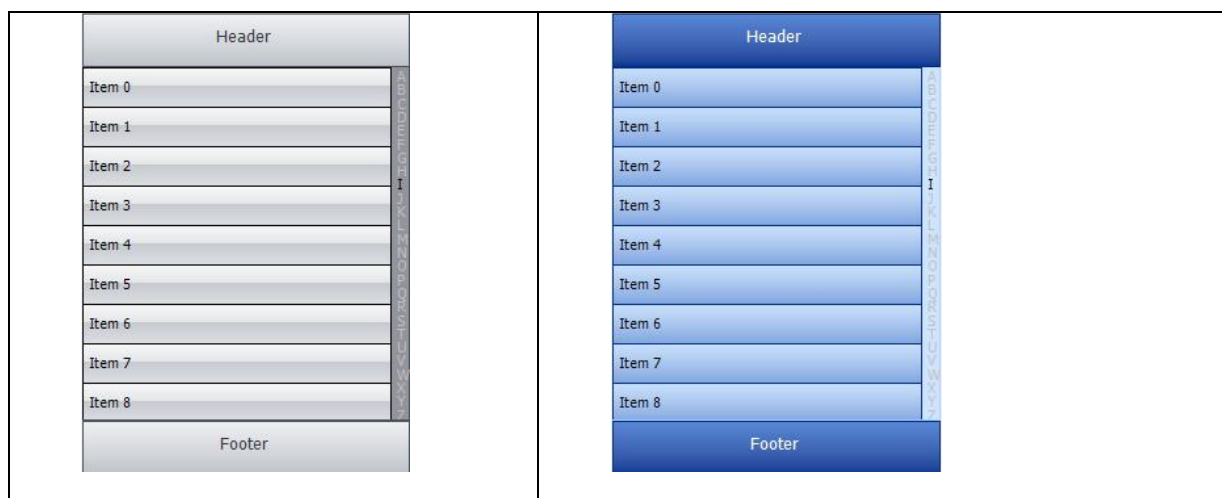




Further customization of the category display on the lookup bar can be found under TAdvSmoothListBox.LookupBar.

### **Office style property**

TAdvSmoothListBox has built-in office 2003 and office 2007 styles. Just right-click on the component at design-time and choose Styles.



The component is also TAdvFormStyler-aware. When using a TAdvFormStyler and changing its style, the TAdvSmoothListbox will change style along all other controls on the form.

### **ShowDetails and HideDetails methods**

When clicking on an item with a graphic DetailImage, the detail control will show. But you can also call ShowDetails in code. Just call AdvSmoothListBox.ShowDetails and the ListBox will show the detail control associated with the selected item. For hiding the details call AdvSmoothListBox.HideDetails. You can check the detailstatus of the ListBox by calling AdvSmoothListBox.DetailStatus.

You can call the details on many different ways, either with the mouse or with the keyboard (See: TAdvSmoothListBox Keyboard support).

There are 2 properties that can be set to change the way the details are shown.

For the mouse set ShowDetailClick to the type you want.

For the keyboard use the property ShowDetailKey.

### **Y-Position to Item**

You can find an item by using YToItem or ItemAtXY. The function returns the index of the item that was found at the location of the Y-position. The function returns -1 when no item was found.

### **Get the first and the last visible items.**

Call GetTopIndex or GetBottomIndex to get the item displayed at the top of the listbox or at the bottom of the listbox.

### **Item Selection**

By default, TAdvSmoothListBox works with single selection. The selected item is set via TAdvSmoothListbox.SelectedItemIndex. When SelectionMode is set to sAutoDeselect, selection disappears upon scrolling (like the iPhone list). When SelectionMode is set to sPersistSelection, selection is persisted while scrolling. A variant on the sPersistSelection mode is the sPersistSelectionAlways mode, with this mode you can multiselect items without the keyboard.

When the property MultiSelect is set true, multiple items can be selected either with the mouse or the keyboard. Just Shift click on an item if you want to select each item between the previous and the current selected item, or ctrl click on an item if you only want the clicked item to be added to the selection. To get or set which items are selected, the property Item.Selected can be used.

### **Drag & drop items within the listbox**

When property ItemDragging is set to true, you can drag drop items to a different position in the list by Alt - click (and holding Alt key) on the item. The item will be draggable and can be inserted on the position where the item is above.

## **Progressbar and button on list items**

A progressbar and a button can be added for to add extra functionality on the listboxitem. Simply select `gtSmoothButton` as `GraphicLeft` or `GraphicRight` to have a smooth button on the listbox items. To add a progressbar, set the property `ProgressBarVisible` to true. The progressbar minimum, maximum and position can also be set on each item. The progressbar and button appearance can be set in the `itemappearance` property on listbox level.

### **Sample**



## **Item Grouping**

With the `TAdvSmoothListBox` it is possible to group the items and expand or collapse them with a single click. The `level` property on an item allows you to define the different groups to collapse or expand. The `indent` property can be used to visually create a “node” that is indented to the right. An item has a public `expanded` property. With this property you can expand or collapse items with a level that is higher than the current item.

### **Sample**

Three items with level 0 Car brand and for each card brand there are 3 items with a level 1 and an indent of 30:

```
with AdvSmoothListBox5.Items.Add do
begin
  Caption := 'Mercedes';
  GraphicLeftType := gtSmoothButton;
  ButtonCaption := '-';
  ButtonBevelColor := clBlack;
  ButtonColor := clGreen;
  GraphicLeftWidth := 25;
```

```

end;
with AdvSmoothListBox5.Items.Add do
begin
    Level := 1;
    Caption := 'Mercedes SLK Roadster';
    Indent := 30;
end;
with AdvSmoothListBox5.Items.Add do
begin
    Level := 1;
    Caption := 'Mercedes SLR Coupé';
    Indent := 30;
end;
with AdvSmoothListBox5.Items.Add do
begin
    Level := 1;
    Caption := 'Mercedes GLK 4x4';
    Indent := 30;
end;

with AdvSmoothListBox5.Items.Add do
begin
    Caption := 'BMW';
    GraphicLeftType := gtSmoothButton;
    ButtonCaption := '-';
    ButtonBevelColor := clBlack;
    ButtonColor := clGreen;
    GraphicLeftWidth := 25;
end;
with AdvSmoothListBox5.Items.Add do
begin
    Level := 1;
    Caption := 'BMW M3';
    Indent := 30;
end;
with AdvSmoothListBox5.Items.Add do
begin
    Level := 1;
    Caption := 'BMW Z4';
    Indent := 30;
end;
with AdvSmoothListBox5.Items.Add do
begin
    Level := 1;
    Caption := 'BMW X5';
    Indent := 30;
end;

with AdvSmoothListBox5.Items.Add do
begin
    Caption := 'Land Rover';
    GraphicLeftType := gtSmoothButton;

```

```

    ButtonCaption := '-';
    ButtonBevelColor := clBlack;
    ButtonColor := clGreen;
    GraphicLeftWidth := 25;
end;
with AdvSmoothListBox5.Items.Add do
begin
    Level := 1;
    Caption := 'Land Rover Defender 90';
    Indent := 30;
end;
with AdvSmoothListBox5.Items.Add do
begin
    Level := 1;
    Caption := 'Land Rover Series III';
    Indent := 30;
end;
with AdvSmoothListBox5.Items.Add do
begin
    Level := 1;
    Caption := 'Range Rover Sport V8';
    Indent := 30;
end;
end;

```

### **Result:**



### **TAdvSmoothListBox events**

**OnAnchorClick:** when HTML hyperlinks are used in the header or footer and this hyperlink is clicked, the event OnAnchorClick is triggered and returns the anchor value.

**OnHideDetail:** event triggered when hiding the detail control of an item.

**OnItemAnchorClick:** when HTML hyperlinks are used in the listbox item and this hyperlink is clicked, the event **OnItemAnchorClick** is triggered and returns the item and anchor value.

**OnItemBkgDraw:** event triggered when drawing the background of the item. Set parameter **DefaultDraw = true** if you want that default drawing is also done by the **TAdvSmoothListBox** itself.

**OnItemCaptionClick:** event triggered when clicking on the caption of an item.

**OnItemButtonClick:** event triggered when clicking on the button of an item.

**OnItemCheckClick:** when adding checkboxes to the items this event will be triggered when clicking on a checkbox.

**OnItemClick:** event triggered when clicking on the item.

**OnItemDbClick:** event triggered when double-clicking on the item.

**OnItemDraw:** event triggered when drawing the item. This event can be used to customize the item appearance. Set parameter **DefaultDraw = true** if you want that default drawing is also done by the **TAdvSmoothListBox** itself.

**OnItemImageClick:** when adding an image as a left or right graphic in the item, this event will be triggered if you click on the image.

**OnItemInfoClick:** event triggered when clicking on the info.

**OnItemRadioClick:** when adding radio buttons this event will be triggered if you click on the radio button.

**OnItemText:** event called when drawing text on the item. The text can be changed dynamically through this event.

**OnShowDetail:** event called when showing the detail control of an item.

**OnItemMouseLeave / OnItemMouseEnter:** event called when entering or leaving an item.

**OnItemHint:** event called when hovering an item and the **showHint** property is true. A hint can be set on every item with the **item.Hint** property.

**OnHeaderClick / OnFooterClick:** Event called when clicking on the footer or the header.

**OnLookupClick:** Event called when clicking on the lookupbar.

**OnSelectionChanged:** Event called when item selection changes.

**OnItemDragOver:** Event called when an item is dragged over another item.

OnItemDragEnd: Event called when dropping an item outside of the area of the items.

OnItemDragDrop: Event called when dropping an item inside of the area of the items.

OnItemDragStart: Event called when alt-clicking on an item and moving the mouse up or down.

#### TAdvSmoothListBox keyboard and mouse support

##### **Keyboard**

When tabstop is set to true, full keyboard support is enabled for listbox. Below is a list of keys that will allow you to navigate through the listbox without using the mouse.

First of all you can show and hide the detail control of an item by pushing the key set in the ShowDetailKey property of the TAdvSmoothListBox.

Keys which can be used to show or hide the details:

- Space
- F2
- Return
- None (no detailkey)

The keys below are used to navigate through the AdvSmoothListBox.

- Arrow key down : Scroll one item down
- Arrow key up: Scroll one item up
- Home key: Scroll to the first item
- End key: Scroll to the last item
- Page down key: scroll down in steps of 5 items
- Page up key scroll up in steps of 5 items
- Ctrl – space : toggle selection of the item in multi selection mode

##### **Mouse**

A drag-release mouse move allows you to scroll up or down through the items. Like the keyboard you can use the mouse to enter the details of the item. With the ShowDetailClick property you can set the way you have to click before the detail of the item is showing.

These are the values you can set:

- sdOnClick: detail control is shown upon click in the entire item rectangle
- sdOnDbClick: detail control is shown upon double click in the entire item rectangle
- sdOnDetailImageClick: detail control is shown upon click on the detail image (left or right)
- sdOnDetailImageDbClick: detail control is shown upon double click on the detail image (left or right)



## TAdvSmoothImageListBox & TAdvSmoothImageListBoxPicker



### TAdvSmoothImageListBox & TAdvSmoothListBoxLayoutPicker description

TAdvSmoothImageListBox is designed to easily navigate through large folders with many images (JPEG, BMP, GIF, PNG, TIFF, ICO). The listbox has several features such as keyboard navigation, header, footer, lookup, vertical or horizontal scrolling, fully customizable top layer items which enhance the look and feel of the component and much more. The component can perform threaded fast loading of image thumbnails for high speed & low memory usage.

TAdvSmoothImageListBoxPicker is derived from TAdvSmoothImageListBox and provides selection of items with images and text via a dropdown.

