The Package Multis

Installation

TMultiPanel

TMultiButton

TMultiButtonStyleManager

TMultiplexSlider

TMultiSeperator

TMultiLayer

TMultiRadioGroup

TMultiCheckGroup

This text was translated with Deepl and my poor school English.

See also https://www.lazarusforum.de/viewtopic.php?f=29&t=14033
or the demo projects in the package.

Installation

The package is located in the following Github account: https://github.com/wennerer/Multis
After the package has been cloned or downloaded, it can be installed in Lazarus. To do this, open Lazarus and click on Open Package File (.lpk)... under Package.
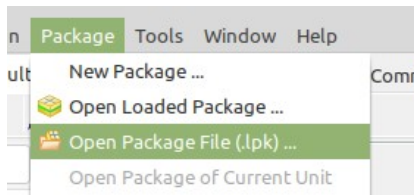
Now navigate to the Multis folder and select the file multis.lpk.
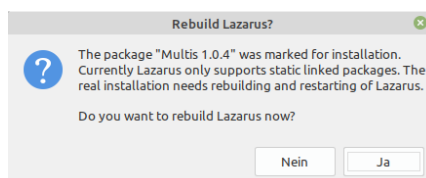

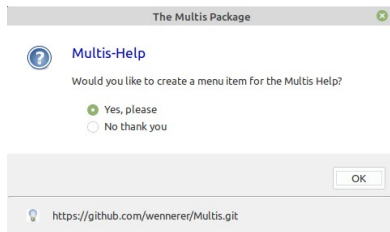The following window will open:
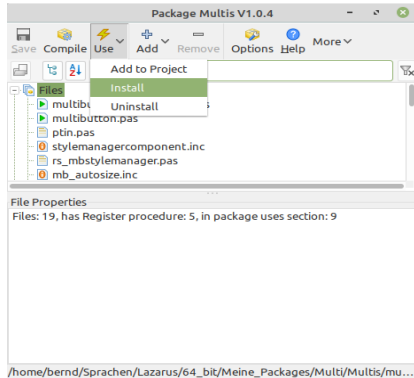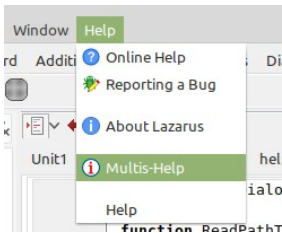

Click on Use and then Install.

Confirm this dialogue with Yes:

In between, you will be asked if you want to create a menu entry for this help. If you want to do this, you should simply confirm with Yes.

In the Help menu there is now a new entry Multis-Help.

If you want to call up the installation dialogue again for whatever reason, delete the file multis.xml in the Lazarus Config folder. The dialogue will then be displayed again.

Tip: If the help menu entry is available but the help file is not found, this may be because invalid package links have been entered. Please search for multis under Package, Package-Links and remove all invalid links.

After successful installation, there is a new Multi tab in the palette selection.
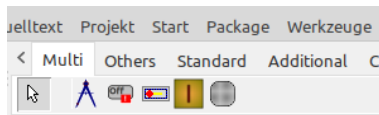
TMultiPanel

Properties

Action	: The Action associated with the control
Align	: Specifies the placement of the control inside its Parent.
Anchors	: The set of anchor definitions for this control
AnimationSpeed	: Speed for Appear bzw. Disappear (default 0,05) (only at runtime!)
Autosize	: Allows automatic adjustment of the size for the control, according to its content
Appear	: makes the panel appear (only at runtime!)
BidiMode	: Customization (of text controls) in bidirectional reading environments
BorderSettings	: The properties of the border
BorderSettings.Between	: The space between inner- and outerborder
BorderSettings.InnerColor	: The color of the innerborder
BorderSettings.InnerWidth	: The width of the innerborder
BorderSettings.OuterColor	: The color of the outerborder
BorderSettings.OuterWidth	: The width of the outerborder
BorderSpacing	: Determines the inner and outer border spacing for this control
Caption	: The text that the user writes in the panel
CaptionAlignment	: Alignment of the text in the caption (left, center, right)
CaptionHorMargin	: The horizontal distance of the text in the text rectangle (only effective with taLeftJustify)
CaptionLayout	: Alignment of the text in the caption (top, center, bottom)
CaptionVerMargin	: The vertical distance of the text in the text rectangle (only effective with tlTop)
CaptionWordbreak	: Allows a line break in the caption
ColorEnd	: The end color of the panel (for color gradient)
ColorGradient	: The direction of the gradient
ColorStart	: The start color of the panel (for color gradient)
Constraints	: The minimum and maximum Width and Height for the control
Cursor	: The shape of the mouse pointer, when the mouse is over this control
Disappear	: makes the panel disappear (only at runtime!)
DoubleBuffered	: Allows to reduce flicker in the painting of the control
DragCursor	: The cursor shape shown while the control is dragged
DragKind	: The operation when the control is dragged - Drag or Dock
DragMode	: Allows the user to drag the control
DrawACustomPanel	: Opens an editor where you can draw a panel
DropDownMenu	: The properties of the dropdownmenu
DropDownMenu.Active	: Activates the dropdown function
DropDownMenu.Compressed	: Properties of the compressed panel
DropDownMenu.Compressed.Active	: Makes the selection the starting value
DropDownMenu.Compressed.Height	: The height of the compressed panel
DropDownMenu.Compressed.Width	: The width of the compressed panel
DropDownMenu.Direction	: The fold-out direction
DropDownMenu.Hotspot	: Defines the area in which a click is effective, only active with DropDownMenu.Active and trPinned (only at runtime!)

|	
DropDownMenu.HotspotCursor	: The shape of the mouse pointer, when the mouse is over the hotspot (only at runtime!)
DropDownMenu.Speed	: The drawing speed (timer intervall)
DropDownMenu.Step	: The drawing steps (pixels)
DropDownMenu.Stretched	: Properties of the streched Panel
DropDownMe nu.Stretched.Active	: Makes the selection the starting value
DropDownMenu.Stretched.Height	: The height of the stretched panel
DropDownMenu.Stretched.Width.	: The width of the stretched panel
DropDownMenu.Trigger	: Trigger
Font	: The font to be used for text display in this panel
Height	: The vertical size of the control
HelpContext	: The ID for context-sensitive Help on this control
HelpKeyword	: The keyword for context-sensitive Help on this control
HelpType	: Determines whether context-sensitive Help is selected by numeric ID or keyword
Hint	: The text to show in the Hint window for the control
ImageIndex	: The Index of a Image in a ImageList
ImageLeft	: The coordinate of the left edge of a Image
Images	: A list for including images
ImageTop	: The coordinate of the top edge of a Image
ImageWidth	: The unique width of all images in the list
Left	: The client coordinate of the left edge of the control
ParentAsBkgrd	: Background of the panel takes on the colour of the parent (only at runtime!)
RndRctRadius	: Corner diameter if the geometric shape is RoundRect
Style	: The geometric shape of the panel
Top	: The client coordinate of the top edge of the control
Visible	: Allows to show or hide the control, and all of its children
Width	: The horizontal extent of the control

Events

OnChangeBounds	: Event handler for a change of the Bounds of the control
OnClick	: Notification handler for mouse clicks
OnCompressed	: Handler when the panel is compressed, only active when DropDownMenu.Active
OnDragDrop	: This handler determines the action on an drop onto this control, in a drag-drop operation
OnDragOver	: Event handler for a control being dragged over this control
OnEndDrag	: Notification handler for the end of a dragging operation
OnEnter	: Handler for control receiving the focus
OnExit	: Handler for control loosing the focus; This is a good place for checking the finished user input
OnKeyDown	: Handler for keyboard key pressed
OnKeyPress	: Handler for a character entered by the user
OnKeyUp	: Handler for keyboard key released
OnMouseDown	: Event handler for mouse button going down
OnMouseEnter	: Event handler for mouse entering the area of the control
OnMouseLeave	: Event handler for mouse leaving the area of the control
OnMouseMove	: Event handler for mouse movement within the control
OnMouseUp	: Event handler for mouse button going up
OnStartDrag	: Event handler for the start of a dragging operation
OnStreched	: Handler wenn das Panel ausgeklappt ist, nur aktive wenn DropDownMenu.Active
OnVisible	: Is triggered when the panel becomes visible for the first time

Public procedures

procedure MouseMove({%H-}Shift: TShiftState; X, Y: Integer);override;

procedure MouseDown({%H-}Button: TMouseButton;{%H-}Shift: TShiftState; X, Y: Integer);override;

procedure MouseUp({%H-}Button: TMouseButton; {%H-}Shift: TShiftState; {%H-}X, {%H-}Y: Integer);override;

procedure LoadFromFile(aFileName: string);

procedure InvalidateBackground;

procedure ParentInputHandler({%H-}Sender: TObject; Msg: Cardinal);

procedure Notification(AComponent: TComponent;Operation: TOperation); override;

constructor Create(AOwner: TComponent); override;

destructor Destroy; override;

procedure MouseEnter; override;

procedure MouseLeave; override;

procedure Paint; override;

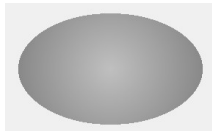## Description

You will find the MultiPanel in the Multis tab.
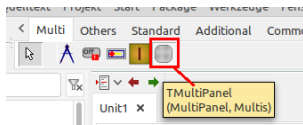
The shape of the MultiPanel can be influenced with the Style property.

mpsRect: mpsEllipse: mpsRoundRect:

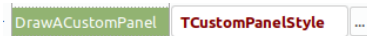
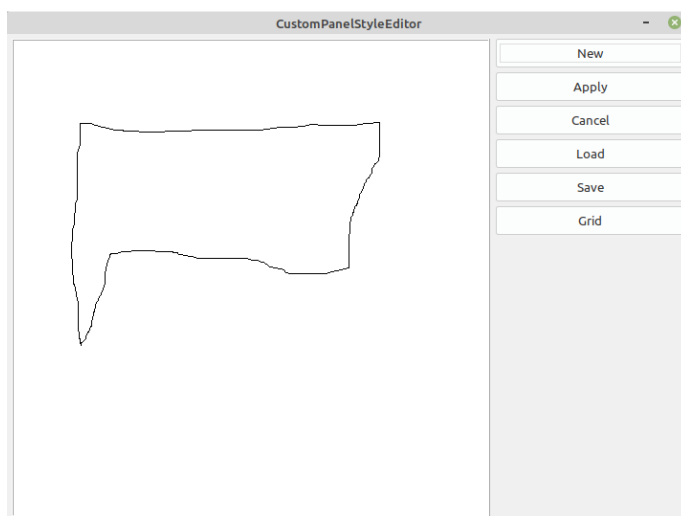The corner radius can be set with RndRctRadius . Default setting is 40

mpsCustom:

By default, mpsCustom has a triangle behind it. To draw a custom panel, click on the 3 dots behind DrawACustomPanel .

A property editor will open:

If you now click on New, you can simply draw the shape of the MultiPanel with the mouse.If you click on Use, the MultiPanel shape is adopted. With Discard the MultiPanel shape is not accepted and the editor is closed. With Save you can save a drawn shape and with Load you can get it again. Grid displays an auxiliary grid that may help you when drawing.

**Remember it must be set to mpsCustom!**

At runtime, MultiPanels saved in advance can also be loaded with LoadFromFile.

To change the colour of the MultiPanel you need the properties ColorStart, ColorEnd and ColorGradient. To get a single-coloured MultiPanel, ColorStart and ColorEnd must be the same. Otherwise, the composition of the three properties determines the appearance.
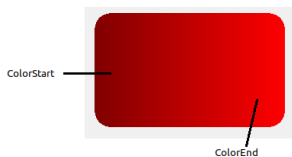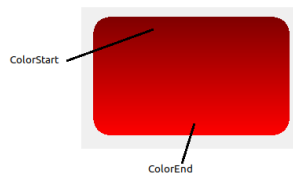
gcSpread:

gcRadiant:
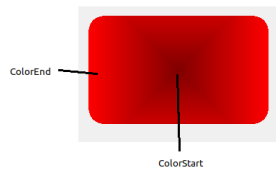
gcAlternate:

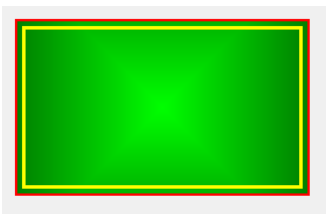Alternately sets one pixel each to Start- and End-Color.

gcHorizontal:

gcVertical:

If you want to highlight the border, you can use the properties of the BorderSettings.

To create a border, simply select a colour. If you do not want a border, use clNone.

BorderSettings.Between   : The space between inner- and outerborder
BorderSettings.InnerColor   : The color of the innerborder
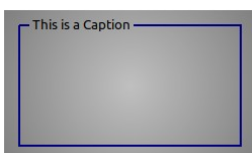BorderSettings.InnerWidth   : The width of the innerborder
BorderSettings.OuterColor   : The color of the outerborder
BorderSettings.OuterWidth   : The width of the outerborder

If you want to imitate a GroupBox, make the inner border visible and move it to the desired position with BorderSettings.Between. In order for the border to be interrupted in the caption area, taLeftJustify and tlTop must be selected for the caption!

The Appear, Disappear and AnimationSpeed properties can only be set at runtime!

To make an invisible MultiPanel appear, use the property Appear.

Example code:

```
procedure TForm1.MultiButton1Click(Sender: TObject);
begin
 MultiPanel1.Appear:= true;
end;
```

To make a visible MultiPanel disappear, use the property Disappear.

Example code:

```
procedure TForm1.MultiButton2Click(Sender: TObject);
begin
 MultiPanel1.Disappear:= true;
end;
```

With the property AnimationSpeed the speed of appearance or disappearance can be influenced.

The default value is 0.05. The smaller the value, the slower the animation. With a value of 0.001 it is already very slow.

Example code:

```
MultiPanel1.AnimationSpeed:= 0.001;
```

If you select something other than mpsRect as the geometric shape (Style property), a part of the background of the MultiPanel becomes visible. These visible corners take on the colour set in the parent. If there are self-drawn lines in the parent, for example, these are also shown. This happens because the property ParentAsBkgrd is set to true by default.

ParentAsBkgrd := true   ParentAsBkgrd := false

This setting makes sense especially when the parent changes its size. Because then, for example, the drawn line is not scaled correctly here.

If the parent has a colour gradient, it is possible to compensate for the scaling problem by calling the procedure InvalidateBackground.

