TabFrame Demonstration Version

<u>Properties</u>   <u>Events</u>   <u>Methods</u>

The increasing complexity of the dialog boxes needed for todays Windows applications has lead to the development of the tabbed dialog box which originally appeared in Microsoft Word for Windows V6.0. The TabFrame custom control allows you to include tabbed dialog boxes in a Visual Basic application in a simple and straightforward manner.

The TabFrame control includes a number of features designed to simplify its use and to enhance the appearance of applications which use it.

- Control over the appearance of the tabs.
- Tab selection at design time using the right mouse button.
- Property synchronisation between tabs.
- Automatic 3D appearance for child controls.
- Focus tracking when tabs selected/deselected.

To create a tabbed dialog you create the first TabFrame control in the normal way setting the size and position as required. Additional TabFrame controls are then created for each tab option by double clicking the TabFrame icon in the Visual Basic toolbox. Tabs are selected in design mode by clicking with the right mouse button and controls can then be drawn on each tab as required.

The TabFrame controls within any form or container make up a <u>TabSet</u> and some of the properties apply to the TabSet as a whole. Since the TabFrame control is itself a container it is easy to create nested TabSets.

<u>Registration</u>

TabSet

A TabSet is a set of TabFrame controls within a form or container. Several of the TabFrame properties are synchronised across all TabFrame controls within a TabSet so that changing the property value for one of the TabFrame controls will automatically change the value for all other TabFrames in the TabSet.

Within a TabSet there is always one <u>active tab</u> and all controls on this tab will be visible. The other, inactive tabs, remain hidden until made active by clicking the tab with the mouse.

Active Tab

The active tab within a <u>TabSet</u> is the tab which is currently displayed. Only one tab may be active within a TabSet.

Appearance

Several properties are provided to control the appearance of the tabbed dialog.

TabWidth

TabHeight

Position

Style

ActiveColor

InactiveColor

Design Time Selection

Use of the TabFrame control in the Visual Basic design environment is simplified by allowing the user to select a tab by clicking on it with the right mouse button.

Note: Users of VBAssist will need to switch off the property pop-up function in order to select a new tab in this manner. Alternatively a new tab mey be selected from the control dropdown list in the Visual Basic (or VBAssist) property window.

Property Synchronisation

Many of the TabFrame properties, including some of the standard properties, are synchronised so that changing the value for one TabFrame control will automatically change the value for all other TabFrame controls on the same form. The properties which are synchronised in this way are listed below.

ActiveColor	FontSize(*)	Left
AutoFont	FontStrikethru(*)	Position
BackColor	FontUnderline(*)	Style
FontBold(*)	ForeColor(*)	TabHeight
FontItalic(*)	Height	Top
FontName(*)	InactiveColor	Width

Note: properties marked with an asterisk (*) are only synchronised if the AutoFont property is True.

Child 3D Effects

The TabFrame control can automatically add 3D effects to child controls which are drawn on it. The following properties are provided to control these effects.

Child3D
ChildBevel
ChildBevelWidth

Focus Tracking

When a new tab is selected the TabFrame control for the current tab can remember which control currently has the focus so that, when the tab is selected again, the focus can be automatically returned to the same control. This feature can be controlled using the FocusTracking property.

Properties

The following properties are supported by the TabFrame control.

<u>Standard Properties</u>

BackColor	FontName	Left
BorderStyle	FontSize	MousePointer
Caption	FontStrikethru	Name
ClipControls	FontUnderline	Parent
DragIcon	ForeColor	TabIndex
DragMode	Height	Tag
Enabled	HelpContextID	Top
FontBold	Hwnd	Visible
FontItalic	Index	Width

Custom Properties

<u>About</u>	<u>ChildBevel</u>	<u>Style</u>
<u>Active</u>	<u>ChildBevelWidth</u>	<u>TabHeight</u>
<u>ActiveColour</u>	<u>FocusTracking</u>	<u>TabNumber</u>
<u>AutoFont</u>	<u>InactiveColor</u>	<u>TabWidth</u>
<u>Child3D</u>	<u>Position</u>	

Standard Properties

For complete documentation on the standard properties supported by the TabFrame control please refer to the Visual Basic Language Reference. The comments below indicate where the TabFrame control differs from other controls in the use of these properties.