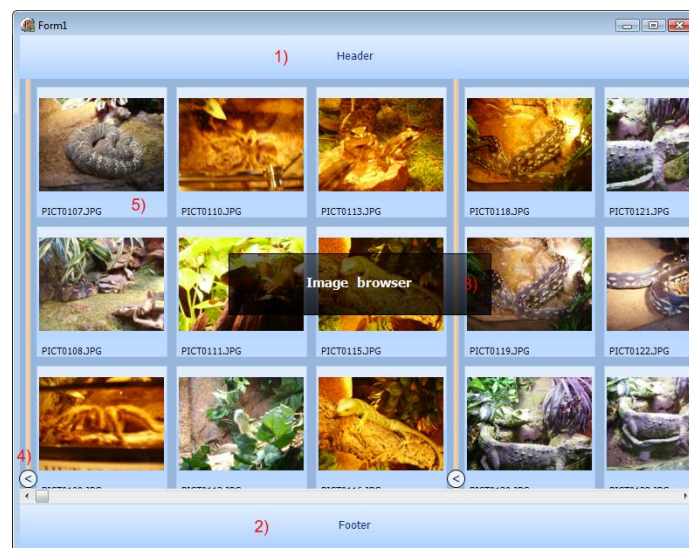
### TAdvSmoothImageListBox & TAdvSmoothListBoxLayoutPicker features

- Smoothly animated image thumbnail list & picker
- Automatic background thread loading for high performance
- Automatic thumbnail creation for minimal memory usage
- Listbox items can have HTML formatted Caption text with hyperlink & image support
- Listbox items can have images with zooming capability.
- Listbox items can be arranged in columns or in rows with keyboard & mouse animated scrolling
- Default image can be used to be displayed in case of unloaded images.
- Fully customizable item appearance with text and image properties.

- Header & footer with sophisticated fills and image support.
- Keyboard lookup support.
- Smooth mouse slide effects.
- Support for Item groups with splitter between items that can be expanded & collapsed
- Support for custom top layer items to enhance to look and feel.
- Different thread loading modes to change the way the images are loading.
- All elements feature sophisticated gradient, texture, hatch fills with optional opacity control.
- Built-in support for using ICO, BMP, JPEG, GIF, ICO, TIF, PNG images with alpha transparency.
- Anti-aliased drawing.
- TMS TAdvFormStyler compatible for instant switching between Office 2003 / Office 2007 styles.

#### TAdvSmoothImageListBox visual organisation

TAdvSmoothImageListBox is a component with the following main visual elements:



- 6) The header can contain information on how the items are organised or which types of items are displayed in the ListBox. Appearance of the header can be fully controlled: all characteristics of the fill can be set, text can be positioned in various locations, text can contain HTML formatting tags, additional images can be set. The header can also be set invisible.

7) The optional footer is identical to the header and allows displaying extra information at the bottom of the list, such as summary information for example like “Number of images: ...”

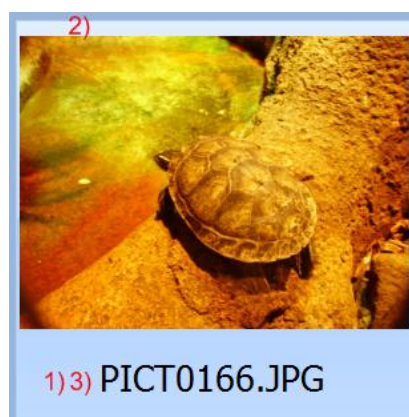
8) This is an example of a top layer item which can be fully customized and can be placed on various positions on top of the listbox. A top layer item can also display HTML text. The fill of each top layer item can be fully customized including its opacity.

9) An item added to the collection can be either an item or a splitter. The splitter can contain text and also a collaps/expand button. With the expand/collaps buttons, all items between two splitters can be made visible or invisible.

10) An item added to the collection can contain an image and HTML text. Different appearance settings can be set to control the position of the image and text in the item. These settings can be found under TAdvSmoothImageListBox.ItemAppearance

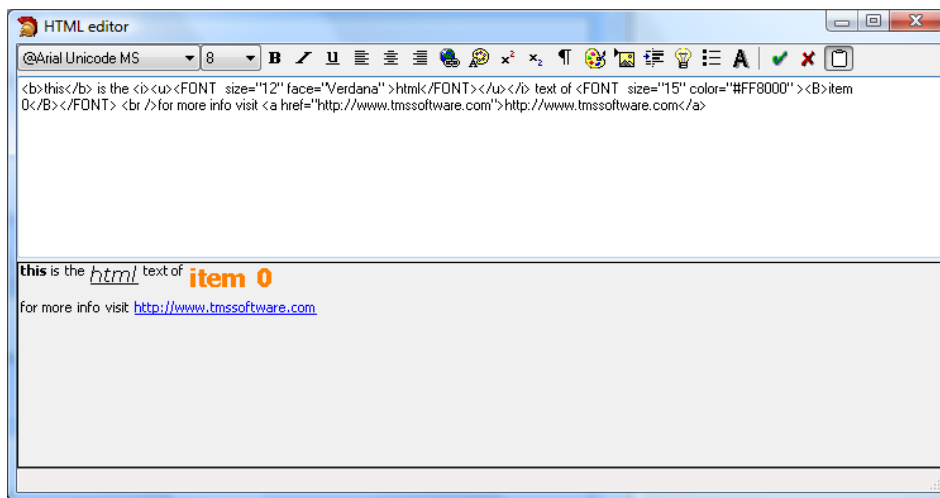
The ImageListBox item can be customized in many ways.

Below is an overview of the important visual elements of the Image Listbox item.



5) The item can contain HTML text and can be positioned at any place on the item area. With the TextAlign property the position of the text can be controlled.

- 6) The image of the item. The image can be positioned with the `ItemAppearance.ImageAlign` property. The image can be drawn taking the aspect ratio in account or not.
- 7) The HTML notes text of the item can be formatted with a design time HTML editor. The HTML can contain images listed in a `TGDIPictureContainer` or a `TImageList`. When clicking on an anchor of the HTML text the event `OnAnchorClick` is called.



The `TAdvSmoothImageListBox.ItemAppearance` property holds common appearance settings for the `TAdvSmoothImageListBox` items. Details of the property settings are discussed in the next chapter.

#### TAdvSmoothImageListBox use

Below you can see how to add items in code and when needed extra properties can be set to change the item appearance.

In this code sample, the image will be directly (non threaded) loaded in the `TAdvSmoothImageListBox`:

```
procedure TForm1.AddItems;
var
  i: integer;
begin
  //Adds 20 items
  for i := 0 to 20 do
  begin
    with AdvSmoothListBox.Items.Add do
    begin
```

```

        Enabled := True; //If enabled false then the item will be
drawn in disabled fill
        Visible := false; //the item will be invisible
        Image.LoadFromFile('image1.jpg'); //the image will be loaded
on the item
        Caption.Text := 'Item ' + inttostr(i);
        Splitter := false; //if splitter is true a splitter will be
drawn between the items
        ...
    end;
end;
end;

```

To have the listbox background thread load the images for higher responsiveness of the application, following code can be used:

```

procedure TForm1.AddItems;
var
    i: integer;
begin
    //Adds 20 items
    for i := 0 to 20 do
        begin
            with AdvSmoothListBox.Items.Add do
                begin
                    Enabled := True; //If enabled false then the item will be
drawn in disabled fill
                    Visible := false; //the item will be invisible
                    Location := 'image1.jpg'; //the image will be loaded by thread
                    Caption.Text := 'Item ' + inttostr(i);
                    Splitter := false; //if splitter is true a splitter will be
drawn between the items
                    ...
                end;
            end;
        end;
    end;

```

You can also add a complete directory of images either threaded or not threaded. When the threaded method is chosen, the images are loaded via a separate thread. This separate thread loads only the visible images for efficiency. As the list is scrolled, new visible item's images will be loaded by this thread.

Not threaded:

```
AdvSmoothImageListBox.AddImagesFromFolder('C:\directory\*.jpg');
```

Threaded:

```
AdvSmoothImageListBox.AddImageLocationsFromFolder('C:\directory\*.jpg');
```

Image types supported are: JPG, JPEG, BMP, PNG, GIF, TIFF and ICO.

#### TAdvSmoothImageListBox properties

##### **ItemAppearance property**

This holds the common appearance settings for items in the list.

- AspectRatio: when true, images are drawn respecting aspect ratio
- AutoSize : when true, size of items is reduced to fill the listbox area when too large
- DisabledFill: sets the fill of disabled list items
- Fill: sets the fill of items in normal state
- HoverFill: sets the fill of items when the mouse is over the item
- HoverSize: sets the increment of the item size when the mouse hovers the item. Setting this to 10 for example will increase the item size by 10 pixels on mouse hovering
- ImageAlign: sets the alignment of the image within the item rectangle
- ImageHeight: sets the height of the image within the item rectangle
- ImageLeft: sets the left position in pixels of the image within the item rectangle
- ImageMargin: sets the margin of the image from the item outer rectangle
- ImageTop: sets the top position in pixels of the image within the item rectangle
- ImageVisible: when false, the image is not visible
- ImageWidth: sets the width of the image within the item rectangle
- ItemHeight: sets the item height
- ItemHorizontalSpacing: sets the horizontal spacing between two items

- ItemVerticalSpacing: sets the vertical spacing between two items
- ItemWidth: sets the item width
- SelectedFill: sets the fill of the item in selected state
- Splitter: sets the appearance of a splitter item
- Stretch: With this property it can be controlled whether only shrinking is applied to images larger than item width and item height or whether images are always either stretched or shrunk

to fit the item size. Often, it is not desirable that small images are stretched to a large item width / height and for this purpose this controlling of the stretch mechanism is available.

Stretch modes:

isShrinkOnly: the images smaller than item size will not be stretched to the item width and height , only larger images will be shrunked.

isAlways: Always stretches or shrinks the images to the item width and height.

- TextAlign: sets the alignment of the text area of an item within the item rectangle
- TextHeight: sets the height of the text area
- TextLeft: sets the left position of the text area within the item rectangle
- TextMargin: sets the margin of the text area within the item rectangle
- TextTop: sets the top position of the text area within the item rectangle
- TextVisible: when false, the text is not visible

### **Columns and Rows**

There are two ways of displaying items in the TAdvSmoothImagelistBox. Either with fixed columns (Number of required Rows will be automatically calculated and vertical scrolling), or with fixed rows (Number of columns is automatically calculated and horizontal scrolling). When columns are set you must scroll up down with the mouse to navigate through the items and the splitters will be drawn horizontally. When Rows are set you must scroll left right with the mouse and the splitters will be drawn vertically.

### **Default Image**

With this property you can set the image to display before the background thread got the change to load the actual image.

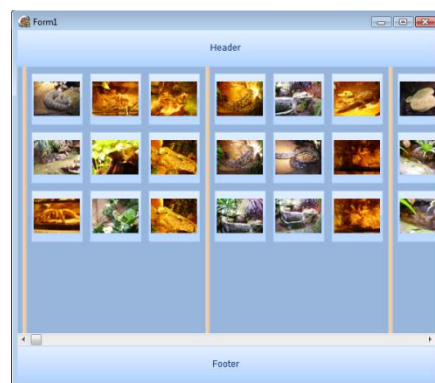
### **TopLayerItems**

This is a collections of items that can be drawn at any position over the TAdvSmoothImageListBox. You can add an additional logo, text, etc... drawn on top, possibly with transparency over the TAdvSmoothImageListBox. Different TopLayer items can also overlap. Properties of an item in the TopLayerItems collection are:

- **Align:** alignment of the item within the imagelistbox
- **Fill:** fill of the toplayer item rectangle
- **Height:** height of the toplayer item rectangle
- **HTMLText:** holds the HTML formatted text the item can contain
- **Left:** left position of the toplayer item
- **Top:** top position of the toplayer item
- **Visible:** when true, the toplayer item is visible
- **Width:** height of the toplayer item rectangle

### **Office styles**

TAdvSmoothImageListBox has built-in office 2003 and office 2007 styles. Just right-click on the component at design-time and choose Styles.