Example code:

```
procedure TForm1.FormChangeBounds(Sender: TObject);

begin

 MultiPanel1.InvalidateBackground;

end;
```
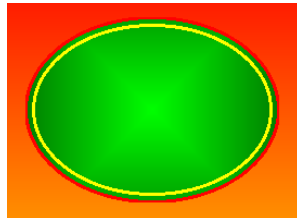
To create a DropDown menu (hamburger menu), first set the property DropDownMenu.Active to true.

DrawACustomPanel	TCustomPanelStyle
DropDownMenu	(TDDMenu)
→ Active	☑ (True)
⊞ Compressed	(TComp)
Direction	LeftTop_RightBottom
Speed	3
Step	2
⊞ Stretched	(TStre)
Trigger	trHover

The MultiPanel now shows the compressed state. The positioning can be done with the mouse or the properties Left or Top (of course anchors can also be set). The size can simply be dragged with the mouse or assigned with the properties DropDownMenu.Compressed.Height or DropDownMenu.Compressed.Width. If the size fits, switch to the expanded state with the properties DropDownMenu.Stretched.Active or DropDownMenu.Compressed.Active. Now the desired size can also be set by dragging with the mouse or with the properties DropDownMenu.Stretched.Height or DropDownMenu.Stretched.Width. It is recommended to place the desired child controls (buttons etc.) in this state. The direction in which the MultiPanel unfolds is determined by the property DropDownMenu.Direction. The following options are available:

TDirection = (LeftTop_RightBottom,RightTop_LeftBottom,LeftBottom_RightTop,RightBottom_LeftTop)

The speed of the unfolding can be influenced by the properties DropDownMenu.Speed and DropDownMenu.Step . The timer interval with which the unfolding is called is hidden behind Speed. To slow down, increase this value to the desired speed. With Step you can set the number of additional pixels that are drawn per interval. If you want to unfold faster, increase the value for Step.

With DropDownMenu.Trigger you determine the trigger for the unfolding.
The following possibilities are available:
TTrigger = (trClick,trHover,trPinned)
With trClick you have to click in the panel, with trHover it is enough to move the mouse over it. With trPinned, the mouse must be clicked in a definable hotspot (DropDownMenu.Hotspot). If the mouse is over this hotspot, the mouse cursor can be adjusted with DropDownMenu.HotspotCursor. By default, it changes to cr-HandPoint.

TMultiButton

Properties

Action	: The Action associated with the control
Align	: Specifies the placement of the control inside its Parent
AllowsUp	: Allows a pressed button to be set to not pressed
Anchors	: The set of anchor definitions for this control
AutoSize	: Allows automatic adjustment of the size for the control, according to its content
BidiMode	: Customization (of text controls) in bidirectional reading environments
BorderColor	: The color of the border
BorderSpacing	: Determines the inner and outer border spacing for this control
BorderWidth	: The whidth of the border
Caption	: The text that the user writes in the button
CaptionAlignment	: Alignment of the text in the caption (left, center, right)
CaptionHorMargin	: The horizontal distance of the text in the text rectangle (only effective with taLeftJustify)
CaptionLayout	: Alignment of the text in the caption (top, center, bottom)
CaptionVerMargin	: The vertical distance of the text in the text rectangle (only effective with tlTop)
CaptionWordbreak	: Allows a line break in the caption
ColorEnd	: The end color of the button (for color gradient)
ColorGradient	: The direction of the gradient
ColorStart	: The start color of the button (for color gradient)
Constraints	: The minimum and maximum Width and Height for the control
DisabledAlphaBValue	: The blendvalue at Enable:=false, only at runtime!
DisabledColor	: The colour at Enable:=false, only at runtime!
Down	: The Button has been set in the Down state
DragCursor	: The cursor shape shown while the control is dragged
DragKind	: The operation when the control is dragged - Drag or Dock
DragMode	: Allows the user to drag the control
Enable	: Determines whether the control reacts on mouse or keyboard input
FocusAlphaBValue	: How translucent the focusframe is (0=transparent, 255=opaque)
FocusColor	: The color of the Fokusframe/Foregroundfocus when the Control has the focus
FocusFrameOn	: Switches the focus frame on and off
FocusFrameWidth	: The whidth of the focus-frame
Font	: The font to be used for text display in this button
ForegroundFocusOn	: Indicates when the button has focus, switches on off
GroupIndex	: The Index within the group of MultiButtons
Height	: The vertical size of the control.The height of the MultiButton is minus HoverFrameWidth

HelpContext	: The ID for context-sensitive Help on this control
HelpKeyword	: The keyword for context-sensitive Help on this control
HelpType	: Determines whether context-sensitive Help is selected by numeric ID or keyword
Hint	: The text to show in the Hint window for the control
HoverEndColor	: The endcolor of a hoverevent
HoverFontColor	: The color of the Caption during one hoverevent
HoverImageIndex	: The Index of a Image in a ImageList when during one hoverevent
HoverOn	: Allows to show or hide a hoverevent
HoverStartColor	: The startcolor of a hoverevent
ImageIndex	: The Index of a Image in a ImageList
ImageLeft	: The coordinate of the left edge of a Image
Images	: A list for including images
ImageTop	: The coordinate of the top edge of a Image
ImageWidth	: The unique width of all images in the list
Left	: The client coordinate of the left edge of the control
MessageButton	: A message button to display information or to provide a second integrated button
MessageButton.Alignment	: The position of the messagebutton
MessageButton.BorderColor	: The color of the border
MessageButton.BorderWith	: The whidth of the border
MessageButton.CalculateAlthoughInvisible	: Is required if the MessagButton is only visible at runtime
MessageButton.Caption	: The text that the user writes in the messagebutton
MessageButton.CaptionAlignment	: Alignment of the text in the caption (left, center, right)
MessageButton.CaptionHorMargin	: The horizontal distance of the text in the text rectangle (only effective with taLeftJustify)
MessageButton.CaptionLayout	: Alignment of the text in the caption (top, center, bottom)
MessageButton.CaptionVerMargin	: The vertical distance of the text in the text rectangle (only effective with tlTop)
MessageButton.ColorEnd	: The end color of the messagebutton (for color gradient)
MessageButton.ColorGradient	: The direction of the gradient
MessageButton.ColorStart	: The start color of the messagebutton (for color gradient)
MessageButton.Font	: The font to be used for text display in this button
MessageButton.Height	: The vertical size of the control
MessageButton.HoverOn	: The color of a hoverevent
MessageButton.HoverOn	: Allows to show or hide a hoverevent
MessageButton.ImageIndex	: The Index of a Image in a ImageList
MessageButton.ImageLeft	: The coordinate of the left edge of a Image
MessageButton.Images	: A list for including images
MessageButton.ImageTop	: The coordinate of the top edge of a Image

MessageButton.ImageWidth	: The unique width of all images in the list
MessageButton.PositionFactor	: Position factor, only active if alSE,alSW,alNW,alNE,alW,alE,alN, alS,alRightIn,alLeftIn,alTopIn,alBottomIn
MessageButton.PresdColBlendVal	: How translucent the pressedcolor is (0=transparent, 255=opaque)
MessageButton.Pres sedColor	: The color of the messagebutton when it is pressed
MessageButton.ShowBorder	: Allows to show or hide a border
MessageButton.ShowPressed	: Allows to show or hide the pressedoption
MessageButton.Style	: The geometric shape of the messagebutton
MessageButton.Visible	: Allows to show or hide the control, and all of its children
MessageButton.Width	: The horizontal extent of the control
MultiButton_StyleManager	: Simplifies the design of the MultiButton
PopupMenu	: A context-sensitive menu that pops up when the right mouse button is clicked over this control
PressedEndColor	: The end color of the button when it is pressed (for color gradient)
PressedFontColor	: The color of the text of the caption when the button is pressed
PressedImageIndex	: The Index of a Image in a ImageList when the Button is pressed
PressedStartColor	: The starting color of the button when it is pressed (for color gradient)
RndRctRadius	: Corner diameter if the geometric shape is RoundRect
ShowBorder	: Allows to show or hide a border
ShowHint	: When True, the Hint text is shown when the mouse hovers over the control
ShowMsgButtonInGroup	: Shows the message button on the MultiButton in a group
ShowTurnedOn	: Makes a visible MessageButton coloured when the button is Down
Style	: The geometric shape of the button
TabOrder	: Determines the sequence of control navigation when the user presses the Tab key
TabStop	: Allows the user to navigate to this control, by pressing the Tab key
Top	: The client coordinate of the top edge of the control
Visible	: Allows to show or hide the control, and all of its children
Width	: The horizontal size of the control.The width of the MultiButton is minus HoverFrameWidth

Public Procedures

procedure SetStyleManager(AValue: TmultiButtonStyleManager);

Public Variables

MouseButton	: can be used in OnClick to determine with which mouse button the MultiButton was clicked.

Events

OnClick	: Notification handler for mouse clicks
OnDragDrop	: This handler determines the action on an drop onto this control, in a drag-drop operation
OnDragOver	: Event handler for a control being dragged over this control
OnEndDrag	: Notification handler for the end of a dragging operation
OnEnter	: Handler for control receiving the focus
OnExit	: Handler for control loosing the focus; This is a good place for checking the finished user input
OnKeyDown	: Handler for keyboard key pressed
OnKeyPress	: Handler for a character entered by the user
OnKeyUp	: Handler for keyboard key released
OnMouseDown	: Event handler for mouse button going down
OnMouseEnter	: Event handler for mouse entering the area of the control
OnMouseLeave	: Event handler for mouse leaving the area of the control
OnMouseMove	: Event handler for mouse movement within the control
OnMouseUp	: Event handler for mouse button going up
OnStartDrag	: Event handler for the start of a dragging operation
MessageButton.OnClick	: Notification handler for mouse clicks
MessageButton.OnMouseMove	: Event handler for mouse movement within the control

Description

You can find the MultiButton in the Multi tab:
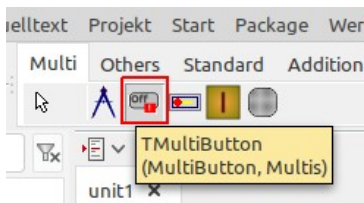
It is important to know that the MultiButton is surrounded by a focus frame. As you can see here, the focused MultiButton has an olive green frame. This means that the actual button is smaller around the frame.

The FocusColor property can be used to set the colour of the focus frame. With FocusAlphaBValue the transparency of the focus frame can be controlled. The value 0 means transparent and 255 opaque. FocusFrameWidth determines the thickness of the frame.

Wert 50:   Wert 200:

If FocusFrameOn is set to false, the border is retained but the focus is not shown in colour.

With ForegroundFocusOn, the focused MultiButton has a dotted rectangle. The colour of the rectangle can be influenced with FocusColor. It can be useful here to set FocusFrameWidth to 0 and FocusFrameOn to false so that the corners are not visible!

The Style property is used to set the desired geometric shape of the MultiButton.

If mbsRoundRect is set, the RndRctRadius property can be used to set the diameter of the corner rounding.
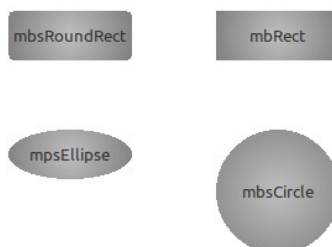
If you want to add a coloured border to the MultiButton, set ShowBorder to true. The colour of the
border is set with BorderColor and the width with BorderWidth.

To change the colour of the MultiButton you need the properties ColorStart, ColorEnd and ColorGradient. To get a single-coloured MultiButton, ColorStart and ColorEnd must be the same. Otherwise, the composition of the three properties determines the appearance.

Alternate alternately sets one pixel each to Start- and EndColor.

Here is StartColor clGreen and EndColor clYellow.

By default, HoverOn is set to true. This means that when a hover event occurs (the mouse moves over the MultiButton) the appearance can be changed as desired with HoverStartColor, HoverEndColor, HoverFontColor and HoverImageIndex. If you do not want this, set HoverOn to false.

HoverEndColor	: The endcolor of a hoverevent
HoverFontColor	: The color of the Caption during one hoverevent
HoverImageIndex	: The Index of a Image in a ImageList when during one hoverevent
HoverOn	: Allows to show or hide a hoverevent
HoverStartColor	: The startcolor of a hoverevent

When the MultiButton is pressed, the properties PressedStartColor, PressedEndColor, PressedFontColor and PressedImageIndex influence the appearance. If you do not want any changes when the button is pressed, the only thing left to do is to set the same settings such as ColorStart etc..

PressedEndColor	: The end color of the button when it is pressed (for color gradient)
PressedFontColor	: The color of the text of the caption when the button is pressed
PressedImageIndex	: The Index of a Image in a ImageList when the Button is pressed
PressedStartColor	: The starting color of the button when it is pressed (for color gradient)

The Enable property determines whether the control reacts to mouse or keyboard input. The appearance when not enabled can be influenced at runtime with DisabledAlphaBValue and DisabledColor.

If you do not want to see a frame, set DisabledColor to the same colour as the parent.

If necessary, use MultiButton2.DisabledColor:=GetColorResolvingParent instead of clDefault.

If you want to insert an image, you must first drag an ImageList onto the form. You then assign the desired images in the desired sizes to this ImageList. The operation of the ImageListEditor is described very well here: https://www.lazarusforum.de/viewtopic.php?f=18&t=13170

With Images you enter the image list on the form. With ImageIndex you can select the desired image from the Image-List, where -1 means no image. With ImageLeft and ImageTop you determine the position of the image. With Image-Width you can scale the size of the image. It is recommended to scale only smaller.
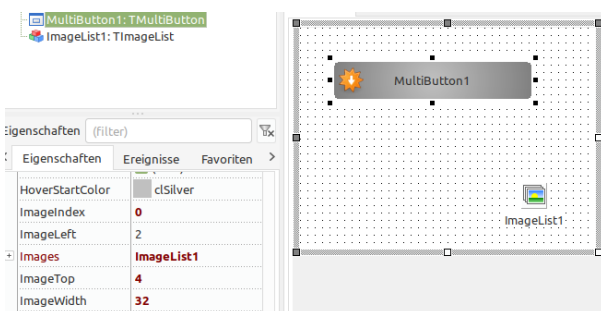
Tip:

If you use HighDPI under Windows, the images and the MultiButton are scaled. In order for it to work at runtime, I had to select Vista-8:an,8.1+:pro Monitor(True/PM) in the project settings for DPI adjustment.