Caption - An ampersand (&) may be included in the caption for a TabFrame control in order to define a mnemonic character which can be used to select that tab and make it active.

Enabled - If the enabled property is set to False for a TabFrame control then the caption will no longer be displayed and the control will no longer respond to the mouse.

Visible - The visible property is managed automatically by the TabFrame control and should not be changed by the user. The currently <u>active tab</u> is always visible whilst inactive tabs are not.

Left, Top, Height and Width - These properties are <u>synchronised</u> across all TabFrames in a <u>TabSet</u> so that moving or resizing one TabFrame will automatically update the other TabFrames in the TabSet.

BackColor - This property is synchronised across all TabFrames in a TabSet. The default value is determined by the BackColor of the container in which the first TabFrame control is created.

Font Properties and ForeColor - If the <u>AutoFont</u> property is True then these properties are synchronised across all TabFrames in a TabSet.

[About]{.blue} Property

Description

Use this property to display the About dialog box which shows the TabFrame version number. Available only at design time.

Active Property

Description

Determines if a TabFrame is the currently <u>active tab</u> within a <u>TabSet</u>. This property is not available at design time.

Usage

[form.]TabFrame.Active[[= True]

Remarks

This property can be used to make a TabFrame control the currently active tab in a TabSet. It cannot, however, be used to make the currently active tab inactive directly - i.e. the property cannot be set to False. This may only be done by making another TabFrame in the TabSet active.

Data Type

Integer (Boolean)

See Also

<u>Activated Event</u>, <u>Deactivated Event</u>

TabNumber Property

Description

Determines the order in which the tabs are displayed - left to right.

Usage

[form.]TabFrame.TabNumber [= *numericexpression*]

Remarks

The valid range is any integer from 0 to (*n*-1) where *n* is the number of TabFrame controls in the TabSet.

By default the TabNumber of a new TabFrame control is set so that the tab appears to the right of all other TabFrames in the TabSet. If you change the TabNumber of a TabFrame control then the TabNumbers of other controls in the TabSet will be automatically updated to reflect insertions and deletions.

Data Type

Integer

TabWidth Property

Description

Determines the width, in Twips, of the tab.

Usage

[form.]TabFrame.TabWidth [= *numericexpression*]

Remarks

The default value of zero causes the tab width to be set automatically so that the TabFrame controls fill the width of the TabSet.

Data Type

Integer

See Also

TabHeight Property

TabHeight Property

Description

Determines the height, in Twips, of the tab. This property is <u>synchronised</u> across all TabFrames in a <u>TabSet</u>.

Usage

[form.]TabFrame.TabHeight [= *numericexpression*]

Remarks

The default value of zero causes the tab height to be set automatically based on the size of the largest font being used in the TabSet.

Data Type

Integer

See Also

<u>TabWidth Property</u>

Position Property

Description

Determines if the tab is shown at the top or bottom. This property is <u>synchronised</u> across all TabFrames in a <u>TabSet</u>.

Usage

[form.]TabFrame.Position [= *position*]

Remarks

The TabFrame Position property settings are :

Setting	Description
0	(Default) Tabs displayed at top.
1	Tabs displayed at bottom.

Data Type

Integer (Enumerated)

Style Property

Description

Determines how the TabFrame control is displayed. This property is <u>synchronised</u> across all TabFrames in a <u>TabSet</u>.

Usage

[form.]TabFrame.Style [= *style*]

Remarks

The TabFrame Style property settings are :

Setting	Description
0	2D
1	3D Raised (Active) - the <u>active tab</u> is shown raised.
2	(Default) 3D Raised (Both) - all tabs shown raised but with the active tab raised more than the inactive tabs.
3	3D Inset (Active) - the active tab is shown inset.
4	3D Inset (Both) - all tabs shown inset but with the active tab inset more than the inactive tabs.