At runtime, the component is TAdvFormStyler-aware. When using a TAdvFormStyler and changing its style, the TAdvSmoothImageListBox will change style along all other controls on the form.



## **Splitter**



The Splitter can be used to collapse items that are display between two splitters. The splitter has a `SplitterState` which can be changed to `Collapsed` or `Expanded`. If you have multiple splitters you can expand or collapse them at once with the `CollapseAll` or `ExpandAll` methods.

## **ThreadLoading**

When using threaded image loading there are 3 modes to load the images.

All: Loads every image at runtime.

On Demand: Loads every visible image. When scrolling, the thread starts again and loads the new visible images.

On Demand After Animation: Loads every visible image. When scrolling, the thread starts again and loads the new visible images after the scrolling animation has finished.

## **ZoomOnDbClick**

You can double-click or press spacebar to zoom in the selected item. The selected item will be zoomed to the bounds of the control (between the header and the footer). The `Zoommode` property will allow the image to be zoomed with aspect ratio.

## **MultiSelect items**

By default, the `TAdvSmoothImageListBox` works in single selection mode and the index of the selected item can be get or set with `TAdvSmoothImageListBox.SelectedIndex`.

When the property `MultiSelect` is set true, multiple items can be selected either with the mouse or the keyboard. Just Shift click on an item if you want to select each item between the previous and the current selected item, or ctrl click on an item if you only want the clicked item to be added to the selection. To get or set which items are selected, the property `Item.Selected` can be used.

## **TAdvSmoothImageListBox methods**

### **Beginupdate and EndUpdate**

If you want to add images or change properties that result in a redraw of the items you can use `BeginUpdate` before and `EndUpdate` after the code that adds items or changes the properties. The items will be drawn more quickly because the drawing of the images will only occur after the

endupdate. When you do not use BeginUpdate and EndUpdate the drawing will also update but will be slower, because the items will be updated for every changed property.

Recommended:

```
AdvSmoothImageListBox.BeginUpdate;  
// add many items here or changes several properties  
AdvSmoothImageListBox.EndUpdate;
```

### **StopThread and StartThread**

When using threading to load the images you can interrupt the thread by calling StopThread. When you want the thread to start loading the images you can call StartThread.

### **Items.FirstItem, Items.NextItem and Items.FirstSplitter, Items.NextSplitter**

FirstItem allows you to lookup the first item that is not a splitter. NextItem will give you the next item that is not a splitter. The parameter that must be given is the item index from where the next item is looked up for.

FirstSplitter gives you the first splitter. NextSplitter looks up the next splitter starting from the item index parameter.

### **Items.Find**

With the function find, you can find an item that matches the given string as parameter. The function then returns the ItemIndex of the item.

### **Items.ScrollToItem**

ScrollToItem allows you to scroll to the item at a certain position in the list. ScrollToItem has only one parameter: the ItemIndex of the item you want to scroll to.

### **TAdvSmoothImageListBox events**

OnItemSelect: Event occurs when item is selected.

OnItemDbClick: Event occurs when item is double-clicked.

OnItemZoomIn: Event occurs when item is starting to zoom in.

OnItemZoomedIn: Event occurs when item is zoomed in.

OnItemZoomOut: Event occurs when item is starting to zoom out.

OnItemZoomedOut: Event occurs when item is zoomed out.

OnItemHint: Event occurs when item is hovered and the hint property is set.

OnItemGetDisplayText: Event occurs when item caption is drawn.

OnNavigate: Event occurs when one of the navigator buttons in header or footer is clicked

OnScroll: Event occurs when scrolling through the list of items.

#### TMS TAdvSmoothImageListBox keyboard and mouse support

##### **Keyboard**

When tabstop is set to true, full keyboard support is enabled for the ImageListBox. Below is a list of keys that will allow you to navigate through the TAdvSmoothImageListBox without using the mouse.

Keys which can be used to zoom:

- Space

The keys below are used to navigate through the TAdvSmoothImageListBox.

- Arrow key down : Scroll one item down
- Arrow key up: Scroll one item up
- Home key: Scroll to the first item
- End key: Scroll to the last item
- Page down key: scroll to the next page of items
- Page up key scroll to the previous page of items

##### **Mouse**

The mouse can be used to scroll through the items (up/down or left/right depending on the settings for Columns & Rows). Drag with the mouse and release to start the scrolling. The amount of scrolling is proportional to the drag length and drag time. Items can be selected with a single mouse click. Like the keyboard you can use the mouse to zoom the image (double-click). The mouse wheel can also be used to scroll.

#### TAdvSmoothImageListBoxPicker

The TAdvSmoothImageListBoxPicker component is an edit control with dropdown that displays the TAdvSmoothImageListBox. This TAdvSmoothImageListBox is fully accessible with all properties, methods & events as described in the previous chapters via the property TAdvSmoothImageListBox.ListBox. When an image is selected the text of the selected item will be set in the text area of the edit control.

## TAdvSmoothPanel, TAdvSmoothExpanderPanel, TAdvSmoothExpanderButtonPanel and TAdvSmoothExpanderGroup



### TAdvSmoothPanel description

TAdvSmoothPanel is designed as a container for other controls with a smooth fill and the possibility to add HTML text, Buttons

### TAdvSmoothPanel features

- Rounded borders & shadow support
- Anti-aliased drawing
- Opacity control
- Sophisticated gradient, texture, hatch fills

- Separate caption with optional font fill / underline
- Background & foreground image at various positions with BMP, JPEG, GIF and full PNG alpha transparency support
- HTML formatted panel content with optional hyperlinks, HTML specified images, ...
- TMS TAdvFormStyler compatible for instant switch between Office 2003 / Office 2007 styles
- Supports TGDIPictureContainer for sharing / reusing BMP,JPEG,GIF,PNG images
- TGDIPButton container
- Expandable collapsable panel
- Support for grouping TAdvSmoothExpanderButtonPanel with TAdvSmoothExpanderGroup

#### TAdvSmoothPanel use

##### **Add a HTML list with groceries**

In this sample the TGDIPictureContainer component is used. Drop a TGDIPictureContainer component on the form and assign the TGDIPictureContainer to the TAdvSmoothPanel.

This sample is based on the MiniHTML reference

```
AdvSmoothPanel1.Caption.Text := 'Grocery List';
AdvSmoothPanel1.Caption.HTMLLocation := plCustom;
AdvSmoothPanel1.Caption.HTMLLeft := 10;
AdvSmoothPanel1.Caption.HTMLTop := 10;
AdvSmoothPanel1.Caption.HTMLText := '<ul>'+
    '<li> Carrots'+
    '<li><IMG src="0"> Bacon'+
    '<li><IMG src="0"> Tomatoes'+
    '<li><IMG src="0"> Bread'+
    '<li><IMG src="0"> Garlic'+
    '<li><IMG src="0"> Oranges</ul>';

AdvSmoothPanel1.Fill.Picture.LoadFromFile('shopping_cart.png');
AdvSmoothPanel1.Fill.PicturePosition := ppBottomRight;
```

Result:



### **Collapse / Expand**

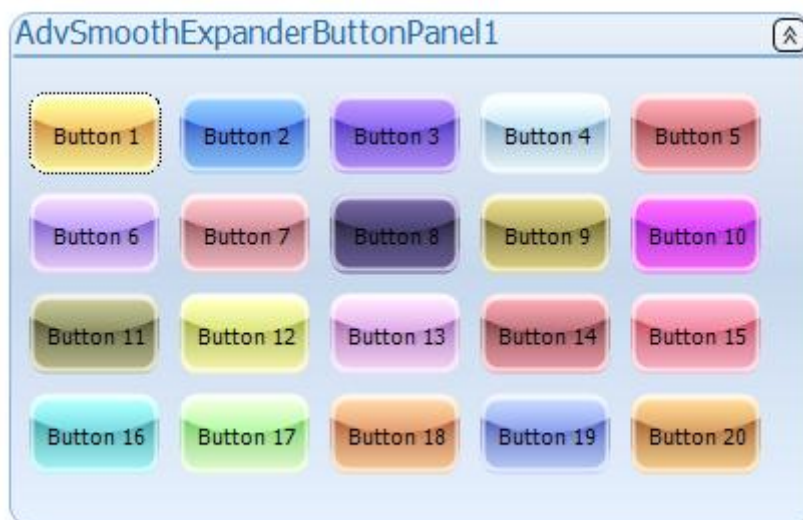
With the AdvSmoothExpanderPanel / AdvSmoothExpanderGroup / AdvSmoothExpanderButtonPanel you can collapse the panel with the expander button. Click the button or press F4 when TabStop = true to collapse/expand the panel.

### **Button Layout**

With the AdvSmoothExpanderButtonPanel you can add TGDIPButtons, by default the Rows and Columns of the panel are -1. The panel will automatically calculate the best row and column settings to fit the buttons in the panel.

When the rows or columns property is specified, the panel will position the buttons Vertically or horizontally depending of the number of Rows / Columns.

When the buttons exceed the height of the panel, the height will automatically increase or decrease depending on the settings of the AutoSize property.





## TAdvSmoothProgressBar



### TAdvSmoothProgressBar description

TAdvSmoothProgressBar is a sophisticated drawn and smoothly animated progressbar

### TAdvSmoothProgressBar features

- Smoothly animated progress bar
- Office 2003 / 2007 Style
- Progress and background fill
- Complex gradient shadows and bevels
- Progress value with support for Progress and normal font
- Optional glow animation and progress animation
- TMS TAdvFormStyler compatible for instant switch between Office 2003 / Office 2007 styles

### TAdvSmoothProgressBar use

The progressbar has a fill for displaying the completed part (from Minimum to Position) and the not completed part (from Position to Maximum). This can be set via TAdvSmoothProgressBar.Appearance.BackgroundFill (not completed part) and TAdvSmoothProgressBar.Appearance.ProgressFill (completed part). The Position value can be displayed as absolute value or as percentage value and a formatting can be applied. This is set with TAdvSmoothProgressBar.Appearance.ValueType, TAdvSmoothProgressBar.Appearance.ValueFormat. The Position value can also be set on various positions on the progressbar and this is controlled with: TAdvSmoothProgressBar.Appearance.ValuePosition.

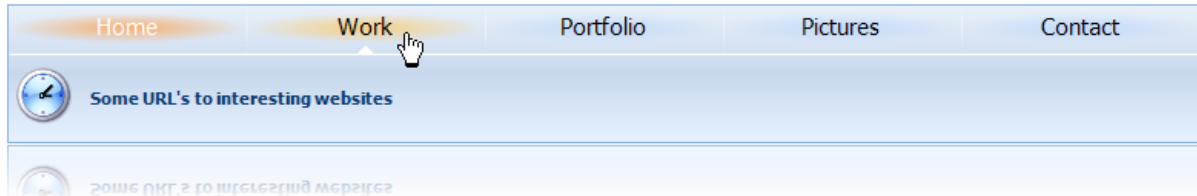
Two animations are available on the progressbar:

- 1) GlowAnimation: this is a glowing animation on the completed part of the progressbar, similar to progressbars in Windows Vista or Windows 7. This is useful to indicate an application is still alive even when the progress only very slowly updates.
- 2) ProgressAnimation: when this is set true, changing the progressbar position will not update the position as a step function but will smoothly animate from current position to new position.