The AllowsUp property turns the button into a kind of switch. This means that when the button is pressed, it remains pressed until it is pressed again. If you want the MultiButton to appear pressed at the beginning of the programme, you do this with the property Down.

 If the button is pressed, it is displayed with the properties Pressed....!

If you want to have an additional feature that the button is in the down position, you can make a Message-Button visible and set the property ShowTurnedOn to true. The MessageButton then gets the colour in down position that is defined under MessageButton.PressedColor.
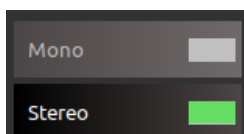
 See also GroupIndex

If needed, the MultiButton can belong to a group. This is achieved with the property GroupIndex. If a MultiButton has a value other than 0, it belongs to the group with the same value. Only one MultiButton can be pressed in a group. If a button in the group should already be pressed when the programme is started, this can be achieved with the property Down.

MultiButton1.GroupIndex:=1;

MultiButton2.GroupIndex:=1;

MultiButton3.GroupIndex:=1; MultiButton3.Down:=true;
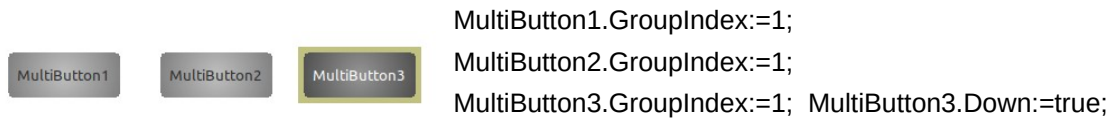
If you want to make the pressed button visually clearer, you can still use the property ShowMsgButtonIn-Group. The last pressed button gets a MessageButton.

The MessageButton

To use the integrated MessageButton, you must first set MessageButton.Visible to true. Then you can set the position of the MessageButton with MessageButton.Alignment.
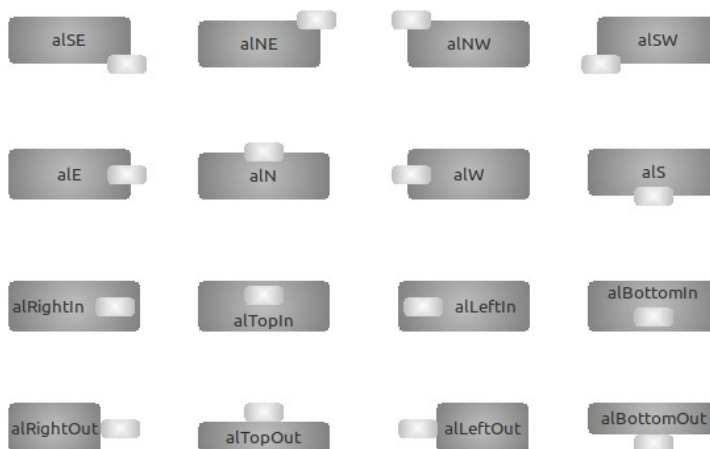
The MessageButton.PositionFactor property can be used to influence the position of the MessageButton somewhat. However, only with alSE,alSW,alNW,alNE,alW,alE,alN,alS,alRightIn,alLeftIn,alTopIn,alBottomIn

If you want to change the shape of the MessageButton, you can do this with the property MessageButton.Style.

If you place several MultiButtons in a row and the MessageButton is not visible for all of them, the MultiButtons have different sizes. Here no. 2 appears larger:

To get around this there is the property MessageButton.CalculateAlthoughInvisible. If you set this property to true for No. 2, it looks like this:

If you want to provide the MessageButton with a coloured border, set MessageButton.ShowBorder to true. The colour of the border is set with MessageButton.BorderColor and the width with MessageButton.BorderWith.

To change the colour of the MessageButton you need the properties MessageButton.ColorStart, MessageButton.ColorEnd and MessageButton.ColorGradient. To get a single-coloured MessageButton, ColorStart and ColorEnd must be the same. Otherwise, the composition of the three properties determines the appearance.
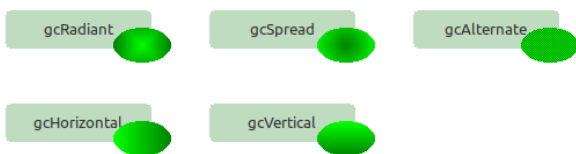
Alternate alternately sets one pixel each to Start- and EndColor.

Here StartColor is clLime and EndColor is clGreen.

By default, MessageButton.HoverOn is set to true. This means that when a hover event occurs (the mouse moves over the MessageButton) a border is drawn around the MessageButton. The colour of the border can be set with MessageButton.HoverColor. If you do not want this, set HoverOn to false.
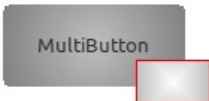
MessageButton. BorderWidth influences the thickness of the hover border!

If the MessageButton is pressed and MessageButton.ShowPressed is true, then the colour set in MessageButton.PressedColor with the value stored in MessageButton.PresdColBlendVal is faded over the MessageButton. Where 0 means transparent and 255 means opaque.

If you want to determine in the OnClick with which mouse button the event was triggered, you can do this with the public variable MouseButton. The value in MouseButton is retained until it is overwritten again in the MouseDown procedure of the component.

Example:

```
procedure TForm1.MultiButton1Click(Sender: TObject);
begin
 if MultiButton1.MouseButton = mbLeft    then showmessage('Left');
 if MultiButton1.MouseButton = mbRight   then showmessage('Right');
 if MultiButton1.MouseButton = mbMiddle then showmessage('Middle');
end;
```

TMultiButtonStyleManager

If you are building a form with many MultiButtons that should look similar, we recommend using the MultiButtonStyleManager.

You can find it here:
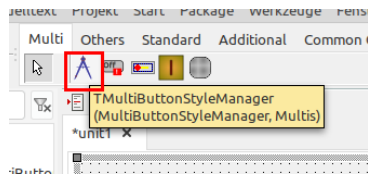
Like any component, you simply drag it onto the form. To connect it to a MultiButton, you must now select the StyleManager in the MultiButton_StyleManager property (of the button).
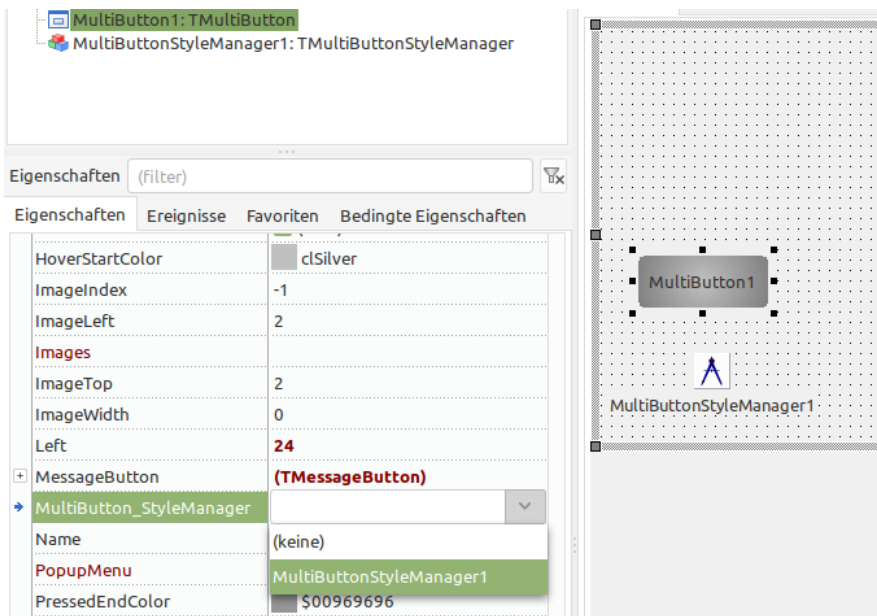
The properties displayed in the Object Inspector under MultiButtonStylmanager now affect all connected MultiButtons simultaneously.

Here all six buttons are connected. By changing the style to mbsEllipse (in the OI under MBStyleManager) all MultiButtons change at once!

Attention! If you try to change a property of a connected MultiButton in the OI tab of the button (not the manager), this will fail!

For me, the procedure that has turned out to be good is that I first set all the desired properties of the MultiButtons with the Stylmanager and then remove the connection again. But that is certainly a matter of taste.

A special situation arises with the properties Width and Height. These two properties can only be changed via the style manager if the properties OffSetHeight and OffSetWidth of the style manager are deliberately set to true (default = false).

MultiButtonStylemanagerEditor

Furthermore, the MultiButtonStylemanager offers the possibility to make all settings in a MultiButtonStylema-nagerEditor. This can be opened by double-clicking on the component symbol on the form.
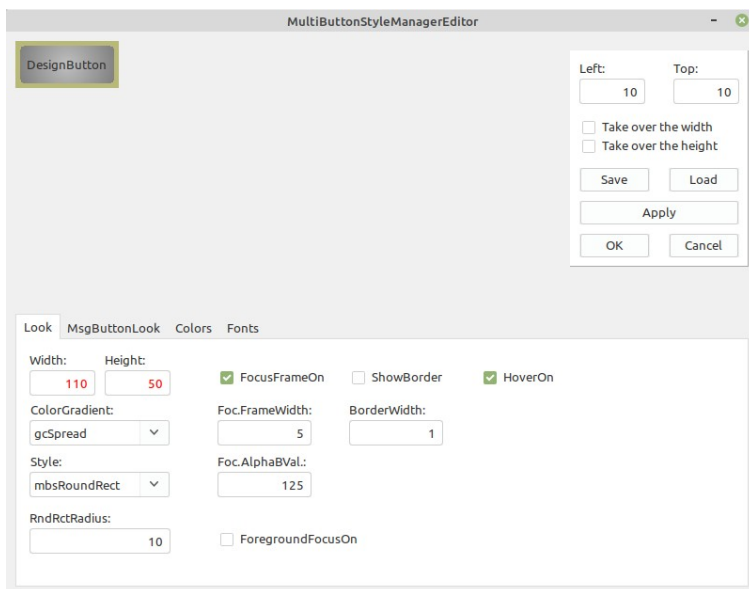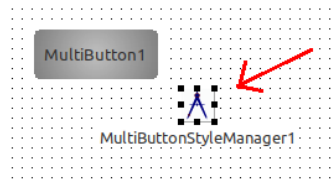
If you move the mouse over the various setting options, their functions are displayed as hints.

The button in the upper left corner serves as a pattern. It can be moved in the editor with *Left* and *Top*.

If you have created a design that you may want to use in another project, you can save it in a file by clicking Save. With Load you can retrieve it from there.

If you want to copy a colour from one selection to another, click with the right mouse button on the selection button, a pop-up opens and you can select copy or paste.
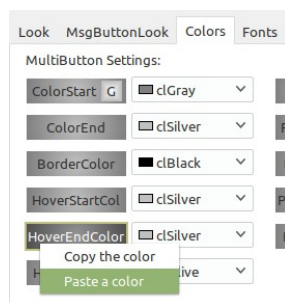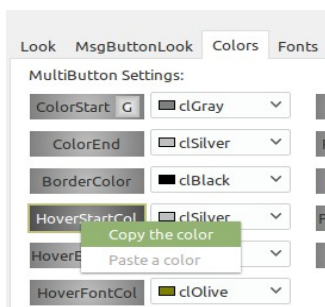
If you have connected several MultiButtons to a style manager and want to change the buttons via the style manager at runtime, you can use the public procedure SetStyleManager.

This works like this, for example:

```
procedure TForm1.AdjustTheMultiButtons(Sender : TObject);

var lv : integer;

begin
 MultiButtonStyleManager1.ColorStart := clLime;
 MultiButtonStyleManager1.ColorEnd   := clRed;
 for lv := 0 to pred(ComponentCount) do
  if (Components[lv] is TMultiButton) then
   if TMultiButton(Components[lv]).MultiButton_StyleManager = MultiButtonStyleManager1 then
    TMultiButton(Components[lv]).SetStyleManager(MultiButtonStylemanager1);
end;
```

TMultiplexSlider

Properties

Action	: The Action associated with the control
Align	: Specifies the placement of the control inside its Parent
Anchors	: The set of anchor definitions for this control
AutoRangeNegative	: If Min is reached, Min increases by AutoRangeValue
AutoRangePositive	: If Max is reached, Max increases by AutoRangeValue
AutoRangeValue	: Only active with AutoRangePositive and AutoRangeNegative
AutoSize	: Only active in conjunction with textlabel
BorderColor	: The color of the border (clNone makes unvisible)
BorderSpacing	: Determines the inner and outer border spacing for this control
BorderWidth	: The width of the border
ColorEnd	: The end color of the slider (for color gradient)
ColorGradient	: The direction of the gradient
ColorStart	: The start color of the slider (for color gradient)
Constraints	: The minimum and maximum Width and Height for the control
Cursor	: The shape of the mouse pointer, when the mouse is over this control
DragCursor	: The cursor shape shown while the control is dragged
DragKind	: The operation when the control is dragged - Drag or Dock
DragMode	: Allows the user to drag the control
Enabled	: Determines whether the control reacts on mouse or keyboard input
FocusAlphaBValue	: How translucent the focusframe is (0=transparent, 255=opaque)
FocusColor	: The color of the Fokusframe/Foregroundfocus when the Control has the focus
FocusFrameOn	: Switches the focus frame on and off
FocusFrameWidth	: The whidth of the focus-frame
ForegroundFocusOn	: Indicates when the slider has focus, switches on off
Height	: The vertical size of the control
HelpContext	: The ID for context-sensitive Help on this control
HelpKeyword	: The keyword for context-sensitive Help on this control
HelpType	: Determines whether context-sensitive Help is selected by numeric ID or keyword
Hint	: The text to show in the Hint window for the control
JumpToPosition	: If active, the button jumps to position when clicked in the track
Knob1Settings	: The properties of the Knobs
Knob1Settings.ColorGradient	: The direction of the gradient
Knob1Settings.Design	: The appearance of the knob
Knob1Settings.DesignColor	: The color of the border or characters in the knob

Knob1Settings.HoverEndColor	: The endcolor of a hoverevent
Knob1Settings.HoverOn	: Allows to show or hide a hoverevent
Knob1Settings.HoverStartColor	: The startcolor of a hoverevent
Knob1Settings.KnobColorEnd	: The end color of the knob (for color gradient)
Knob1Settings.KnobColorStart	: The start color of the knob (for color gradient)
Knob1Settings.KnobPosition	: The Position of the Knob in the Slider
Knob1Settings.KnobStyle	: The shape of the knob
Knob1Settings.Visible	: Shows the Knob
Knob2Settings	: The properties of the Knobs
Knob2Settings.ColorGradient	: The direction of the gradient
Knob2Settings.Design	: The appearance of the knob
Knob2Settings.DesignColor	: The color of the border or characters in the knob
Knob2Settings.HoverEndColor	: The endcolor of a hoverevent
Knob2Settings.HoverOn	: Allows to show or hide a hoverevent
Knob2Settings.HoverStartColor	: The startcolor of a hoverevent
Knob2Settings.KnobColorEnd	: The end color of the knob (for color gradient)
Knob2Settings.KnobColorStart	: The start color of the knob (for color gradient)
Knob2Settings.KnobPosition	: The Position of the Knob in the Slider
Knob2Settings.KnobStyle	: The shape of the knob
Knob2Settings.Visible	: Shows the Knob
Knob3Settings	: The properties of the Knobs
Knob3Settings.ColorGradient	: The direction of the gradient
Knob3Settings.Design	: The appearance of the knob
Knob3Settings.DesignColor	: The color of the border or characters in the knob
Knob3Settings.HoverEndColor	: The endcolor of a hoverevent
Knob3Settings.HoverOn	: Allows to show or hide a hoverevent
Knob3Settings.HoverStartColor	: The startcolor of a hoverevent
Knob3Settings.KnobColorEnd	: The end color of the knob (for color gradient)
Knob3Settings.KnobColorStart	: The start color of the knob (for color gradient)
Knob3Settings.KnobPosition	: The Position of the Knob in the Slider
Knob3Settings.KnobStyle	: The shape of the knob
Knob3Settings.Visible	: Shows the Knob
Left	: The client coordinate of the left edge of the control
Max	: The highest value in range
Min	: The lowest value in range
Orientation	: The orientation of the Slider
PopupMenu	: A context-sensitive menu that pops up when the right mouse button is clicked

Reversed	: Max and min are swapped
RndRctRadius	: Corner diameter if the geometric shape is RoundRect
Scale1Settings	: The properties of the first scale
Scale1Settings.BigMarkColor	: The color of the big marks
Scale1Settings.BigMarkInterval	: The distance of the big marks
Scale1Settings.BigMarksVisible	: Shows big marks
Scale1Settings.LineColor	: The color of the lines in the scale
Scale1Settings.LineWidth	: The whidth of the scalelines
Scale1Settings.ScaleStyle	: The appearance of the markings (ssNone makes unvisible)
Scale1Settings.SmallMarkColor	: The color of the Marks in the scale
Scale1Settings.SmallMarkInterval	: The distance of marks in the scale
Scale2Settings	: The properties of the second scale
Scale2Settings.BigMarkColor	: The color of the big marks
Scale2Settings.BigMarkInterval	: The distance of the big marks
Scale2Settings.BigMarksVisible	: Shows big marks
Scale2Settings.LineColor	: The color of the lines in the scale
Scale2Settings.LineWidth	: The whidth of the scalelines
Scale2Settings.ScaleStyle	: The appearance of the markings (ssNone makes unvisible)
Scale2Settings.SmallMarkColor	: The color of the Marks in the scale
Scale2Settings.SmallMarkInterval	: The distance of marks in the scale
ShowHint	: Enables the Hint display
Style	: The geometric shape of the slider
TabOrder	: Determines the sequence of control navigation when the user presses the Tab key
TabStop	: Allows the user to navigate to this control, by pressing the Tab key
TextSettings	: The properties of the textlabel
TextSettings.AdInPercent	: Shows the value of the slider in the textLabel in percent
TextSettings.AutoAd	: Shows the value of the slider in the TextLabel
TextSettings.BackgrdColor	: The backgroundcolor of the textlabel (clNone for no color)
TextSettings.BorderColor	: The color of the border (clNone for unvisible)
TextSettings.BorderWidth	: The width of the border
TextSettings.CaptionAlignment	: Alignment of the text in the caption (left, center, right)
TextSettings.CaptionBelow	: Write the letters one below the other (only active poLeft and poRight)
TextSettings.CaptionHorMargin	: The horizontal distance of the text in the text rectangle (only effective with taLeftJustify)
TextSettings.CaptionLayout	: Alignment of the text in the caption (top, center, bottom)
TextSettings.CaptionVerMargin	: The vertical distance of the text in the text rectangle (only effective with tlTop)
TextSettings.Font	: The font to be used for textlabel

TextSettings.Height	: The height of the TextLabel (only effectiv with poTop/poBottom)
TextSettings.Position	: The position of the textlabel (poNone makes unvisible)
TextSettings.PostCaption	: The text behind the value in the textlabel
TextSettings.PreCaption	: The text in front of the value in the textlabel
TextSettings.Style	: The geometric shape of the textlabel
TextSettings.Width	: The width of the TextLabel (only effectiv with poLeft/poRight)
Top	: The client coordinate of the top edge of the control
TrackSettings	: The properties of the track
TrackSettings.ExtraColor	: The color of the additional color (clNone for unvisible)
TrackSettings.ExtraRangeMax	: The max Value of the additional color
TrackSettings.ExtraRangeMin	: The min Value of the additional color
TrackSettings.SelRangeColor	: The color of the selected area (clNone for unvisible)
TrackSettings.TrackColor	: The color of the track
ValueDisplaySettings	: The properties of the ValueDisplay
ValueDisplaySettings.BorderColor	: The color of the border (clNone for unvisible)
ValueDisplaySettings.BorderWidth	: The width of the border
ValueDisplaySettings.ColorEnd	: The end color of the display (for color gradient)
ValueDisplaySettings.ColorGradient	: The direction of the gradient
ValueDisplaySettings.ColorStart	: The start color of the display (for color gradient)
ValueDisplaySettings.Font	: The font to be used for display
ValueDisplaySettings.InPercent	: Shows the value in percent
ValueDisplaySettings.Position	: The position of the display in the slider, vdsNone makes unvisible
ValueDisplaySettings.Style	: The geometric shape of the display, vdsNone makes no shape
ValueDisplaySettings.X	: affects the position, only to be used with vdpXY,vdpAboveRight,vdpBelowLeft
ValueDisplaySettings.Y	: affects the position, only to be used with vdpXY,vdpAboveRight,vdpBelowLeft
Visible	: Allows the control, and all of its children, to be displayed or hidden
Width	: The horizontal extent of the control

Events

OnChange	: Returns the value of Knob1 (as integer)
OnChangeStr	: Returns the value of Knob1 as a string
OnChange3x	: Returns the values of Knob1,2,3 (as integer)
OnChangeStr3x	: Returns the values of Knob1,2,3 as a string
OnClick	: Notification handler for mouse clicks
OnDragDrop	: This handler determines the action on an drop onto this control, in a drag-drop operation
OnDragOver	: Event handler for a control being dragged over this control
OnEndDrag	: Notification handler for the end of a dragging operation
OnEnter	: Handler for control receiving the focus
OnExit	: Handler for control loosing the focus; This is a good place for checking the finished user input
OnKeyDown	: Handler for keyboard key pressed
OnKeyPress	: Handler for a character entered by the user
OnKeyUp	: Handler for keyboard key released
OnMouseDown	: Event handler for mouse button going down
OnMouseEnter	: Event handler for mouse entering the area of the control
OnMouseLeave	: Event handler for mouse leaving the area of the control
OnMouseMove	: Event handler for mouse movement within the control
OnMouseUp	: Event handler for mouse button going up
OnMouseWheelDown	: Event handler for downward movement of mouse wheel
OnMouseWheelUp	: Event handler for upward movement of the mouse wheel
OnStartDrag	: Event handler for the start of a dragging operation

Description

You will find the MultiplexSlider in the Multi tab:
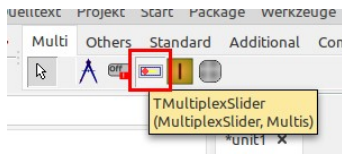
It is important to know that the MultiplexSlider is surrounded by a focus frame. As you can see here, the focused MultiplexSlider has an olive green frame. This means that the actual slider is smaller around the frame.
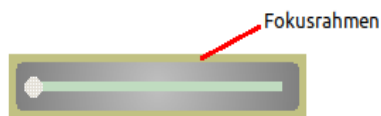
The FocusColor property can be used to set the colour of the focus frame. With FocusAlphaBValue the transparency of the focus frame can be controlled. The value 0 means transparent and 255 opaque.

Value 50:
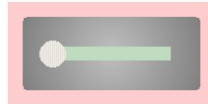
Value 200:
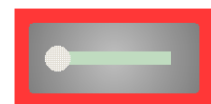
FocusFrameWidth determines the thickness of the frame.

If FocusFrameOn is set to false, the border is retained but the focus is not shown in colour.

With ForegroundFocusOn, the focused MultiplexSlider has a coloured border. The colour of the border can be influenced with FocusColor. This setting only makes sense if FocusFrameOn is set to false!

Here the red border shows that the slider has the focus.
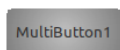
To change the background colour of the MultiplexSlider you need the properties ColorStart, ColorEnd and ColorGradient. To get a single-coloured MultiplexSlider, ColorStart and ColorEnd must be the same. Otherwise, the composition of the three properties determines the colour appearance.

Here StartColor is clBlack and EndColor is clFuchsia.

gcSpread

gcRadiant

gcAlternate

gcHorizontal

gcVertical

Alternate alternately sets one pixel each to Start- and EndColor.

Tip: If you set ColorStart and ColorEnd to clNone, the background gets the colour of the parent.

If the slider is sitting on a MultiPanel it takes on the colour of that panel (for clNone).
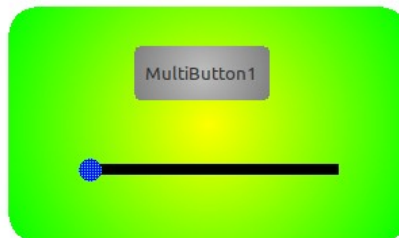
The Style property is used to set the desired geometric shape of the MultiplexSlider.

mssRect

If mssRoundRect is set, you can set the diameter of the corner rounding with the property RndRctRadius.

mssRoundRect

RndRectRadius :=10;

mssRoundRect

RndRectRadius := 40;

If you want to add a coloured border to the MultiplexSlider, select the colour of the border in BorderColor. No border is drawn with clNone. The width of the border is set with BorderWidth.

The properties of the knobs can be found under Knob1Settings, Knob2Settings and Knob3Settings.

While the first knob is visible by default, the second and third are invisible. Knob1Settings.Visible, Knob2Settings.Visible and Knob3Settings.Visible are used to make the knobs visible or invisible.

The Knob1Settings.KnobStyle,Knob2Settings.KnobStyle or Knob3Settings.KnobStyle property is used to set the desired geometric shape of the knob.
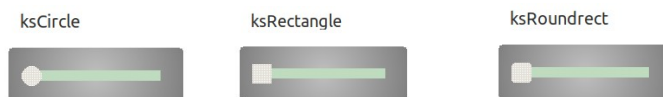
To change the background colour of the knob you need the properties

Knob1Settings.KnobColorStart, Knob2Settings.KnobColorStart or Knob3Settings.KnobColorStart

Knob1Settings.KnobColorEnd, Knob2Settings.KnobColorEnd or Knob3Settings.KnobColorEnd und

Knob1Settings.ColorGradient, Knob2Settings.ColorGradient or Knob3Settings.ColorGradient

To get a unicoloured knob, ColorStart and ColorEnd must be the same. Otherwise, the composition of the three properties determines the colour appearance.

Here StartColor is clBlack and EndColor is clFuchsia.
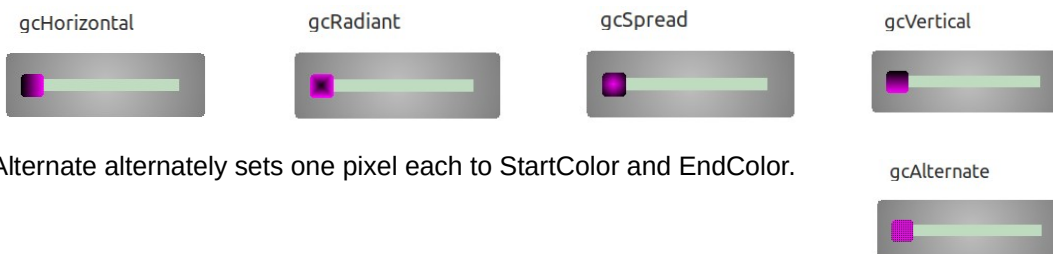
Alternate alternately sets one pixel each to StartColor and EndColor.

By default, Knob1Settings.HoverOn, Knob2Settings.HoverOn and Knob3Settings.HoverOn are set to true. This means that when a hover event occurs (the mouse moves over the knob) the appearance can be changed as desired with
Knob1Settings.HoverStartColor, Knob2Settings.HoverStartColor or Knob3Settings.HoverStartColor and
Knob1Settings.HoverEndColor, Knob2Settings.HoverEndColor or Knob3Settings.HoverEndColor.
If you do not want this, set HoverOn to false.

Knob1-3Settings.HoverEndColor : The end colour of a hover event.

Knob1-3Settings.HoverOn : Allows you to show or hide a hover event.

Knob1-3Settings.HoverStartColor : The start colour of a hover event.

Another possibility to add visual effects to the knobs are the properties Knob1Settings.Design, Knob2Settings.Design or Knob3Settings.Design and Knob1Settings.DesignColor, Knob2Settings.DesignColor or Knob3Settings.DesignColor.

In the examples, DesignColor is clYellow. DesignColor is not used for kdDefault.

kdBorder   kdClassic   kdDefault

kdDown   kdLeft   kdRight   kdUp

The Knob1Settings.KnobPosition, Knob2Settings.KnobPosition or Knob3Settings.KnobPosition property can be used to set or query the position of the knob within the slider.