## TAdvSmoothMenu



### TAdvSmoothMenu description

TAdvSmoothMenu is designed as an animated navigation control with the possibility to use complex gradient fills.

### TAdvSmoothMenu features

- Animated menu with hover menu hint text per menuitem
- Can be transparent or have sophisticated gradient, texture or hatch fills
- Built-in color settings for Office 2003 / Office 2007 styles
- Optional animation when switching or hovering menu items and showing hint text & image per menu item
- Built-in support for using BMP,JPEG,GIF and PNG images with alpha transparency
- Anti-aliased drawing
- TMS TAdvFormStyler compatible for instant switch between Office 2003 / Office 2007 styles

### TAdvSmoothMenu use

TAdvSmoothMenu menu items are added via the TAdvSmoothMenu.Items collection. The appearance of the menu items is controlled by TAdvSmoothMenu.ItemAppearance while the appearance of the menu container is controlled by the TAdvSmoothMenu.Appearance property. The TAdvSmoothMenu.Items collection consists of TAdvSmoothMenuitem instances with following properties:

Caption: sets the text of the menu item

Enabled: when true, the menu item is enabled

Notes: sets the notes for the menu item that will appear under the menu strip

NotesLeft, NotesTop: sets the top,left position of the notes when NotesLocation is set to plCustom

NotesLocation: sets the location of the notes on area under the menu strip

Picture: sets the picture for the menu item that is displayed under the menu strip

PictureLeft, PictureTop: sets the top,left position of the picture when PictureLocation is set to plCustom

PictureLocation: sets the location of the picture on area under the menu strip

PictureSize: sets the size of the picture, ie. either the original size or custom specified size

PictureWidth, PictureHeight: sets the size of the pictuere when PictureSize is set to psCustom

This code snippet creates a menu consisting of 4 items:

```
begin
  with AdvSmoothMenu1.Items.Add do
    begin
      Caption := 'BMW';
      Notes := 'Freude am fahren';
      Picture.LoadFromFile('bmwlogo.png');
    end;

    with AdvSmoothMenu1.Items.Add do
      begin
        Caption := 'Mercedes';
        Notes := 'Perfektion wird wieder neu definiert';
        Picture.LoadFromFile('mblogo.png');
      end;

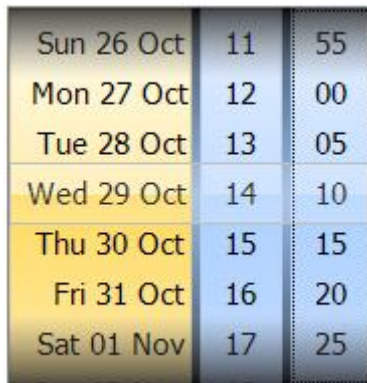
      with AdvSmoothMenu1.Items.Add do
        begin
          Caption := 'Porsche';
          Notes := 'Sicherheit und Dynamik. Vereint mit innerer Stärke';
          Picture.LoadFromFile('porschelogo.png');
        end;

        with AdvSmoothMenu1.Items.Add do
          begin
            Caption := 'Aston Martin';
            Notes := 'Defining Personality';
            Picture.LoadFromFile('amlogo.png');
          end;
        end;
      end;
    end;
```

Handling of a click on a menu item is done with the OnItemClick event. In this sample, the Notes for the menu item clicked is shown:

```
procedure TForm2.AdvSmoothMenu1ItemClick(Sender: TObject; ItemIndex:
Integer);
begin
    ShowMessage(AdvSmoothMenu1.Items[ItemIndex].Notes);
end;
```

## TAdvSmoothSpinner



### TAdvSmoothSpinner description

TAdvSmoothSpinner is designed as a flexible spin control using multiple draggable wheels. Each wheel can contain a different and selectable range of values.

### TAdvSmoothSpinner features

- iPhone style spinner control
- Spinner with selectable number of columns with numeric data, date/time data and custom data
- Optional infinite scrolling
- Keyboard support
- Smooth mouse scroll effects
- All elements feature sophisticated gradient, texture, hatch fills with optional opacity control
- Built-in support for using BMP, JPEG, GIF and PNG images with alpha transparency for custom data items
- Anti-aliased drawing
- TMS TAdvFormStyler compatible for instant switch between Office 2003 / Office 2007 styles

### TAdvSmoothSpinner use

Each wheel of the spinner can be configured to scroll through a specific range of numbers, datetime values or custom values. The type of the range is set with `TAdvSmoothSpinnerColumn.RangeType`. For numbers, the range is set with `TAdvSmoothSpinnerColumn.RangeFrom` and `TAdvSmoothSpinnerColumn.RangeTo`. For a datetime range, the range is set with `TAdvSmoothSpinnerColumn.DateRangeFrom` and `TAdvSmoothSpinnerColumn.DateRangeTo`. The formatting of numbers and/or date time values displayed is controlled by `TAdvSmoothSpinnerColumn.DateTimeValueFormat` or `TAdvSmoothSpinnerColumn.ValueFormat`. For `DateTimeValueFormat` all formatting capabilities of the Delphi method `FormatDateTime()` are available. For the `ValueFormat`, all formatting capabilities of the Delphi method `Format()` are available. Each wheel has the option to make the wheel range cyclic. This is chosen by setting `TAdvSmoothSpinnerColumn.Cyclic = true`. When this is true, the first range value is shown again immediately after the last range value and vice versa.

In the sample code snippet below, the spinner is configured to allow selecting a day and hour between now and 10 years.

```
AdvSmoothSpinner.Columns[0].RangeType := rtDateTime;
AdvSmoothSpinner.Columns[0].StepType := stDay;
AdvSmoothSpinner.Columns[0].RangeFrom := Now;
AdvSmoothSpinner.Columns[0].RangeTo := Now + 365 * 10;
AdvSmoothSpinner.Columns[0].DateTimeValueFormat := 'DDD dd MMM';

AdvSmoothSpinner.Columns[1].RangeType := rtNumber;
AdvSmoothSpinner.Columns[1].StepType := stNumber;
AdvSmoothSpinner.Columns[1].RangeFrom := 0;
AdvSmoothSpinner.Columns[1].RangeTo := 23;
AdvSmoothSpinner.Columns[1].ValueFormat := '%d';
AdvSmoothSpinner.Columns[1].Cyclic := true;

AdvSmoothSpinner.Columns[2].RangeType := rtNumber;
AdvSmoothSpinner.Columns[2].StepType := stNumber;
AdvSmoothSpinner.Columns[2].Step := 5;
AdvSmoothSpinner.Columns[2].RangeFrom := 0;
AdvSmoothSpinner.Columns[2].RangeTo := 55;
AdvSmoothSpinner.Columns[2].ValueFormat := '%.2d';
AdvSmoothSpinner.Columns[2].Cyclic := true;
```

### **Jackpot application**

In this sample it is shown how columns can be added with custom items. To rotate the wheels until a random value matches with the value in the spinner you must set the `Cyclic` property true on each column.

The `TGDIPictureContainer` is used to add jackpot images when using custom items.

For each picture in the collection use an integer value for the name. When adding custom items you can specify the `picturename` property to add a picture that is defined in the `TGDIPictureContainer` collection.

Needed controls : Timer, TButton, TAdvSmoothSpinner

First you must define a set of variables that will be used in the OnTimer event.

```
var
  Form2: TForm2;
  Time1, time2, time3: integer;
  doTime1, doTime2, doTime3: Boolean;
  sel1, sel2, sel3: integer;

procedure TForm2.FormCreate(Sender: TObject);
var
  K, I: Integer;
begin
  for I := 0 to 2 do
  begin
    with AdvSmoothSpinner2.Columns.Add do
    begin
      RangeType := rtCustom;
      Cyclic := true;
      for K := 0 to 5 do
        CustomItems.Add.PictureName := inttostr(K);
      end;
    end;
  end;
end;
```

Add a timer on the form and set the interval to 10. The OnTimer event handles the spinning and randomly selecting an item.

```
procedure TForm2.Timer1Timer(Sender: TObject);
begin
  if doTime1 then
  begin
    Inc(time1);
    with AdvSmoothSpinner2.Columns[0] do
    begin
      if time1 = 40 then
      begin
        DoTime2 := true;
      end;
      Randomize;
      if (SelectedValue = RandomRange(Round(GetRangeFrom),
Round(GetRangeTo))) and (time1 >= 100) then
      begin
        DoTime1 := false;
      end;
      Previous;
    end;
  end;

  if DoTime2 then
  begin
    Inc(time2);
    with AdvSmoothSpinner2.Columns[1] do
    begin
```

```

        if time2 = 40 then
        begin
            DoTime3 := true;
        end;
        Randomize;
        if (SelectedValue = RandomRange(Round(GetRangeFrom),
Round(GetRangeTo))) and (time2 >= 100) then
        begin
            DoTime2 := false;
        end;
        Previous;
    end;
end;

if DoTime3 then
begin
    Inc(time3);
    with AdvSmoothSpinner2.Columns[2] do
    begin
        Randomize;
        if (SelectedValue = RandomRange(Round(GetRangeFrom),
Round(GetRangeTo))) and (time3 >= 100) then
        begin
            DoTime3 := false;
        end;
        Previous;
    end;
end;
end;
end;

```

In the OnSelectedValueChanged event of the spinner you could save the item index of each column and then see if there is a match:

```

procedure TForm2.AdvSmoothSpinner2SelectedValueChanged(Sender: TObject;
    Column, SelectedCustomIndex: Integer; SelectedValue: Double;
    RangeType: TAdvSmoothSpinnerRangeType);
begin
    if Column = 0 then
        sel1 := SelectedCustomIndex;

    if Column = 1 then
        sel2 := SelectedCustomIndex;

    if Column = 2 then
        sel3 := SelectedCustomIndex;

    SetJackPot;
end;

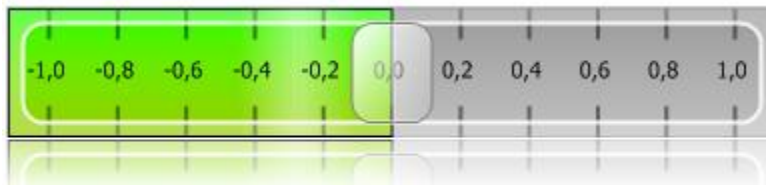
procedure TForm2.SetJackPot;
begin
    if (sel1 > -1) and (sel2 > -1) and (sel3 > -1) then
        begin

```



```
if (sel1 = sel2) and (sel1 = sel3) and (sel2 = sel3) then
    Label1.Caption := 'You won, congratulations!'
else
    Label1.Caption := 'You lost, try again...';
end;
end;
```

## TAdvSmoothTrackBar



### TAdvSmoothTrackBar description

TAdvSmoothTrackBar is a vertically or horizontally oriented trackbar with semi transparent thumb. The trackbar can displays the range from minimum to position with a different fill than the range from position to maximum.

### TAdvSmoothTrackBar features

- Smoothly animated trackbar
- Office 2003 / 2007 Style
- Progress and background appearance fill style
- Minimum, maximum and step with tickmarks
- Complex thumb, with fill support
- Vertical or horizontal direction

### TAdvSmoothTrackBar use

The TAdvSmoothTrackBar allows to set a value between Minimum and Maximum. Tickmarks and value can be displayed at positions defined by TAdvSmoothTrackBar.Step. It can be configured if and how the thumb should snap to the tickmarks. The formatting of the value is controlled with TAdvSmoothTrackBar.ValueFormat and formatting that can be applied here is the same as available with the Delphi Format() function.