Example: Knob1Settings.KnobPosition := 40;

Label1.Caption := inttostr(Knob1Settings.KnobPosition);

The orientation of the MultiplexSlider is achieved by means of Orientation.

msoHorizontal   msoVertical
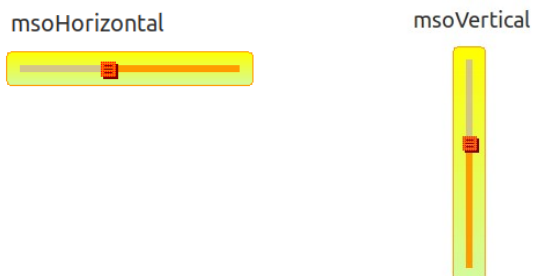
If the Reversed property is used, the max. value and the min. value are reversed.

Reversed := false;   Reversed := true;
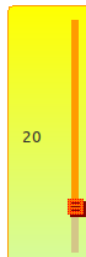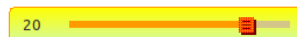
The property Max represents the highest value in the value range of the MultiplexSlider and Min the lowest. Here with knob position 0.
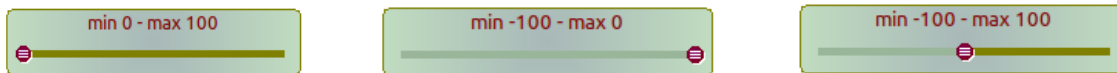
If you are not yet sure about the value range of the MultiplexSlider or if you need a dynamic value range, you can use the properties AutoRangeNegative or AutoRangePositive and AutoRangeValue.

For example, if you want the max. value to increase by 20 units when it is reached, set the following:

When the knob in the slider reaches the maximum value, it is increased by 20. If the knob reaches the max. value again, it is increased again. If the value falls below the original maximum value, the original value range is restored.

If you want to display the set value of the slider, you can use the properties of ValueDisplaySettings. To activate the display, a type other than vdpNone must be selected for ValueDisplaySettings.Position.

Right and Left come into play with a vertical slider.

With the additional properties ValueDisplaySettings.X and ValueDisplaySettings.Y, the position of the display can be influenced for vdpAboveRight,vdpBelowLeft.

With vdpXY, the position of the display is freely selected in the slider with these properties.
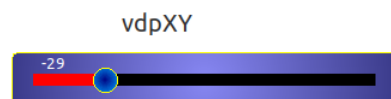
If the display is to have a coloured background, this is realised with the properties ValueDisplaySettings.Style, ValueDisplaySettings.ColorStart, ValueDisplaySettings.ColorEnd and ValueDisplaySettings.ColorGradient.

The shape of the background is set with Style. If vdsNone is selected, no background is drawn.
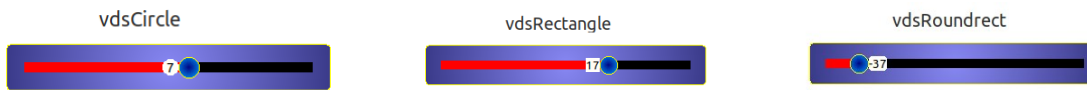
ColorStart, ColorEnd and ColorGradient work in the same way as setting the background. See 31

A coloured border around the display is created with BorderColor (clNone for invisible) and Border.Width.

ValueDisplaySettings.BorderColor := clRed;

ValueDisplaySettings.BorderWidth := 2;

With ValueDisplaySettings.Font, you can set all attributes of the font, such as colour and size, as usual.

If you need the value to be displayed as a percentage, you can simply set ValueDisplaySettings.InPercent to true.
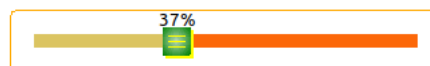
All available properties of the track can be set in the TrackSettings.

TrackSettings.TrackColor   : The colour of the track

TrackSettings.SelRangeColor   : The colour of the selected area (clNone for invisible).

If you want to display an additional colour, you can do this by assigning a colour to the property TrackSettings.ExtraColor (clNone for invisible). With the properties TrackSettings.ExtraRangeMax and TrackSettings.ExtraRangeMin you determine the limits of this colour.

This slider has a value range of 0-100. ExtraRangeMin is set to 80 and Max to 100.

ExtraColor is clRed.

The MultiplexSlider has two integrated scales. The settings for these can be found in the properties of Scale1Settings and Scale2Settings. If you set Scale1Settings.ScaleStyle or Scale2Settings.ScaleStyle to ssDash or ssCircle, the respective scale becomes visible (ssNone makes it invisible).
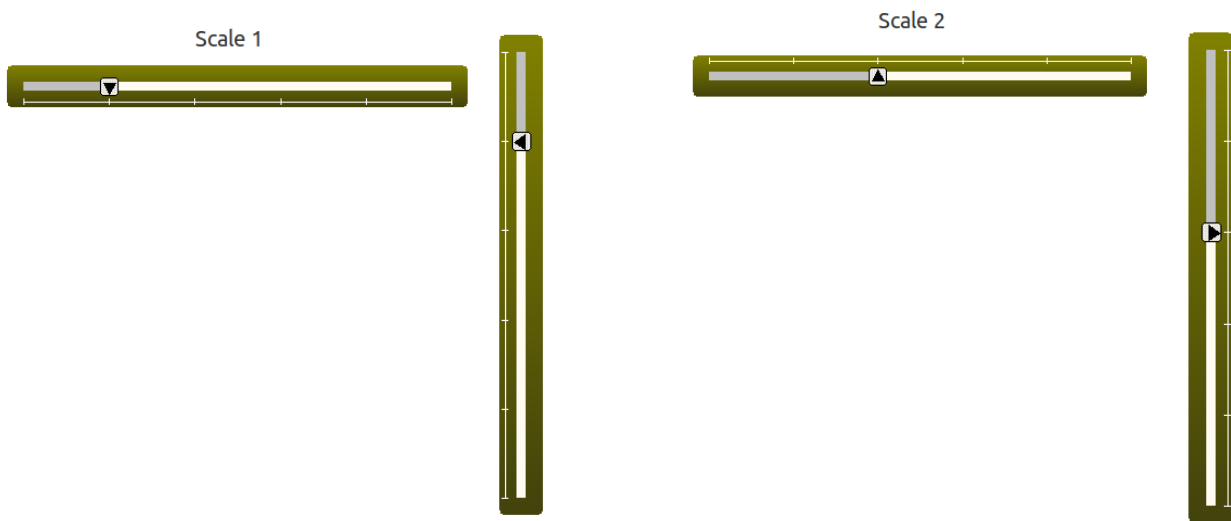
Scale1Settings.ScaleStyle or Scale2Settings.ScaleStyle:

Scale1Settings.LineColor, Scale2Settings.LineColor   : here clRed
Scale1Settings.LineWidth, Scale2Settings.LineWidth   : The thickness of the lines of the scale, here 2
Scale1Settings.SmallMarkColor, Scale2Settings.SmallMarkColor : here clLime

With Scale1Settings.SmallMarkInterval or Scale2Settings.SmallMarkInterval the distance between the small marks can be set.

Value range here 0-100. Interval 10.

Thickness marks can also be displayed for better recognition. This is done with Scale1Settings.BigMarksVisible or Scale2Settings.BigMarksVisible (set to true).

Here Scale1Settings.BigMarkColor or Scale2Settings.BigMarkColor clYellow and Scale1Settings.BigMarkInterval or Scale2Settings.BigMarkInterval 20.

If you want to use the built-in text label, you have to set the property TextSettings.Position under TextSettings to a value other than poNone (poNone makes invisible). If you set TextSettings.AutoAd to true, the value is automatically displayed in the text label. If you want to add more text to the label, you can do this with the properties TextSettings.PreCaption and TextSettings.PostCaption. What is entered in PreCaption appears in front of the value, what is entered in PostCaption appears behind it.

poBottom

Wert: 28 Einheiten

poTop

Wert: 88 Einheiten

PostCaption	Einheiten
PreCaption	Wert:

poLeft

Wert: 60 Einheiten

poRight

Wert: 117 Einheiten
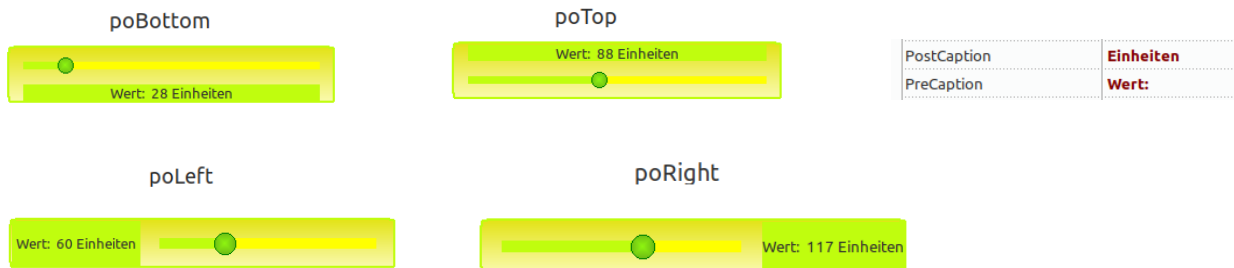
The TextSettings.AdInPercent property displays the value of the slider as a percentage.

Wert: 33 %

: 0 Einh
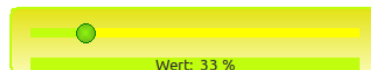
If the text label is too short, the width can be adjusted with TextSettings.Width (only effective with poLeft/poRight).

The same applies to the height, where TextSettings.Height must be used (only effective with poTop/poBottom).

The AutoSize property extends or shortens the entire slider to the necessary size of the text label. If the slider is shortened, the use of Constraints makes sense.

Wert: 0 Einheiten

Constraints	(TSizeConstraints)
MaxHeight	0
MaxWidth	0
MinHeight	60
MinWidth	180

AutoSize	✓ (True)
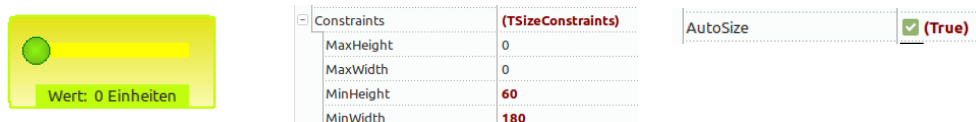
If the text in the text label is extended for any reason, the length is adjusted here:

Originalwert: 0 Einheiten
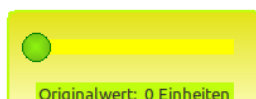
The background of the text label can be set with the properties TextSettings.BackgrdColor (clNone for no colour), TextSettings.BorderColor (clNone for invisible), TextSettings.BorderWidth and TextSettings.Style.
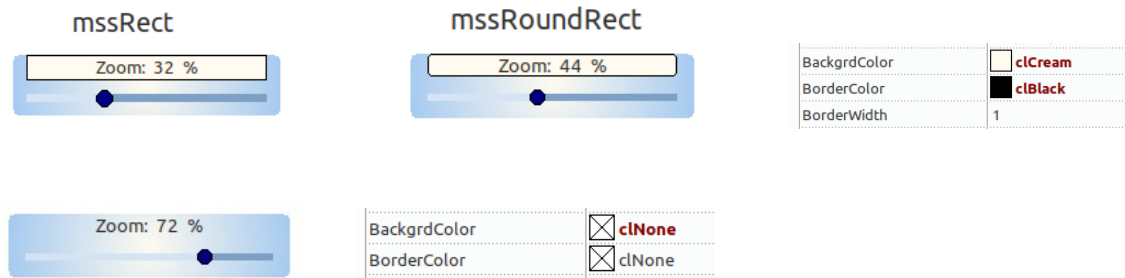
The position of the text within the TextLabel is determined by the properties

TextSettings.CaptionAlignment	: Alignment of the text in the caption (left,centre,right)
TextSettings.CaptionHorMargin	: The horizontal spacing of the text in the text rectangle (only effective with taLeftJustify).
TextSettings.CaptionLayout	: Alignment of the text in the caption (Top,Middle,Bottom)
TextSettings.CaptionVerMargin	: The vertical spacing of the text in the text rectangle (only effective with tlTop)
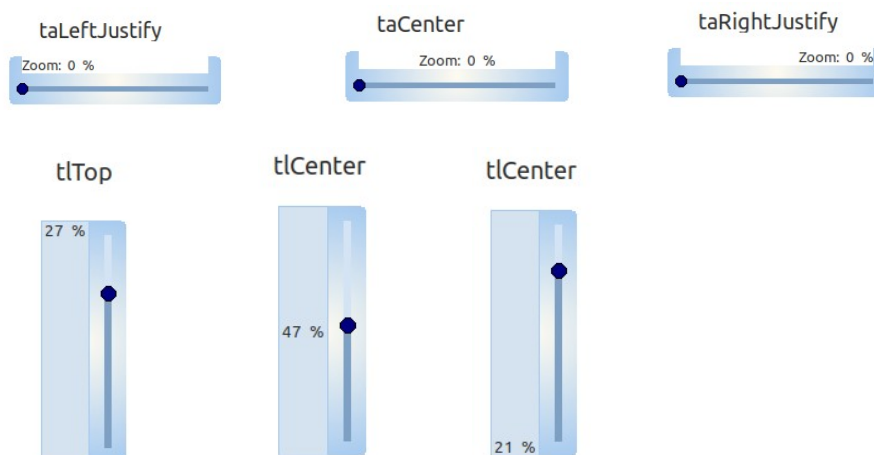
If you want to write the text from bottom to top in a vertical slider and change the font, you can do this with TextSettings.Font
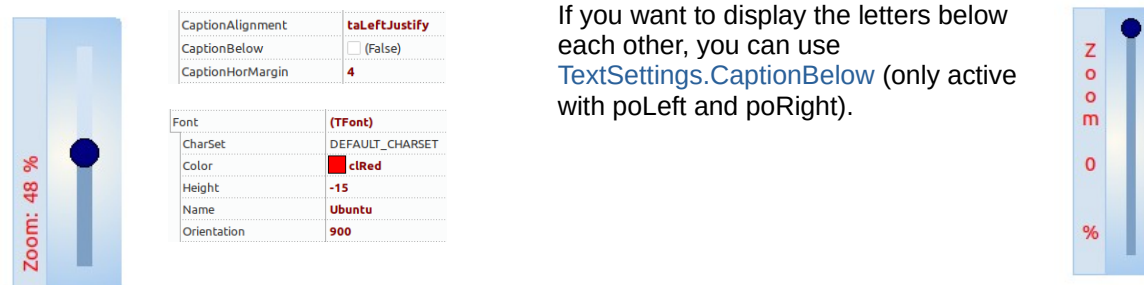
If you want to display the letters below each other, you can use TextSettings.CaptionBelow (only active with poLeft and poRight).