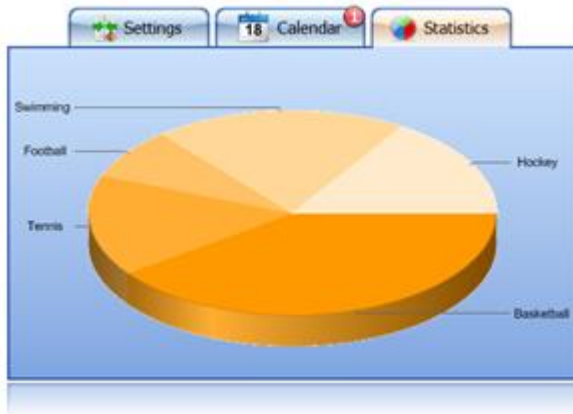
### **Snapping margins**

The property SnapMargin is used to snap the thumb to the values defined by the step property.

Sample: When the SnapMargin is 10 and the step is 20, the thumb will immediately snap from 0 to 20, from 20 to 40. When the SnapMargin is 1 the thumb can be freely moved between 0 and 20 until the thumb reaches 19, then the thumb will automatically snap to the value 20.

When the SnapMargin is 0 there will be no snapping and the Thumb can be freely moved between minimum and maximum.

## TAdvSmoothTabPage



### TAdvSmoothTabPage description

TAdvSmoothTabPage is a page control with tabs designed to fit well specifically with TAdvSmoothButton or TAdvSmoothToggleButton. The tabs can be positioned left, right, top or bottom of the pages. Each tab can optionally have a status indicator and tabs can be centered, left aligned or right aligned on the side of the pagecontrol.

### TAdvSmoothTabPage features

- Office 2007 / Office 2003 style tabpager
- Support for top, left, right, bottom tabs
- Support for controlling alignment of tabs on side of the page control
- Page appearance fill style, each page can have a different fill style
- Tab appearance button fill style
- Tab button with picture and caption
- Tab status indicator
- Tab reordering

### TAdvSmoothPager use

Adding a new page at design time can be done by right-clicking the component and choosing “New page” from the context menu.

To create a new page at runtime with a tab with status indicator, following code can be used:

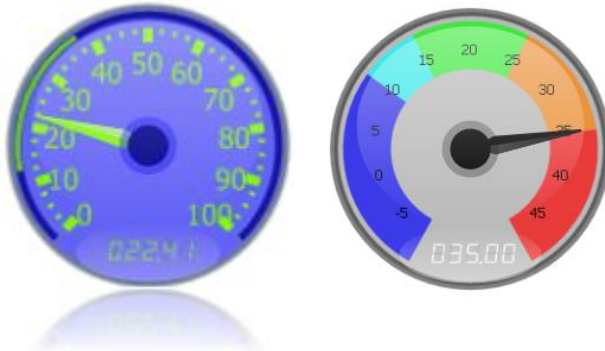
```
var
    stb: TAdvSmoothTabPage;

begin
    stb := TAdvSmoothTabPage.Create(AdvSmoothTabPager1);
    stb.AdvSmoothTabPager := AdvSmoothTabPager1;
    stb.Caption := 'Runtime created page';
    stb.TabAppearance.Status.Caption := 'Warning!';
    stb.TabAppearance.Status.Visible := true;
end;
```

To remove a tab page at runtime, simply destroy the page:

```
AdvSmoothTabPage.Free;
```

## TAdvSmoothGauge



### TAdvSmoothGauge description

TAdvSmoothGauge is an instrumentation control to visualize data as a meter with optionally smooth animation. The meter can be used as read-only control but also features optional keyboard interaction to change the needle position with the keyboard.

### TAdvSmoothGauge features

- Smoothly animated gauge with complex gradients
- Animated needle pointer
- Digit value led display
- Informative dialtext
- Minimum and maximum with division and subdivisions
- Office 2007 / Office 2003 style

### TAdvSmoothGauge visual organisation



- 1) Needle: The needle can be fully customized and points to the current value. The needle can be animated to switch between the current and the next value.
- 2) DialText: The dialtext can be useful to provide information on the purpose of the gauge. Some samples are: Speed, C°, KPH, MPH...
- 3) Display digits: When a value is set the needle will animate to the given value causing the led display to show the value. The LED display is updated synchronously with the needle value. Set `AdvSmoothGauge.Digit.Visible = false` if it is not needed to display the value via LEDs.
- 4) The minimum and maximum value can be changed and the property `DivisionCount` allows you to set the number of divisions from minimum tot maximum.
- 5) Threshold: the threshold is used to mark special area's where the value in that range has a different meaning than the value outside that range.
- 6) The property `DivisionCount` also specifies the tick marks. The property `SubDivisionCount` is the number of tick marks between to divisions.

### **TAdvSmoothGauge Office Styles**

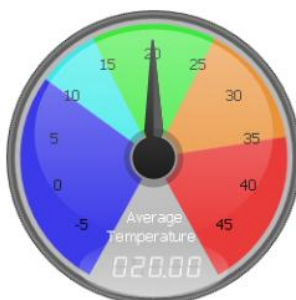
TAdvSmoothGauge has built-in office 2003 and office 2007 styles. Just right-click on the component at design-time and choose Styles or use `TAdvSmoothGauge.SetComponentStyle(style)` at runtime.

### **TAdvSmoothGauge use**

Normally, TAdvSmoothGauge is a read-only visual control only, indication a value via a meter. It is however possible to also let the meter interact with the keyboard. When `AdvSmoothGauge.TabStop = true` and `AdvSmoothTabGauge.Enabled = true`, the keyboard Up & Down keys will increase/decrease the meter position with 1 unit. PgUp and PgDn keys will increase/decrease the meter position with 10 units and Home and End key will set the meter respectively on minimum and maximum.

### **Sections**

The gauge supports sections to apply different "range categories".In the screenshot below the sections have a different color and range.



Below is a screenshot of the default office 2007 luna style gauge with a section added between value 20 and 60 with a clBlue color:

```
with AdvSmoothGauge1.Sections.Add do  
begin  
    StartValue := 20;  
    EndValue   := 60;  
    Color      := clBlue;  
end;
```



#### TAdvSmoothGauge events

**OnValueChanged:** This event is called when the value is changed. When the property **Animation** is true, the **OnValueChanged** event will be called when the value is reached after the animation completed.



## TAdvSmoothJogWheel



### TAdvSmoothJogWheel description

TAdvSmoothJogWheel is designed to manipulate data in 3 different ways with the look and feel of a real jogwheel in vertical or horizontal direction, with complex gradients and shadows.

### TAdvSmoothJogWheel features

- Smoothly animated jogwheel with complex gradients and shadows
- Indicator to mark current value with different shapes and Picture support
- Different color and brightness for each mode
- Vertical and horizontal direction
- Animationfactor to change the speed of the animation
- Editable grip size and spacing
- Comes with three modes: Continuous, Cue and AutoCue

### TAdvSmoothJogWheel visual organisation



- 1) Continuous mode: In this mode the jogwheel can scroll unlimited left (negative) or right (positive) and remains at the position of the indicator. The indicator can be a shape (triangle, square, circle, ...) and can also be a picture.
- 2) Cue mode: This mode has the ability to block the value limited to a certain percentage of the total size of the wheel. With the Apperture property this can be achieved.
- 3) Auto Cue mode: This mode is the same as the cue mode, but the value always returns to zero after a Mouseup occurs.

The property Mode allows you to change the mode that is present in the property Modes. The property Modes is a set of Mode to choose which modes you want to allow. For each mode you can change the color, brightness and indicator. To change the mode, hold the left mouse button for 2 seconds (default). Upon release of the left mouse button the mode changes. The amount of seconds before the mode changes can be set with the property ModeChangeDelay.

You can change the size of the grips and the spacing between the grips with the properties GripSize and GripSpacing.

The speed of which the value changes can be set with the AnimationFactor. when the AnimationFactor is lower the value will change faster.

#### TAdvSmoothJogWheel use

##### Change mode

To change the mode simply use the code below:

```
AdvSmoothJogWheel1.Mode := wmAutoCue;
```

##### Change allowed modes

To change the set of modes that are allow use the following code:

##### Add mode

```
AdvSmoothJogWheel1.Modes := AdvSmoothJogWheel1.Modes +  
[wmContinuous];
```

##### Remove mode

```
AdvSmoothJogWheel1.Modes := AdvSmoothJogWheel1.Modes -  
[wmContinuous];
```

#### TAdvSmoothJogWheel events

OnValueChanged: This event is called when the value changes.

OnModeChanged: This event is called when the mode changes.

## TAdvSmoothLEDLabel



### TAdvSmoothLEDLabel description

TAdvSmoothLEDLabel is designed to display values via 7-segment LEDs with the possibility to add complex gradients and textures.

### TAdvSmoothLEDLabel features

- Transparent background or background fill
- Sophisticated opacity selection & background fill, including gradient, texture, hatch fills
- Optional shadow on background fill
- Optional rounded corners
- 7-Segment LEDs
- Support for Time

### TAdvSmoothLEDLabel use

Some samples after different styles applied



## TAdvSmoothStatusIndicator



### TAdvSmoothStatusIndicator description

TAdvSmoothStatusIndicator is designed to provide extra information on several components in the TMS Smooth Controls pack or to be used separately directly on another control.

### TAdvSmoothStatusIndicator features

- Small status indicator with sophisticated fill
- Is internally used in TAdvSmoothCalendar, TAdvSmoothToggleButton, TAdvSmoothButton and TAdvSmoothTabPage

### TAdvSmoothStatusIndicator use

Components that implement the StatusIndicator component are:

TAdvSmoothButton

TAdvSmoothCalendar & TAdvSmoothDatePicker

TAdvSmoothTabPage

TAdvSmoothToggleButton

TAdvSmoothDock

TAdvSmoothStatusIndicator can also separately be dropped on any container component. Set the fill via the property TAdvSmoothStatusIndicator.Appearance.Fill. The status text is set via TAdvSmoothStatusIndicator.Caption. The status indicator can autosize, ie. its width will automatically adapt to the width of the caption text. Enable this with TAdvSmoothStatusIndicator.AutoSize = true.

## TAdvSmoothToggleButton



### TAdvSmoothToggleButton description

TAdvSmoothToggleButton is toggle button with an appearance similar to the TAdvSmoothButton. The toggle state is indicated by changing the color of a thick bevel around the button. The component can also be used in combination with other TAdvSmoothToggleButton components to form a radio group.

### TAdvSmoothToggleButton features

- Smooth toggle button with rounded gradient
- Rounded optional bevel with separate color styles
- Support for DropDownMenu / DropDownControl
- Fully automatic gradient color calculation from single color property
- Button can have image of caption text
- Image supports PNG with alpha transparency
- GroupIndex property to create radio group from several TAdvSmoothToggleButtons

### TAdvSmoothToggleButton use

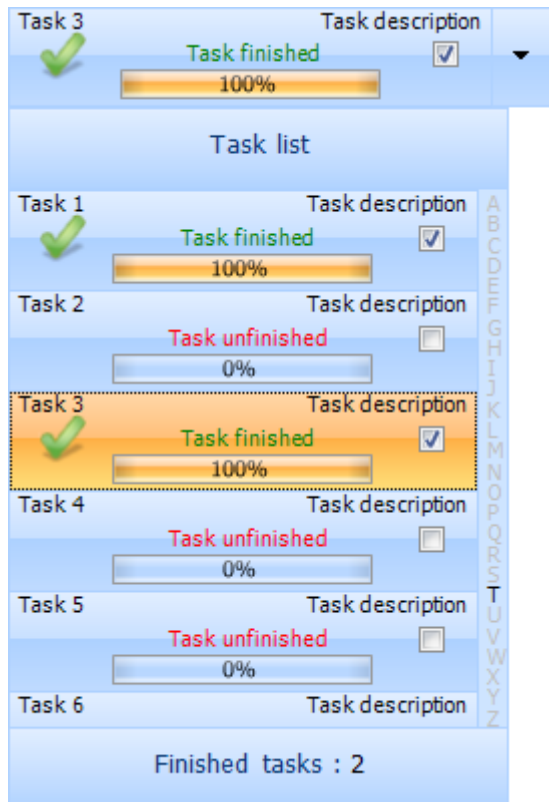
TAdvSmoothToggleButton is similar to the TAdvSmoothButton, except that it features an extra thick bevel that can indicate the button down state. This border color is an automatic calculated gradient to visualize a glow. The bevel can have three states: normal, down and disabled. Therefore, there are three bevel color properties: BevelColor, BevelColorDown and BevelColorDisabled. The state of the toggle button can be get or set with TAdvSmoothToggleButton.Down.