If the JumpToPosition property is true, the knob jumps to this position when you click in the track. If two or three buttons are visible, the last button moved jumps.
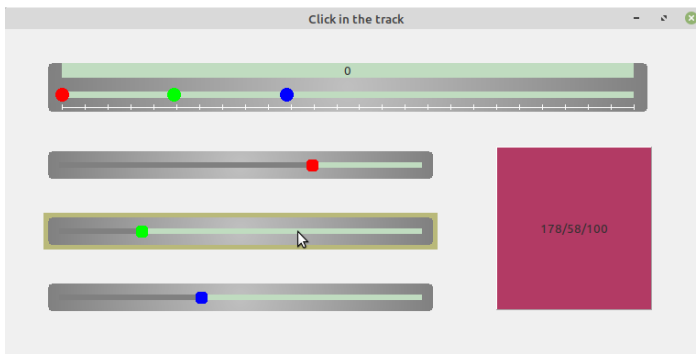
When clicked here, the knob jumps to the position of the mouse pointer.

TMultiSeperator

[Properties]

|	
Action	: The Action associated with the control
Align	: Specifies the placement of the control inside its Parent
Anchors	: The set of anchor definitions for this control
BackgrdImage	: Contains the image displayed in the control, only active with gcBitmap
BorderColor	: The color of the border, clNone makes unvisible
BorderSpacing	: Determines the inner and outer border spacing for this control
BorderWidth	: The whidth of the border
ColorEnd	: The end color of the background (for color gradient),clNone makes unvisibel
ColorGradient	: The direction of the gradient
ColorStart	: The start color of the background (for color gradient),clNone makes unvisibel
Constraints	: The minimum and maximum Width and Height for the control
Cursor	: The shape of the mouse pointer, when the mouse is over this control
Enabled	: Determines whether the control reacts on mouse or keyboard input
Height	: The vertical size of the control
HelpContext	: The ID for context-sensitive Help on this control
HelpKeyword	: The keyword for context-sensitive Help on this control
HelpType	: Determines whether context-sensitive Help is selected by numeric ID or keyword
Hint	: The text to show in the Hint window for the control
Left	: The client coordinate of the left edge of the control
LineSettings	: The Settings of the line in the seperator
LineSettings.Color	: The color of the line
LineSettings.Design	: The number of lines
LineSettings.EndCap	: The shape of the line ends
LineSettings.LinesLength	: The lenght of the lines at dash,dashdot ...
LineSettings.LinesSpace	: The lenght of the space at dash,dashdot ...
LineSettings.Margin	: The distance from the line to the border
LineSettings.PenWidth	: The width of the line
LineSettings.Style	: The style of the line, cpsNull makes unvisible
Orientation	: The orientation of the seperator
RndRctRadius	: Corner diameter if the geometric shape is RoundRect
ShowHint	: Enables the Hint display

Style	: The geometric shape of the seperator
Top	: The client coordinate of the top edge of the control
Visible	: Allows the control, and all of its children, to be displayed or hidden
Width	: The horizontal extent of the control

Description

You can find the MultiSeperator in the Multi tab:
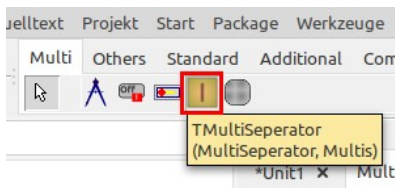
The MultiSeperator is a component that is intended for visual design. It can also be used as a separator between other controls.

With the Orientation property, the position of the separator can be switched between horizontal and vertical.

To change the background colour of the MultiSeperator you need the properties ColorStart, ColorEnd and ColorGradient. To get a single-coloured MultiSeperator, ColorStart and ColorEnd must be the same. Otherwise, the composition of the three properties determines the colour appearance.

Here StartColor is clMaroon and EndColor is $0000B5FF.

Alternate alternately sets one pixel each to Start- and EndColor.

In order to be able to use the type gcBitmap, a bitmap with the property BackgrdImage must first be loaded. To do this, click in the box with the three dots at BackgrdImage in the OI.
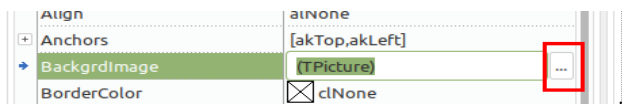
The Load Image dialogue opens. Click on Load and select a bitmap (it also works with png). Finally, select gcBitmap under ColorGradient and the bitmap is used as the background.

The Style property is used to set the desired geometric shape of the MultiSeperator.
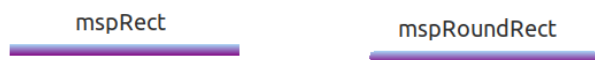
If mspRoundRect is set, you can set the diameter of the corner rounding with the property RndRctRadius.

If BorderColor is set unequal to clNone, a border appears. Its thickness can be set with BorderWidth.

With the settings under LineSettings, a line can be drawn in the separator.

By setting a LineSettings.Style (cpsNull makes invisible) the line becomes visible.
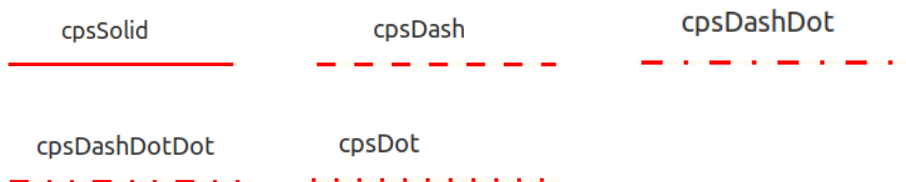
With LineSettings.Color the colour of the line can be influenced. LineSettings.PenWidth sets the thickness of the line.
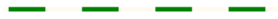
The length of the break between the lines can be set with LineSettings.LinesSpace and the length of the lines with LineSettings.LinesLength.

With LineSettings.EndCap the end of the line can be adjusted:

cepENDCAP_FLAT   cepENDCAP_ROUND   cepENDCAP_SQUARE

For a better understanding of the line ends:
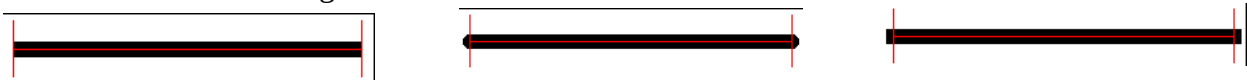
If you want to set the distance of the line left and right to the margin the same, this is done with LineSettings.Margin.

With LineSettings.Design a double line can be created.

ldSingle   ldDouble

TMultiLayer

Properties

Align	: Specifies the placement of the control inside its Parent
Anchors	: The set of anchor definitions for this control
BorderSpacing	: Determines the inner and outer border spacing for this control
Color	: The background color of the control
Constraints	: The minimum and maximum Width and Height for the control
Cursor	: he shape of the mouse pointer, when the mouse is over this control
GroupIndex	: The index of the group to which the MultiLayer belongs
Height	: The vertical size of the control
HelpContext	: The ID for context-sensitive Help on this control
HelpKeyword	: The keyword for context-sensitive Help on this control.
HelpType	: Determines whether context-sensitive Help is selected by numeric ID or keyword
Hint	: The text to show in the Hint window for the control
Left	: The client coordinate of the left edge of the control
Top	: The client coordinate of the top edge of the control
Visible	: Allows the control, and all of its children, to be displayed or hidden, **also at design time**
Width	: The horizontal extent of the control

Public Procedures

procedure InvalidateMultiPanel;

Description

You will find the MultiLayer in the Multi tab:
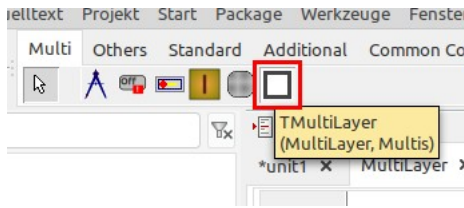
The MultiLayer is intended for simplified designing when clicking forms together. All child controls of TMulti-Layer become invisible when TMultiLayer is set to Visible := false. If the MultiLayer sits on a MultiPanel, its colour gradient is assumed as background.

Tip: If you place a MultiLayer on top of a MultiLayer, the first TWinControl behind it is taken as the parent!
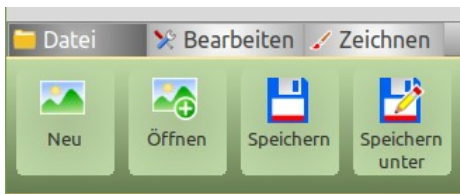
Here, a TMultiLayer sits on a MultiPanel for each tab. By switching Visible := true to false, each tab can be designed as desired at design time.

Another way to switch layers during design time is to **double-click** on the MultiLayer you want to make visible in the Object Inspector treeview.
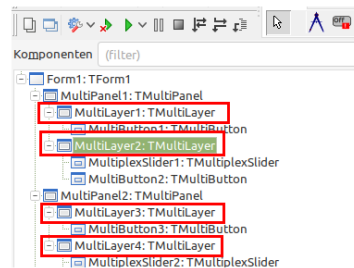
If MultiLayers have the same parent but are to be switched independently of each other, the GroupIndex must be set to different values.

If the background of the MultiPanel or other MultiControls is not redrawn in any constellation, a redrawing can be triggered with InvalidateMultiPanel.

TMultiRadioGroup

Properties

Action	: The Action associated with the control
Align	: Specifies the placement of the control inside its Parent
Anchors	: The set of anchor definitions for this control
AutoSize	: Allows automatic adjustment of the size for the control, according to its content
BidiMode	: Customization (of text controls) in bidirectional reading environments
BorderColor	: The color of the border
BorderMargin	: The distance of the frame to the outer edge
BorderWidth	: The whidth of the border
BorderSpacing	: Determines the inner and outer border spacing for this control
Caption	: The headline of the radio group
CaptionLeft	: The coordinate of the left edge of the caption
CaptionTop	: The coordinate of the top edge of the caption
ColorEnd	: The end color of the RadioGroup (for color gradient)
ColorGradient	: The direction of the gradient
ColorStart	: The start color of the RadioGroup (for color gradient)
Constraints	: The minimum and maximum Width and Height for the control
Cursor	: The shape of the mouse pointer, when the mouse is over this control
DragCursor	: The cursor shape shown while the control is dragged
DragKind	: The operation when the control is dragged - Drag or Dock
DragMode	: Allows the user to drag the control
Enabled	: Determines whether the control reacts on mouse or keyboard input
FocusAlphaBValue	: How translucent the focusframe is (0=transparent, 255=opaque)
FocusColor	: The color of the Fokusframe/Foregroundfocus when the Control has the focus
FocusFrameOn	: Switches the focus frame on and off
FocusFrameWidth	: The whidth of the focus-frame
Font	: The font to be used for text display the caption
ForegroundFocusOn	: Indicates when the slider has focus, switches on off
GroupIndex	: The Index within the group of MultiRadioGroups
Height	: The vertical size of the control

HelpContext	: The ID for context-sensitive Help on this control
HelpKeyword	: The keyword for context-sensitive Help on this control
HelpType	: Determines whether context-sensitive Help is selected by numeric ID or keyword
Hint	: The text to show in the Hint window for the control
Left	: The client coordinate of the left edge of the control
RadioButtons	: Opens the editor to add radio buttons
RadioButtons.Item[Index].ButtonColor	: The color of the radiobutton
RadioButtons.Item[Index].ButtonSelColor	: The color of the selected radiobutton
RadioButtons.Item[Index].Caption	: The text that the user writes in the radiobutton
RadioButtons.Item[Index].CaptionAlignment	: Alignment of the text in the caption (left, center, right)
RadioButtons.Item[Index].CaptionHorMargin	: The horizontal distance of the text in the text rectangle (only effective with taLeftJustify)
RadioButtons.Item[Index].CaptionLayout	: Alignment of the text in the caption (top, center, bottom)
RadioButtons.Item[Index].CaptionVerMargin	: The vertical distance of the text in the text rectangle (only effective with tlTop)
RadioButtons.Item[Index].CaptionWordbreak	: Allows a line break in the caption
RadioButtons.Item[Index].Color	: The background colour of the RadioButton
RadioButtons.Items[Index].DisplayName	: The name that is displayed in the TreeView of the ObjectInspector
RadioButtons.Items[Index].Enabled	: Determines whether the control reacts on mouse or keyboard input
RadioButtons.Items[Index].Font	: The font to be used for text display the caption
RadioButtons.Item[Index].HoverColor	: The color of a hoverevent
RadioButtons.Item[Index].HoverStyle	: Whether a hover event is drawn as a frame only or full-surface
RadioButtons.Item[Index].ImageIndex	: The Index of a Image in a ImageList
RadioButtons.Item[Index].ImageLeft	: The coordinate of the left edge of a Image
RadioButtons.Item[Index].Images	: A list for including images
RadioButtons.Item[Index].ImageTop	: The coordinate of the top edge of a Image
RadioButtons.Items[Index].ImageWidth	: The unique width of all images in the list
RadioButtons.Items[Index].ParentFont	: Uses the font from the Parent when enabled
RadioButtons.Item[Index].Selected	: Determines if a radio button is selected
RadioButtons.Items[Index].Tag	: Can be used to store an integer value in the component
RndRctRadius	: Corner diameter if the geometric shape is RoundRect
Rows	: Number of lines when Wordbreak is active
Style	: The geometric shape of the RadioGroup

TabOrder	: Determines the sequence of control navigation when the user presses the Tab key
TabStop	: Allows the user to navigate to this control, by pressing the Tab key
Tag	: Can be used to store an integer value in the component
Top	: The client coordinate of the top edge of the control
Visible	: Allows the control, and all of its children, to be displayed or hidden
Width	: The horizontal extent of the control

Events

OnChange	: Returns the Index of the RadioButtton
OnClick	: Notification handler for mouse clicks
OnDragDrop	: This handler determines the action on an drop onto this control, in a drag-drop operation
OnDragOver	: Event handler for a control being dragged over this control
OnEndDrag	: Notification handler for the end of a dragging operation
OnEnter	: Handler for control receiving the focus
OnExit	: Handler for control loosing the focus; This is a good place for checking the finished user input
OnKeyDown	: Handler for keyboard key pressed
OnKeyPress	: Handler for a character entered by the user
OnKeyUp	: Handler for keyboard key released
OnMouseDown	: Event handler for mouse button going down
OnMouseEnter	: Event handler for mouse entering the area of the control
OnMouseLeave	: Event handler for mouse leaving the area of the control
OnMouseMove	: Event handler for mouse movement within the control
OnMouseUp	: Event handler for mouse button going up
OnStartDrag	: Event handler for the start of a dragging operation

Description

The MultiRadioGroup can be found in the Multi tab:
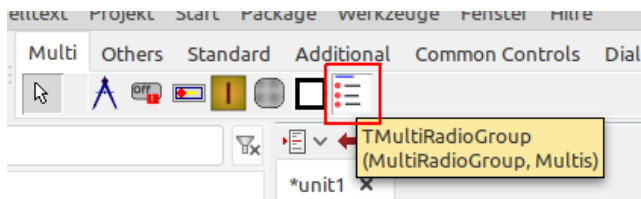
If you set the MultiRadioGroup to the form, it has only one RadioButton.
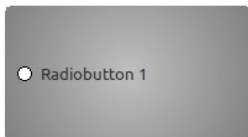
This one radio button cannot be deleted either!

To add more radio buttons, click on RadioButtons in the Object Inspector. Now an editor opens in which further radio buttons can be created.
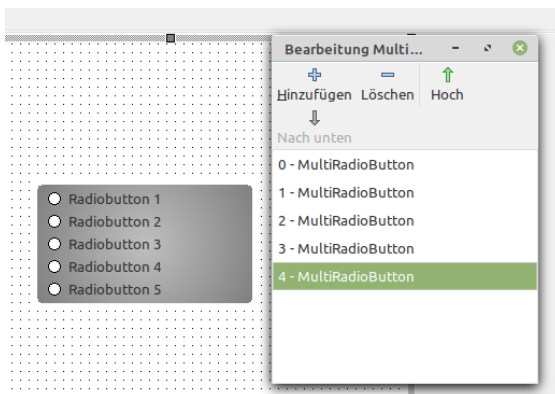
In the TreeView of the Object Inspector, you can now see the individual MultiRadioButtons under the Multi-RadioGroup.

It is important to know that the MultiRadioGroup is surrounded by a focus frame. As you can see here, the focused MultiRadioGroup has a red frame. This means that the actual RadioGroup is smaller by the frame.
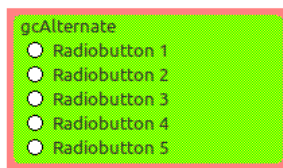
The FocusColor property can be used to set the colour of the focus frame. With FocusAlphaBValue the transparency of the focus frame can be controlled. The value 0 means transparent and 255 opaque. FocusFrameWidth determines the thickness of the frame.

Value 50:   Value 200:
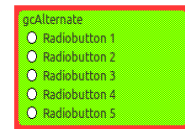
If FocusFrameOn is set to false, the border is retained but the focus is not displayed in colour.

With ForegroundFocusOn the focused MultiRadioGroup has a border. The colour of the border can be influenced with FocusColor. With FocusFrameWidth the distance to the actual RadioGroup can be set. It can be useful to set FocusFrameOn to false.
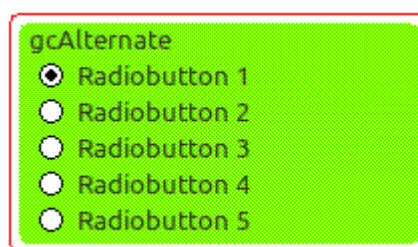
The Style property is used to set the desired geometric shape of the MultiRadioGroup.
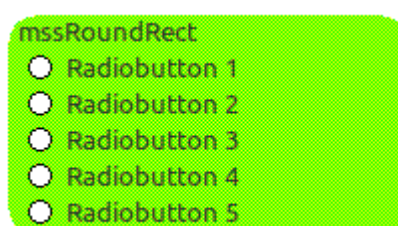
If mssRoundRect is set, you can set the diameter of the corner rounding with the property RndRctRadius.

With Caption you can add a heading to the MultiRadioGroup. See also 56
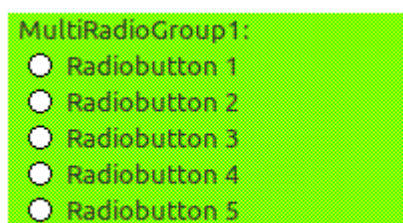
The background can be influenced with the properties ColorStart, ColorEnd and ColorGradient.

Here ColorStart is clLime and ColorEnd is clYellow:
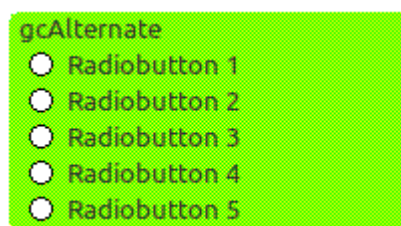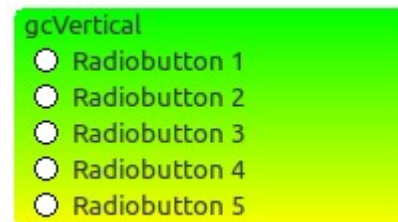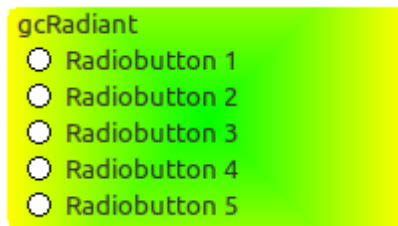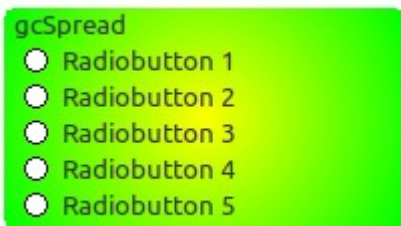
Alternate alternately sets a pixel to Start or EndColor.

If you set either ColorStart or ColorEnd to clNone, the background becomes transparent.
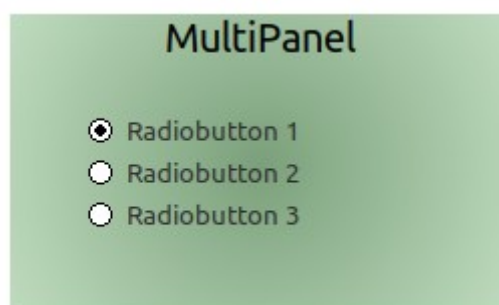
If the MultiRadioGroup sits on a MultiPanel, it becomes visible.

If the property GroupIndex is given a value other than 0, several MultiRadioGroups that are located on the same parent and have the same index can be connected together.

This allows any arrangement to be realised. You can navigate with the arrow keys, select with the space bar.

The settings for the individual MultiRadioButtons can be made separately for each button. The only exception is the font size. If this is changed for one button, it affects all other radio buttons. To easily access the view of the radio buttons, the component tree should be visible in the object inspector. If it is invisible, click with the right mouse button in the OI and tick Show component tree. Now you can simply select the individual MultiRadioButtons.
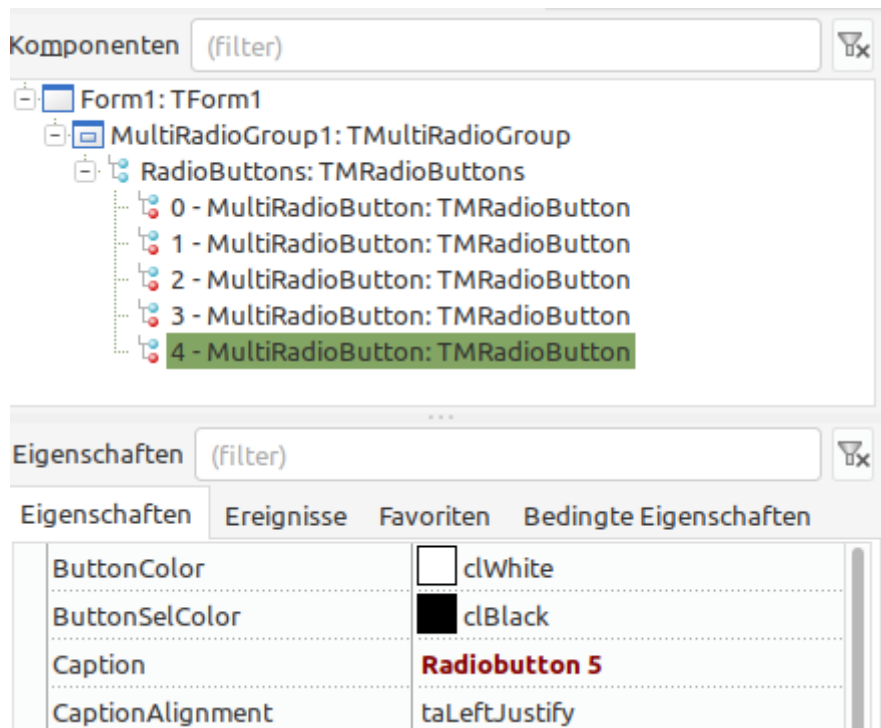
With the RadioButtons.Items[Index].Font settings (except the font size), different settings can be made for all buttons.

The RadioButtons.Item[Index].ButtonColor property is used to fill the background of the RadioButton.

Here Orange.

RadioButtons.Item[Index].Selected determines whether a RadioButton is selected. With RadioButtons.Item[Index].ButtonSelColor the colour of the selection can be determined.

Here Yellow.

With the property RadioButtons.Item[Index].Caption the text behind the RadioButton can be set. With RadioButtons.Item[Index].CaptionAlignment, RadioButtons.Item[Index].CaptionHorMargin the horizontal alignment of the text can be influenced.

With RadioButtons.Item[Index].CaptionLayout and RadioButtons.Item[Index].CaptionVerMargin the text can be aligned vertically.

With RadioButtons.Item[Index].CaptionWordbreak the text is wrapped if necessary.

However, the number of rows required must be specified with Rows.

RadioButtons.Item[Index].Color sets the background of the RadioButton, clNone makes it transparent.

RadioButtons.Item[Index].HoverColor changes the colour of the background of the RadioButton when you move the mouse over it, clNone makes it transparent.

RadioButtons.Item[Index].HoverStyle can be used to select whether the hover event is to be fully filled or only displayed as a frame.
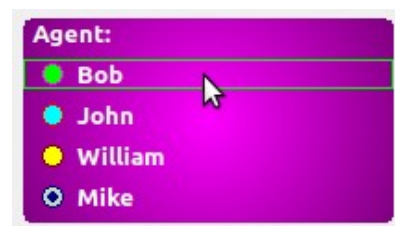
Images can also be inserted with the help of an image list. To do this, select the ImageList at RadioButtons.Item[Index].Images. Select the desired image at RadioButtons.Item[Index].ImageIndex and determine the position of the image with RadioButtons.Item[Index].ImageLeft and RadioButtons.Item[Index].ImageTop.

If you want to give the RadioGroup a border, change BorderColor to the desired colour. This means clNone makes the border invisible. With BorderWidth you can set the thickness of the border.

If you want to move the border inwards, you can do this with BorderMargin. If you then move a caption over the border, the appearance of a GroupBox is created.

Moving the caption is done with CaptionLeft and CaptionTop.
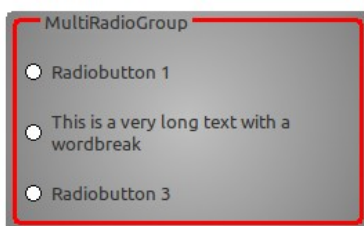
TMultiCheckGroup

Properties

Action	: The Action associated with the control
Align	: Specifies the placement of the control inside its Parent
Anchors	: The set of anchor definitions for this control
AutoSize	: Allows automatic adjustment of the size for the control, according to its content
BidiMode	: Customization (of text controls) in bidirectional reading environments
BorderColor	: The color of the border
BorderMargin	: The distance of the frame to the outer edge
BorderWidth	: The whidth of the border
BorderSpacing	: Determines the inner and outer border spacing for this control
Caption	: The headline of the checkgroup
CaptionLeft	: The coordinate of the left edge of the caption
CaptionTop	: The coordinate of the top edge of the caption
Checkboxes	: Opens the editor to add Checkboxes
CheckBoxes.Item[Index].ButtonColor	: The color of the checkbox
CheckBoxes.Item[Index].ButtonSelBackColor	: The backgroundcolor in the selected CheckBox
CheckBoxes.Item[Index].ButtonSelColor	: The color of the selected checkbox
CheckBoxes.Item[Index].Caption	: The text that the user writes in the checkbox
CheckBoxes.Item[Index].CaptionAlignment	: Alignment of the text in the caption (left, center, right)
CheckBoxes.Item[Index].CaptionHorMargin	: The horizontal distance of the text in the text rectangle (only effective with taLeftJustify)
CheckBoxes.Item[Index].CaptionLayout	: Alignment of the text in the caption (top, center, bottom)
CheckBoxes.Item[Index].CaptionVerMargin	: The vertical distance of the text in the text rectangle (only effective with tlTop)
CheckBoxes.Item[Index].CaptionWordbreak	: Allows a line break in the caption
CheckBoxes.Item[Index].Color	: The background colour of the checkbox
Checkboxes.Items[Index].DisplayName	: The name that is displayed in the TreeView of the ObjectInspector
CheckBoxes.Item[Index].Enabled	: Determines whether the control reacts on mouse or keyboard input
CheckBoxes.Items[Index].Font	: The font to be used for text display the caption
CheckBoxes.Item[Index].HoverColor	: The color of a hoverevent
CheckBoxes.Item[Index].HoverStyle	: Whether a hover event is drawn as a frame only or full-surface
CheckBoxes.Item[Index].ImageIndex	: The Index of a Image in a ImageList
CheckBoxes.Item[Index].ImageLeft	: The coordinate of the left edge of a Image
CheckBoxes.Item[Index].Images	: A list for including images
CheckBoxes.Item[Index].ImageTop	: The coordinate of the top edge of a Image