TAdvSmoothToggleButton can also be used as button within a radiogroup. Simply put multiple buttons on the form and set their GroupIndex property to the same value. The buttons will start behaving as a radiogroup.

TAdvSmoothToggleButton can also be used as a button that shows any control as a dropdown control when the button is clicked. To use this capability, simply assign any TCustomControl descendent component to TAdvSmoothToggleButton.DropDownControl and set TAdvSmoothToggleButton.DropDownButton = true.



## TAdvSmoothComboBox



### TAdvSmoothComboBox description

TAdvSmoothComboBox is a dropdown control implementation of the TAdvSmoothListBox. The selected item of the TAdvSmoothComboBox is displayed in a fully identical way as the items in the dropdown listbox.

### TAdvSmoothComboBox features

- Combobox items can have Caption, Info text as well as HTML formatted notes with hyperlink & image support
- Combobox items can have checkbox, radiobutton, image, detailimage,...
- Dropdown header & footer with sophisticated fills and image support
- Keyboard lookup support
- Progressbar support in items
- Item grouping

- Smooth mouse slide effects
- Lookup indicator for instant lookup in alphabet
- Support for Item groups with splitter between items
- Detail control per item or global detail control with animation to show detail
- All elements feature sophisticated gradient, texture, hatch fills with optional opacity control
- Built-in support for using BMP,JPEG,GIF and PNG images with alpha transparency
- Anti-aliased drawing

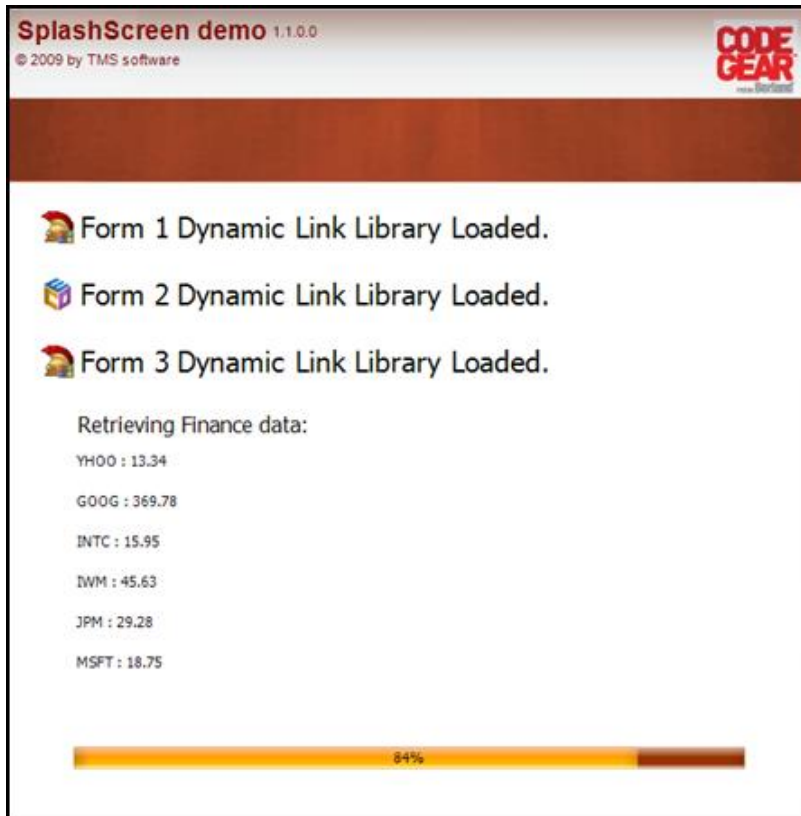
#### TAdvSmoothComboBox use

As TAdvSmoothComboBox is basically a TAdvSmoothListBox but used as dropdown control, it can be used in an identical way as TAdvSmoothListBox. The items within the dropdown have the same capabilities as in the TAdvSmoothListBox and can as such be handled in the same way.

Different from the TAdvSmoothListBox is that the combobox always shows one selected item. The index of this selected item is set with TAdvSmoothComboBox.SelectedIndex. Set this to -1 if no item should be selected.



## TAdvSmoothSplashScreen



### TAdvSmoothSplashScreen description

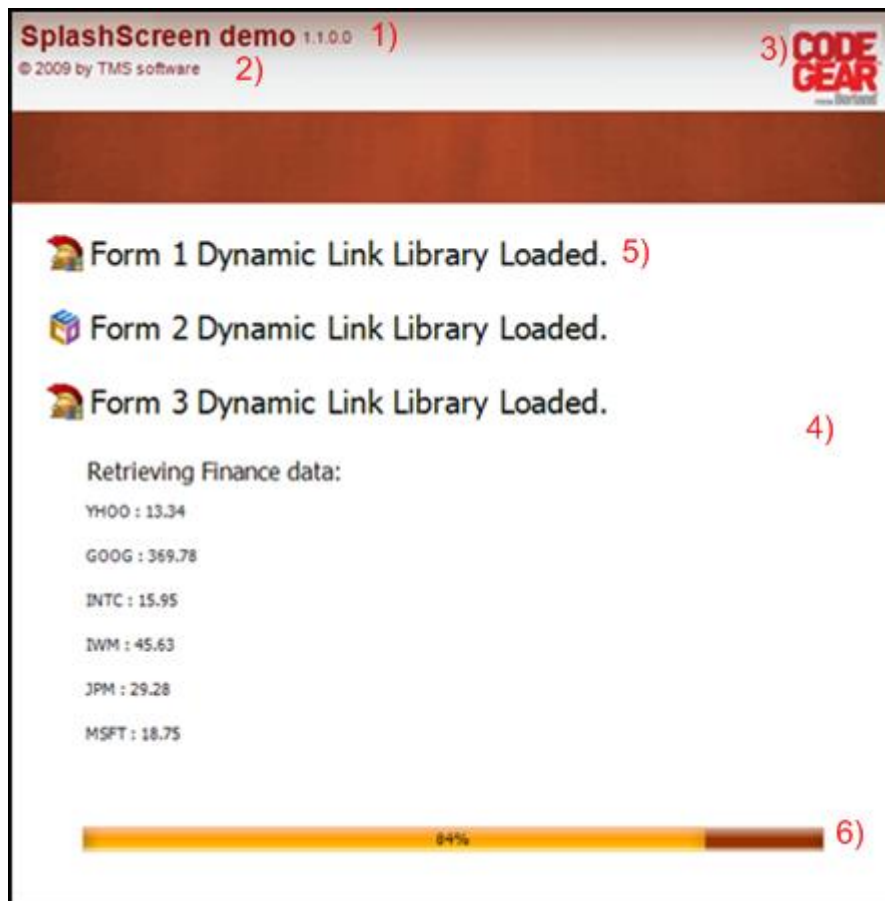
TAdvSmoothSplashScreen is designed to easily create rich splash screens to display information while loading large files.

### TAdvSmoothSplashScreen features

- All elements feature sophisticated gradient, texture, hatch fills with foreground and backgroundpicture support
- Progress bar to indicate progress during application start
- Fade in/out animation when splash screen appears
- Basic program information to automatically obtain program name and version from the executable version resource
- Top Layer items with opacity control to have full flexibility for designing the splash screen contents
- HTML formatted text support
- Background Texture support

### TAdvSmoothSplashScreen use

Below is an overview of the TAdvSmoothSplashScreen major elements. These elements are important to customize the look and feel of the splashscreen:



1 & 2) Basic Program Information: The Splash screen allows you to set the program name version number and copyright. With the property AutoLoad the splash automatically loads the project settings from the EXE version info resource.

☒ Include version information in project

**Module version number**

Major version: 1 Minor version: 0 Release: 0 Build: 0

☐ Auto-increment build number

**Module attributes**

☐ Debug build ☐ Special build  
☐ Pre-release ☐ Private build  
☐ DLL

**Language**

Locale ID: \$0409  
English (United States)

Key	Value
CompanyName	TMSSoftware
FileDescription	
FileVersion	1.0.0.0
InternalName	
LegalCopyright	© 2009 TMSSoftware
LegalTrademarks	
OriginalFilename	
ProductName	TMS TAdvSmoothSplashScreen

**TMS TAdvSmoothSplashScreen 1.0.0.0**  
© 2009 TMSSoftware

3, 4) The background fill of the splashscreen can contain texture, gradients opacities, etc...

```
AdvSplashScreen1.Fill.Picture.LoadFromFile('RAD2007.bmp');
```

5) ListItems to display information about which item is loading. Supports HTML in combination with the ImageList and PictureContainer to specify images via HTML tag in items.

6) A ProgressBar to display the progress while the application is loading the different elements.

Below is a sample on how to simulate a splash screen. The layout will be based on the Office 2007 Luna style. With the basic program information you can automatically display the program name and version that is embedded inside the EXE version info resource.

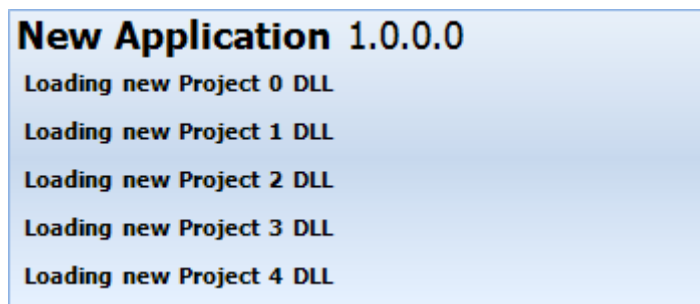
**Code:**

```
var
  I: integer;
begin
  AdvSmoothSplashScreen1.SetComponentStyle(tsOffice2007Luna);
  AdvSmoothSplashScreen1.Height := 150;
  AdvSmoothSplashScreen1.Width := 350;
  AdvSmoothSplashScreen1.CloseOnTimeout := true;
  AdvSmoothSplashScreen1.ListItemsSettings.Rect.Top := 30;
  AdvSmoothSplashScreen1.ListItemsSettings.Rect.Left := 5;
  AdvSmoothSplashScreen1.BasicProgramInfo.AutoLoad := true;
```

```
AdvSmoothSplashScreen1.Show;

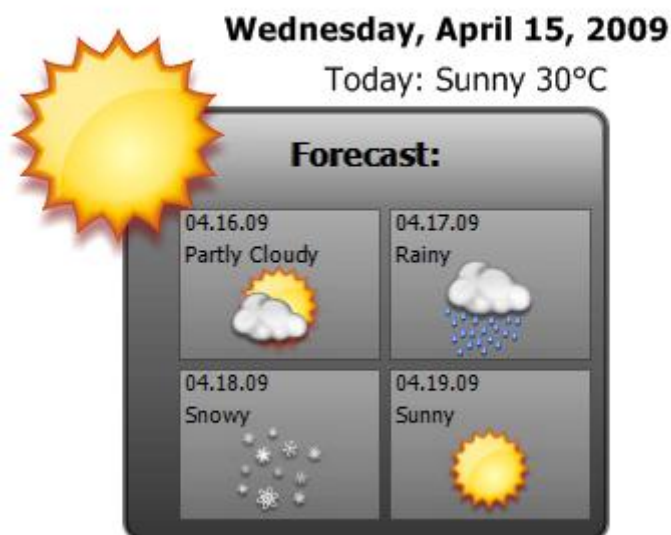
I := 0;
while I <= 4 do
begin
    AdvSmoothSplashScreen1.ListItems.Add.HTMLText := '<b>Loading new
Project '+inttostr(I)+' DLL</b>';
    AdvSmoothSplashScreen1.Refresh;
    Sleep(1000);
    Inc(I);
end;
```

**Result:**



The splash screen also supports background textures and toplayer items to enhance the look and feel. Below are 2 sample images of splash screens build with toplayer items and background textures.