CheckBoxes.Item[Index].ImageWidth	: The unique width of all images in the list
Checkboxes.Items[Index].ParentFont	: Uses the font from the Parent when enabled
CheckBoxes.Item[Index].Selected	: Determines if a checkbox is selected
CheckBoxes.Item[Index].SelectedStyle	: The character that is displayed in a selected box
Checkboxes.Items[Index].Tag	: Can be used to store an integer value in the component
ColorEnd	: The end color of the checkGroup (for color gradient)
ColorGradient	: The direction of the gradient
ColorStart	: The start color of the checkGroup (for color gradient)
Constraints	: The minimum and maximum Width and Height for the control
Cursor	: The shape of the mouse pointer, when the mouse is over this control
DragCursor	: The cursor shape shown while the control is dragged
DragKind	: The operation when the control is dragged - Drag or Dock
DragMode	: Allows the user to drag the control
Enabled	: Determines whether the control reacts on mouse or keyboard input
FocusAlphaBValue	: How translucent the focusframe is (0=transparent, 255=opaque)
FocusColor	: The color of the Fokusframe/Foregroundfocus when the Control has the focus
FocusFrameOn	: Switches the focus frame on and off
FocusFrameWidth	: The whidth of the focus-frame
Font	: The font to be used for text display the caption
ForegroundFocusOn	: Indicates when the slider has focus, switches on off
GroupIndex	: The Index within the group of MultiCheckGroups
Height	: The vertical size of the control
HelpContext	: The ID for context-sensitive Help on this control
HelpKeyword	: The keyword for context-sensitive Help on this control
HelpType	: Determines whether context-sensitive Help is selected by numeric ID or keyword
Hint	: The text to show in the Hint window for the control
Left	: The client coordinate of the left edge of the control
RndRctRadius	: Corner diameter if the geometric shape is RoundRect
Rows	: Number of lines when Wordbreak is active
Style	: The geometric shape of the CheckGroup
TabOrder	: Determines the sequence of control navigation when the user presses the Tab key
TabStop	: Allows the user to navigate to this control, by pressing the Tab key
Tag	: Can be used to store an integer value in the component
Top	: The client coordinate of the top edge of the control
Visible	: Allows the control, and all of its children, to be displayed or hidden
Width	: The horizontal extent of the control

Events

OnChange	: Returns the Index of the checkbox
OnClick	: Notification handler for mouse clicks
OnDragDrop	: This handler determines the action on an drop onto this control, in a drag-drop operation
OnDragOver	: Event handler for a control being dragged over this control
OnEndDrag	: Notification handler for the end of a dragging operation
OnEnter	: Handler for control receiving the focus
OnExit	: Handler for control loosing the focus; This is a good place for checking the finished user input
OnKeyDown	: Handler for keyboard key pressed
OnKeyPress	: Handler for a character entered by the user
OnKeyUp	: Handler for keyboard key released
OnMouseDown	: Event handler for mouse button going down
OnMouseEnter	: Event handler for mouse entering the area of the control
OnMouseLeave	: Event handler for mouse leaving the area of the control
OnMouseMove	: Event handler for mouse movement within the control
OnMouseUp	: Event handler for mouse button going up
OnStartDrag	: Event handler for the start of a dragging operation

Description

You can find the MultiCheckGroup in the Multi tab:
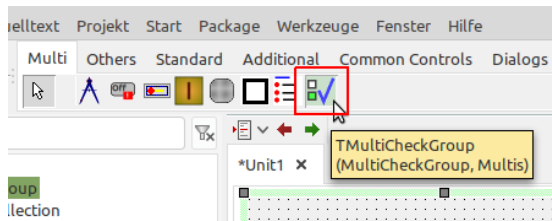
If you set the MultiCheckGroup to the form, it has only one CheckBox.
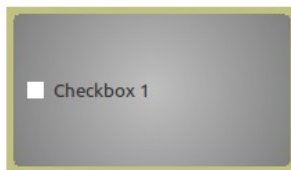
This one CheckBox cannot be deleted either!

To add more CheckBoxes, click on Checkboxes in the Object Inspector. Now an editor opens in which further CheckBoxes can be created.
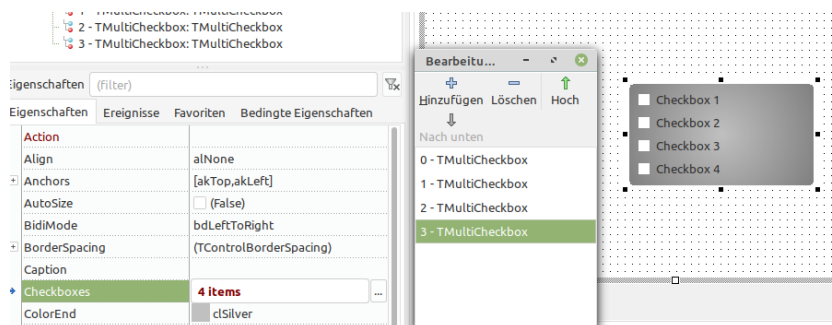
In the tree view of the Object Inspector, the individual MultiCheckBoxes can now be seen under the group MultiCheckGroup.
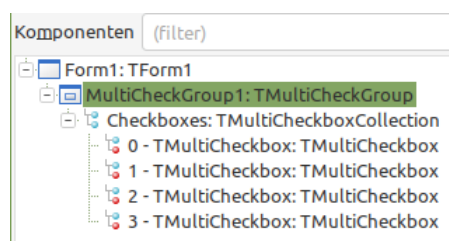
It is important to know that the MultiCheckGroup is surrounded by a focus frame. As you can see here, the focused MultiCheckGroup has a light blue frame. This means that the actual CheckGroup is smaller by the frame.
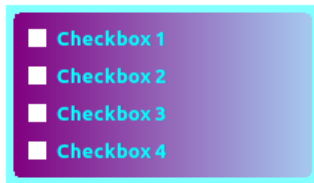
The FocusColor property can be used to set the colour of the focus frame. With FocusAlphaBValue the transparency of the focus frame can be controlled. The value 0 means transparent and 255 opaque. FocusFrameWidth determines the thickness of the frame.

Value 50:   Value 200:
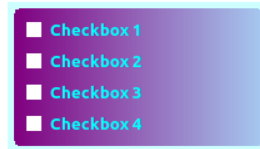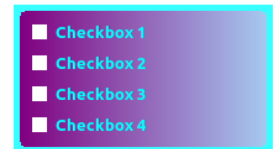
If FocusFrameOn is set to false, the border is retained but the focus is not displayed in colour.

With ForegroundFocusOn the focused MultiCheckGroup has a border. The colour of the border can be influenced with FocusColor. With FocusFrameWidth the distance to the actual CheckGroup can be set. It can be useful to set FocusFrameOn to false.
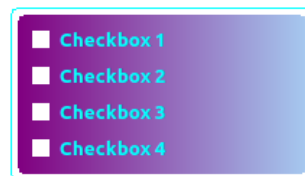
With Caption you can add a heading to the MultiCheckGroup. See also 66
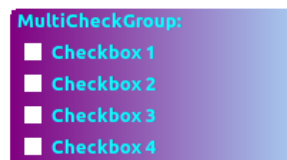
The Style property is used to set the desired geometric shape of the MultiCheckGroup.
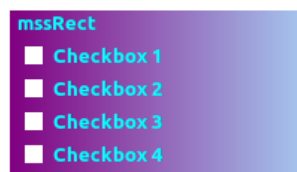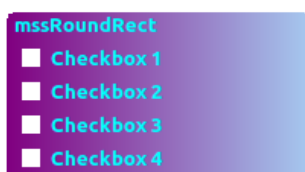
If mssRoundRect is set, you can set the diameter of the corner rounding with the property RndRctRadius.

The background can be influenced with the properties ColorStart, ColorEnd and ColorGradient.

Here ColorStart is clPurple and ColorEnd is clSkyBlue:
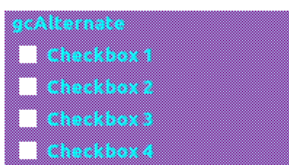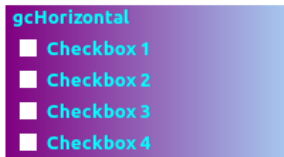
Alternate alternately sets a pixel to Start or EndColor.

If you set either ColorStart or ColorEnd to clNone, the background becomes transparent.
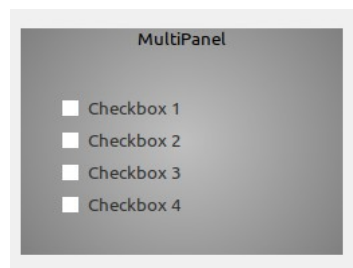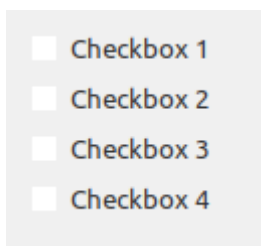
If the MultiRadioGroup sits on a MultiPanel, it becomes visible.

FocusFrameOn should better be set to false.

If the property GroupIndex is given a value other than 0, several MultiCheckGroups that are located on the same parent and have the same index can be connected together.

This allows any arrangement to be realised. You can navigate with the arrow keys and select with the space bar.

The settings for the individual MultiCheckBoxes can be made separately for each checkbox. The only exception is the font size. If this is changed for one checkbox, it affects all other checkboxes. To easily access the view of the checkboxes, the component tree should be visible in the object inspector. If it is invisible, click with the right mouse button in the OI and tick Show component tree. Now you can simply select the individual checkboxes.
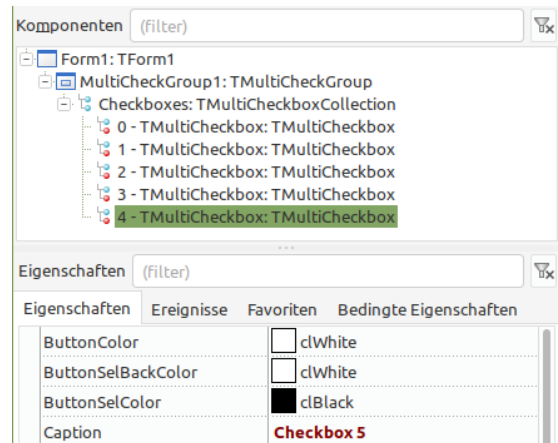
With the CheckBoxes.Items[Index].Font settings (except the font size) different settings can be made for all buttons.

The property CheckBoxes.Item[Index].ButtonColor is used to fill the background of the CheckBox.

Here clLime.

CheckBoxes.Item[Index].Selected determines whether a CheckBox is selected. With CheckBoxes.Item[Index].ButtonSelColor the colour of the selection can be determined and with CheckBoxes.Item[Index].ButtonSelBackColor the background of a selected CheckBox.
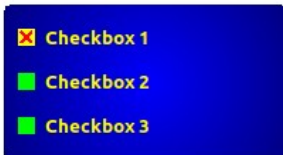
ButtonSelColor is here clRed.

ButtonSelBackColor is here clYellow.

CheckBoxes.Item[Index].SelectedStyle determines which character is drawn in a selected CheckBox.
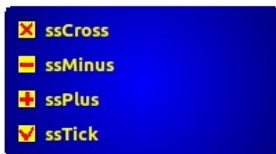
With the property CheckBoxes.Item[Index].Caption the text behind the CheckBox can be set. With CheckBoxes.Item[Index].CaptionAlignment, CheckBoxes.Item[Index].CaptionHorMargin the alignment of the text in the horizontal can be influenced.
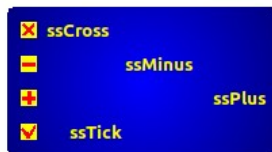

With CheckBoxes.Item[Index].CaptionLayout and CheckBoxes.Item[Index].CaptionVerMargin the text can be aligned vertically.

With CheckBoxes.Item[Index].CaptionWordbreak the text is wrapped if needed. However, the number of rows required must be specified with Rows.
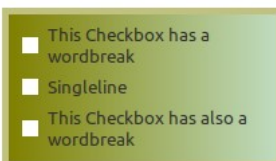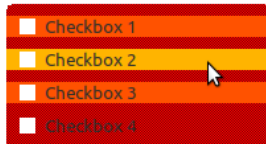
CheckBoxes.Item[Index].Color sets the background of the checkbox including the caption, clNone makes it transparent.
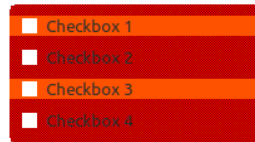
CheckBoxes.Item[Index].HoverColor changes the colour of the background of the RadioButton when you move the mouse over it, clNone makes it transparent.

With CheckBoxes.Item[Index].HoverStyle you can choose whether the hover event is fully filled or only displayed as a frame.
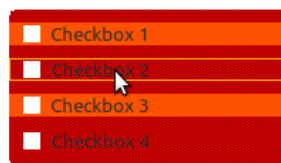

Images can also be inserted with the help of an image list. To do this, select the ImageList at CheckBoxes.Item[Index].Images . Select the desired image at CheckBoxes.Item[Index].ImageIndex and determine the position of the image with CheckBoxes.Item[Index].ImageLeft and CheckBoxes.Item[Index].ImageTop .
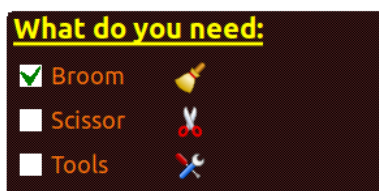
With CheckBoxes.Item[Index].ImageWidth the size of the image can be changed. It is recommended to scale only smaller!

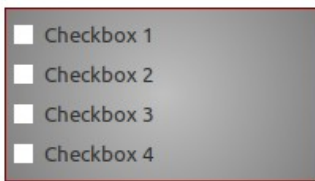If you set CheckBoxes.Item[Index].Enabled to false, a selection can be disabled.
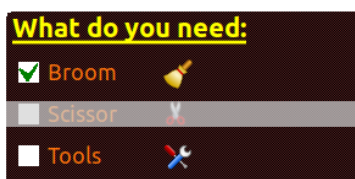
At runtime, the colour and transparency of the disabled bar can be set.


```
procedure TForm1.FormCreate(Sender: TObject);
begin
  MultiCheckGroup1.Checkboxes.Items[1].DisabledColor:= clAqua;
  MultiCheckGroup1.Checkboxes.Items[1].DisabledAlphaBValue:= 50;
end;
```
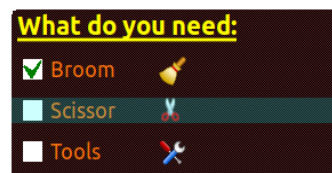
If you want to give the CheckGroup a border, change BorderColor to the desired colour. This means clNone makes the border invisible. With BorderWidth you can set the thickness of the border.

If you want to move the border inwards, you can do this with BorderMargin. If you then move a caption over the border, the appearance of a GroupBox is created.

Moving the caption is done with CaptionLeft and CaptionTop.