Each element can be positioned with an x and y coordinate absolute or relative depending on the type of element. When changing properties at runtime it is best to call `beginupdate` and `endupdate` that will update the splash screen after the changes have been set.



## TAdvSmoothMessageDialog



### TAdvSmoothMessageDialog description

Replace your default delphi message dialogs with the TAdvSmoothMessageDialog. This feature rich component allows you to create a message dialog with complex and smooth graphics.

### TAdvSmoothMessageDialog features

- Full opacity control
- Buttons with separate button result
- HTML text support
- Office Styles
- Horizontal or vertical stacked buttons
- Buttons with customizable color, image
- Standard ShowMessage & MessageDlg call direct replacements
- Margins & capability to have alpha transparent images outside the dialog

### TAdvSmoothMessageDialog use

To call the TAdvSmoothMessageDialog with a simple text use ShowSmoothMessage('text'); This allows you to quickly replace the ShowMessage functions with the TAdvSmoothMessageDialog component. By default the TAdvSmoothMessageDialog will apply the Office 2007 Luna style if you use ShowSmoothMessage.

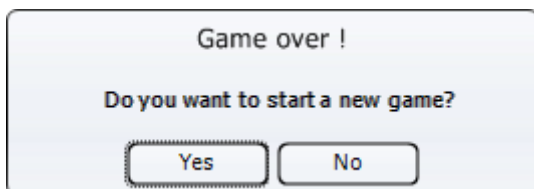
The TAdvSmoothMessageDialog will automatically calculate the best width and height depending of the number of buttons, the HTML and the caption. The buttons can have a vertical or horizontal layout.

Below is a sample of a message dialog with a caption, some html text and two buttons. With a Office 2007 Silver appearance.

#### Code:

```
var
  md: TAdvSmoothMessageDialog;
begin
  md := TAdvSmoothMessageDialog.Create(Self);
  md.Caption := 'Game over !';
  with md.Buttons.Add do
  begin
    Caption := 'Yes';
    ButtonResult := mrYes;
  end;
  with md.Buttons.Add do
  begin
    Caption := 'No';
    ButtonResult := mrNo;
  end;
  md.HTMLText.Text := 'Do you want to start a new game?';
  md.HTMLText.Location := hlCenterCenter;
  md.SetComponentStyle(tsOffice2007Silver);
  md.Execute;
```

#### Result:



#### Replacement Functions

The TAdvSmoothMessageDialog supports functions to quickly show a default message dialog. By doing a find & replace in existing applications of ShowMessage to ShowSmoothMessage and MessageDlg to SmoothMessageDlg, you can quickly change an application to use the new dialogs. Below are the functions signatures that can be used:

```
procedure ShowSmoothMessage(const Msg: string; AStyle: TTMSStyle =
  tsOffice2007Luna);
```

```
function SmoothMessageDlg(const Title, Msg: string; DlgType:
  TMsgDlgType;
  Buttons: TMsgDlgButtons; HelpCtx: Longint; AStyle: TTMSStyle =
  tsOffice2007Luna): Integer; overload;
```



```
function SmoothMessageDlg(const Title, Msg: string; DlgType:
TMsgDlgType;
  Buttons: TMsgDlgButtons; HelpCtx: Longint; DefaultButton:
TMsgDlgBtn; AStyle: TTMSStyle = tsOffice2007Luna): Integer;
overload;

function SmoothMessageDlgPos(const Title, Msg: string; DlgType:
TMsgDlgType;
  Buttons: TMsgDlgButtons; HelpCtx: Longint; X, Y: Integer; AStyle:
TTMSStyle = tsOffice2007Luna): Integer; overload;

function SmoothMessageDlgPos(const Title, Msg: string; DlgType:
TMsgDlgType;
  Buttons: TMsgDlgButtons; HelpCtx: Longint; X, Y: Integer;
  DefaultButton: TMsgDlgBtn; AStyle: TTMSStyle = tsOffice2007Luna):
Integer; overload;
```

### **Execute and ExecuteDialog**

The TAdvSmoothMessageDialog has an Execute and ExecuteDialog function. The ExecuteDialog function returns a TModalResult. The Execute function returns a Boolean and this Boolean is only true when the ModalResult is mrOk or mrYes. When adding buttons and using the Execute function, make sure that there is a button with the ButtonResult mrOk or mrYes.

```
AdvSmoothMessageDialog1.Buttons.Clear;
AdvSmoothMessageDialog1.Position := poScreenCenter;
with AdvSmoothMessageDialog1.Buttons.Add do
begin
  ButtonResult := mrOk;
  Caption := 'Ok';
end;
with AdvSmoothMessageDialog1.Buttons.Add do
begin
  ButtonResult := mrCancel;
  Caption := 'Cancel';
end;

if AdvSmoothMessageDialog1.Execute then
  Label1.Caption := 'Ok Button clicked';
```

### **Appearance**

When the default message dialog functions are no longer suitable, the message dialog can be fully customized for its 4 different elements:

- **Buttons:** The buttons have a separate appearance and can be formatted with a color, and opacity property. When a picture is needed to make the button more attractive use the picture and pictureposition property. The buttons can also be vertical or horizontal stacked depending on the type of message dialog needed.

The ButtonAreaFill property is used to fill the area of the buttons.

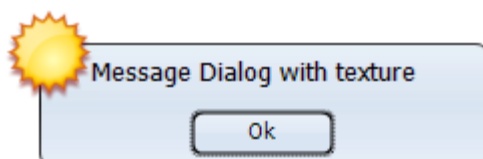
- **Caption:** The caption has a separate fill that is fully customizable. With the CaptionFont and CaptionPosition properties the caption text can be formatted.
- **HTML:** The HTML text has no separate Fill and is drawn directly on the message dialog. The HTML text can be customized in a separate dialog. With the OnAnchorClick event you can call a ShellExecute to open the URL.

```
procedure TForm1.AdvSmoothMessageDialog1AnchorClick(Sender: TObject;
  Anchor: string);
begin
  ShellExecute(0, 'open', pchar(Anchor), nil, nil, SW_NORMAL);
end;
```

- **Background Fill:** the background fill of the message dialog is the fill behind the caption, html and buttons and can be complete transparent giving many possibilities to the message dialog.

### Using overlay textures

The AdvSmoothMessageDialog has a margin property to indent the messagedialog drawing. This opens the possibility to add overlay textures, textures that visually go out the draw area. Below is a sample of a default messagedialog with a margin and a texture. The captionfill.Picture is loaded with a PNG image and the picture position and size are customized.



Foreground picture

Picture position: Custom

Picture: ... x

Picture x: 0 y: 0

Picture size: Custom

Picture width: 50 height: 50

```
AdvSmoothMessageDialog1.Caption := 'Message Dialog with texture';
AdvSmoothMessageDialog1.Position := poScreenCenter;
```

```
AdvSmoothMessageDialog1.Execute;
```

## TAdvSmoothTimeLine



### TAdvSmoothTimeLine description

Smooth time line with complex fills, opacity, sections, indicators and tickmarks. With optional transparent or semi transparent floating hints and moveable indicators.

### TAdvSmoothTimeLine features

- Office styles
- Complex gradients with full opacity control
- Moveable indicators with different shapes
- Customizable sections with floating hints

### TAdvSmoothTimeLine use

The TAdvSmoothTimeLine component can be fully customized. Indicators can be added, removed on the timeline. Sections support floating hints to display extra information that follows the mouse when hovering the section.

### Start and EndTime

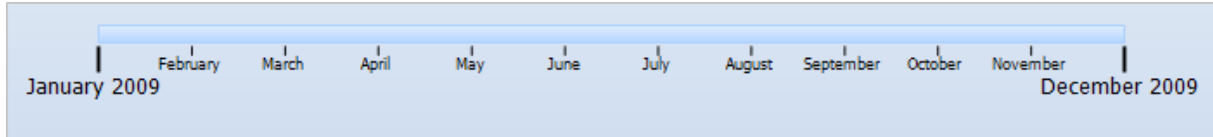
To change the start and end time of the timeline, change the Range.RangeFrom and Range.RangeTo properties. In combination with RangeAppearance.DivisionFormat and RangeAppearance.SubDivisionFormat these properties give full access to every possible time range. The Range.Divisions and Range.SubDivisions properties allow you to specify to number of steps from RangeFrom to RangeTo. For each step a tickmark is drawn.

### Example: Years / Months

Settings to display a range from January 2009 to December 2009 with a subdivision for each month:

```
AdvSmoothTimeLine1.Range.RangeFrom := EncodeDate(2009, 1, 1);
AdvSmoothTimeLine1.Range.RangeTo   := EncodeDate(2009, 12, 31);
AdvSmoothTimeLine1.Range.Divisions  := 1;
AdvSmoothTimeLine1.Range.SubDivisions := 11;
AdvSmoothTimeLine1.RangeAppearance.DivisionFormat := 'mmmm yyyy';
AdvSmoothTimeLine1.RangeAppearance.SubDivisionFormat := 'mmmm';
AdvSmoothTimeLine1.RangeAppearance.DivisionFont.Size := 10;
AdvSmoothTimeLine1.RangeAppearance.SubDivisionFont.Size := 7;
AdvSmoothTimeLine1.RangeAppearance.DivisionTickMarkSize := 15;
AdvSmoothTimeLine1.RangeAppearance.SubDivisionTickMarkSize := 5;
```

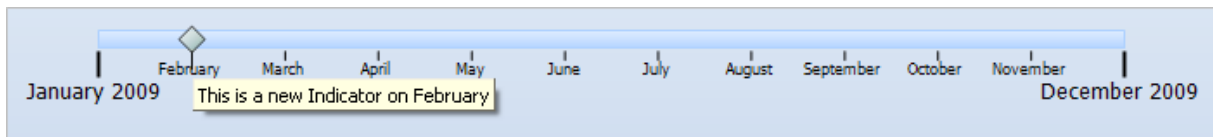
```
AdvSmoothTimeLine1.HorizontalMargin := 50;  
AdvSmoothTimeLine1.Width := 700;
```



## **Indicators**

The TAdvSmoothTimeLine can also display indicators with different shapes to mark special points on the timeline or to give extra information.

```
with AdvSmoothTimeLine1.TimeLineIndicators.Add do
begin
    Position := AdvSmoothTimeLine1.Range.RangeFrom +
    ((AdvSmoothTimeLine1.Range.RangeTo -
    AdvSmoothTimeLine1.Range.RangeFrom) /
    AdvSmoothTimeLine1.Range.SubDivisions);
    Shape := isDiamond;
    Color := clWhite;
    ColorTo := clGreen;
    Hint := 'This is a new Indicator on February';
end;
```



The indicator is limited to a single position and can be dragged along the timeline to change the position. With the OnIndicatorPositionChanged and OnIndicatorPositionChanging event you can see the current position of the indicator. The indicator dragging can be disabled by setting the Fixed property to true.

## **Sections**

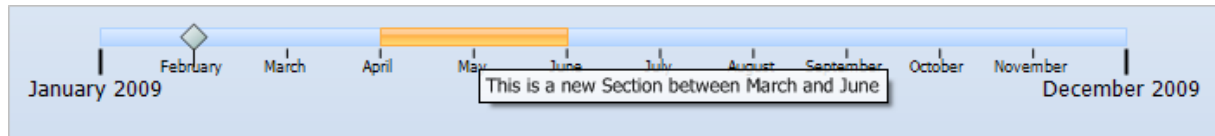
An indicator is limited to one position property while the Section can be stretched over a timezone between a starttime and endtime.

```
with AdvSmoothTimeLine1.TimeLineSections.Add do
begin
    StartTime := AdvSmoothTimeLine1.Range.RangeFrom +
    ((AdvSmoothTimeLine1.Range.RangeTo -
    AdvSmoothTimeLine1.Range.RangeFrom) /
    AdvSmoothTimeLine1.Range.SubDivisions) * 3;
```

```

EndTime := AdvSmoothTimeLine1.Range.RangeFrom +
((AdvSmoothTimeLine1.Range.RangeTo -
AdvSmoothTimeLine1.Range.RangeFrom) /
AdvSmoothTimeLine1.Range.SubDivisions) * 5;
Hint := 'This is a new Section between March and June';
end;

```



The Section hints can be customized with the HintFill property on Section level. There are also DefaultHintfill, DefaultIndicator and DefaultSectionFill to apply when a new indicator or section is added.

## TAdvSmoothSlider



### TAdvSmoothSlider description

Smoothly animated slider button with on/off state

### TAdvSmoothSlider features

- On / Off state with separate appearance and font
- Office style support
- Complex gradients with full opacity control
- Keyboard and mouse handling
- Button with texture support

### TAdvSmoothSlider use

The TAdvSmoothSlider component smoothly slides from left to right when clicking on the left / right side or dragging the button. The slider can be customized on 3 major elements: the “ON”-part, the “OFF”-part and the button.

### Different States

The slider has 2 different states with a separate fill for each state. Each fill can be customized with gradients, hatches and textures. Below is a sample of a customized slider with textures for each state:




### Appearance

To customize the texture on the fill, open the fill editor and set the foreground picture position to custom. Change the left and top properties until the picture is on the correct position. When the picture is too large/small, the picture size, width and height properties can be useful to shrink/expand the picture to fit in the slider control.



**Foreground picture**

Picture position: Custom Picture: ... x 

Picture x: 48 y: 2

Picture size: Custom

Picture width: 25 height: 25

When the slider state changes, an event `OnSliderStateChanged` is called with the `State` and `Value` parameters. The value parameter contains the `ValueOn` or `ValueOff` double depending on the state.

### ValueOn / ValueOff

Below is a sample when the button state is Off and the `ValueOff` is -10.5 (*Option 1*). The `State` parameter can contain the `ssOn` or `ssOff` value. Depending on that value the Label caption can be set to a different value(*Option 2*).



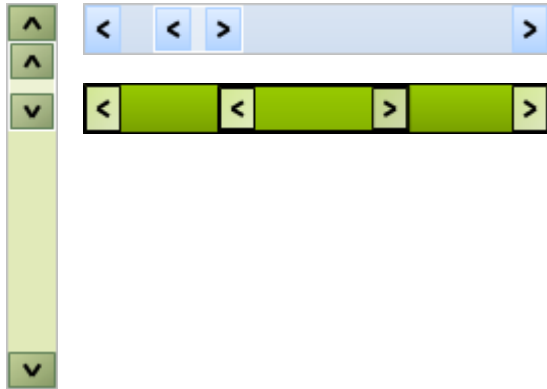
### Code:

```

procedure TForm1.AdvSmoothSlider1StateChanged(Sender: TObject;
    State: TAdvSmoothSliderState; Value: Double);
begin
    //option 1
    Label1.Caption := FloatToStr(Value);
    //option 2
    case State of
        ssOn: Label1.Caption := 'On';
        ssOff: Label1.Caption := 'Off';
    end;
end;

```

## TAdvSmoothScrollBar



### TAdvSmoothScrollBar description

Scrollbar with scalable Pagesize and smooth complex graphics.

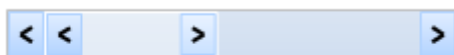
### TAdvSmoothScrollBar features

- Office Styles
- Scalable pagesize
- Complex graphics with separate scroll button and thumb button fills
- Horizontal and Vertical mode

### TAdvSmoothScrollBar use

The TAdvSmoothScrollBar has a moveable & sizeable thumb that can be fully customized and expanded by dragging the thumb buttons on the left / right. This can be used in typical scenarios where both a position and duration needs to be set. The normal scrollbar behavior is based on the standard Delphi TScrollBar to keep the functionality as seamless as possible.

Besides the basic functionality, the smooth scrollbar contains an adaptable pagesize. Below is a sample of the OnPageSizeChanged event when dragging the thumb buttons left or right:



PageSize : 46

```
procedure TForm1.AdvSmoothScrollBar1PageSizeChanged(Sender: TObject;
    PageSize: Integer);
begin
    Label1.Caption := 'PageSize : ' + inttostr(PageSize);
```

**end;**

The PageSize can be programmatically changed by using

```
AdvSmoothScrollBar1.PageSize := 50;
```

This property can be used to change the height / width of the scrollable area.

## TAdvSmoothDock



### TAdvSmoothDock description

Smoothly animated Apple style dock bar with complex gradients, reflection, animation and different docking modes.

### TAdvSmoothDock features

- Office Styles
- Support for PNG, GIF, JPG, BMP images
- Support for file shell icons
- Optional jump item when item is selected
- Optional 3D platform
- Optional reflection on items
- Drag Drop support (switch items and OLE drag drop file icons from windows)
- Position Left, Right Top or Bottom

### TAdvSmoothDock use

The TAdvSmoothDock component allows you to display images / icons / files and navigate through these with a smooth wave effect.

### **Methods to quickly add items**

Images / files can be added by using

- AdvSmoothDock.Items.Add
- AdvSmoothDock1.AddFilesFromFolder('C:\\*..\*', SetImageCaption, SetFilePath, LoadIcon);
- AdvSmoothDock1.AddImagesFromFolder('C:\\*.png', SetImageCaption);

When adding images or files with AddFilesFromFolder or AddImagesFromFolder there are some extra parameters that can be used to quickly set extra properties.

SetImageCaption: Extracts the filename of the file / image that will be loaded and uses this filename as the caption of the item.

SetFilePath: The property FilePath can be used when clicking or double-clicking on the item to open the item or application linked to the item. When SetFilePath is true, the AddFilesFromFolder routine will add a reference to the file in the FilePath property.

LoadIcon: When the loading a file, the shell icon for the file will be used for the item. Set LoadIcon to true to load the shell icon instead of an image.

### **Item properties**

When adding an item in code, several properties affect the appearance / functionality of the item. Below is the complete list of the dockbar item properties with a short explanation.

- Caption: The Caption of the item is displayed above the item and the appearance can be customized with ItemAppearance.CaptionFill and ItemAppearance.CaptionFont on AdvSmoothDock level.



- Data: The Data property can contain extra information such as the path to the item or application. When single or double clicking the item, a ShellExecute call can be used to start the application or open the item.

```
procedure TForm1.AdvSmoothDock1.ItemDblClick(Sender: TObject;
  ItemIndex: Integer);
var
  newdir: string;
begin
  ShellExecute(0, 'open', pchar(AdvSmoothDock1.Items[ItemIndex].Data), nil,
  nil, SW_NORMAL);
end;
```

- Enabled: Enables / Disables the item. The item will animate but is not clickable, selectable, or moveable.
- Hint: Displays a hint on the item.
- Image: An image to display in the item. The image can be a PNG, GIF, JPG, BMP
- ItemObject: The ItemObject property can contain any object such as a button to link specific actions to that item.
- Jump: When an item is clicked or double clicked an extra visual feature can be started to indicate the item has been clicked: Set Jump to true to allow the item to jump. Set Jump to false to stop the jumping. This way it is under full control of the application code how long the item jumping lasts.



With this code a Timer is started to count 3 seconds before the item stops jumping:

```
var
    time, clickeditem: integer;

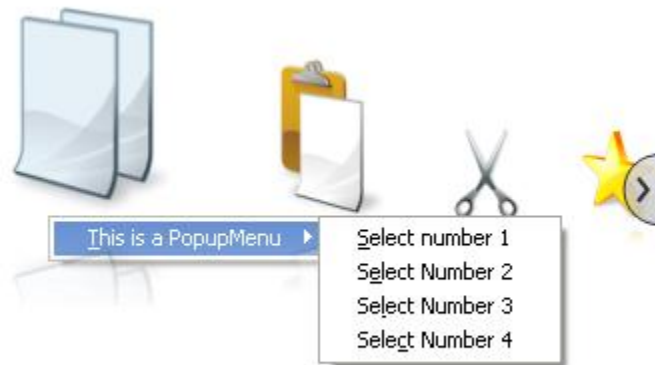
implementation

{$R *.dfm}

procedure TForm1.AdvSmoothDock1ItemClick(Sender: TObject; ItemIndex:
Integer);
begin
    Timer1.Enabled := true;
    time := 0;
    clickeditem := ItemIndex;
    AdvSmoothDock1.Items[clickeditem].Jump := true;
end;

procedure TForm1.Timer1Timer(Sender: TObject);
var
    i: integer;
begin
    if time >= 3 then
    begin
        Timer1.Enabled := false;
        for I := 0 to AdvSmoothDock1.Items.Count - 1 do
            AdvSmoothDock1.Items[I].Jump := false;
        end;
        Inc(time);
    end;
end;
```

- PopupMenu: When holding down the mouse on the item and a PopupMenu is assigned, the popupmenu will show on the item at the Mouse cursor position.



- ProgressMaximum, ProgressMinimum, ProgressPosition: An item can contain a background progressbar. The appearance of this progressbar is controlled by the ProgressFill property. Simple increase or decrease the ProgressPosition to indicate the progress of a process started when the item is clicked.



- Separator: The item can also be set to behave as a Separator that only moves with the animation but cannot be clicked or selected. This can be used as an indicator between categories of items. Set Separator to True and use ItemAppearance.SeparatorFill to define the fill the item.



- ShowCaption: Shows / Hides the caption of the item
- StatusIndicator: A status indicator can be added to present extra information about the item. The indicator is by default positioned at the top right corner of the item. The indicator can be fully customized with the StatusIndicator.Appearance.Fill property.



- Tag: The tag property is similar to the data property to persist extra information but the type is an integer.
- Visible: Sets the item visible / invisible.

All these properties can be set when adding items at designtime or runtime. Use this code to add an item and set properties at runtime.

```
with AdvSmoothDock1.Items.Add do
begin
    Caption := 'Item 1';
    Image.LoadFromFile('image1.png');
end;
```

### **Scrolling**

When the total size of the items exceed the width or height of the dock, scrollers will appear left, right, top or bottom depending on the position of the dock bar. Click on the scrollers to navigate through the items. When holding the mouse down on the scrollers the items will continuously scroll.



With the OnScroll event you can track the scrolling of the items. With the FirstVisibleIndex and VisibleItemCount you can get the number of visible items and the start index.

### **Positioning**

The Dock bar can be positioned left, right, top or bottom. When changing the dock bar position at runtime it is best to align the dock bar left, right, top or bottom depending on the position. When the dock is positioned with a left and top position, the dock will automatically calculate the best height for the Top and Bottom position and the best width for the Left and Right position.