If one of the 3D styles is chosen then both the ActiveColor and InactiveColor properties should be set to light grey - RGB(192,192,192).

Data Type

Integer (Enumerated)

See Also

<u>ActiveColor Property</u>, <u>InactiveColor Property</u>

ActiveColor Property

Description

Determines the background colour of the <u>active tab</u>. This property is <u>synchronised</u> across all TabFrames in a <u>TabSet</u>.

Usage

[form.]TabFrame.ActiveColor [= *color*]

Remarks

The TabFrame control uses the Microsoft Windows environment RGB scheme for colours and allows the following ranges of settings :

Range of Settings	Description
Normal RGB Colours	Colors specified by using the Color palette, or by using the RGB or QBColor functions in code.
System Default Colors	Colors specified with system color constants from CONSTANT.TXT, a Visual Basic file that specifies system defaults. The Windows environment substitutes the users choices as specified in the users Control Panel settings.

The default is light grey - RGB(192,192,192).

Data Type

Long

See Also

<u>InactiveColor Property</u>d

InactiveColor Property

Description

Determines the background colour of the inactive tab. This property is <u>synchronised</u> across all TabFrames in a <u>TabSet</u>.

Usage

[form.]TabFrame.InactiveColor [= *color*]

Remarks

The TabFrame control uses the Microsoft Windows environment RGB scheme for colours and allows the following ranges of settings :

Range of Settings	Description
Normal RGB Colours	Colors specified by using the Color palette, or by using the RGB or QBColor functions in code.
System Default Colors	Colors specified with system color constants from CONSTANT.TXT, a Visual Basic file that specifies system defaults. The Windows environment substitutes the users choices as specified in the users Control Panel settings.

The default is light grey - RGB(192,192,192).

Data Type

Long

See Also

<u>ActiveColor Property</u>d

AutoFont Property

Description

Deterimes whether or not font properties are synchronised across the Tabframes in a TabSet. This property is, itself, synchronised across all TabFrames in a TabSet.

Usage

[form.]TabFrame.AutoFont [= {True|False}]

Remarks

If the AutoFont property is True then the following standard properties are synchronised across all TabFrames in the TabSet :-

      ForeColor

      FontItalic

      FontName

      FontSize

      FontStrike

      FontUnder

The FontBold property setting is ignored and the font for the active tab is made bold whilst all other tabs are not bold.

If the AutoFont property is False then these properties (including FontBold) may be set independently for each TabFrame.

Data Type

Integer (Boolean)

FocusTracking Property

Description

Determines if a TabFrame remembers which control has the focus when it is made inactive and resets the focus to that control when it becomes <u>active</u> again.

Usage

[form.]TabFrame.FocusTracking [= {True|False}]

Remarks

When a new tab becomes active the focus will be set to a control on the new active tab if, and only if, the focus was previously on a control on the old active tab.

Data Type

Integer (Boolean)

Child3D Property

Description

Determines if the TabFrame control gives child controls a 3D effect.

Usage

[form.]TabFrame.Child3D [= *child3D*]

Remarks

The TabFrame Child3D property settings are :

Setting	Description
0	(Default) None - no child controls are given a 3D effect.
1	All - all child controls are given a 3D effect.
2	Tagged - all child controls where the Tag property is not null are given a 3D effect.
3	Not Graphical - all non-graphical child controls are given a 3D effect.
4	Not Containers - all non-container child controls are given a 3D effect.
5	Not Graphical - all non-graphical and non-container child controls are given a 3D effect.

Data Type

Integer (Enumerated)

See Also

ChildBevel Property, ChildBevelWidth Property

ChildBevel Property

Description

Determines the type of 3D effect given to child controls on the TabFrame.

Usage

[form.]TabFrame.ChildBevel [= *childbevel*]

Remarks

The TabFrame ChildBevel property settings are :

Setting	Description
0	(Default) Inset
1	Raised

Data Type

Integer (Enumerated)

See Also

Child3D Property, ChildBevelWidth Property

ChildBevelWidth Property

Description

Determines the width of the 3D effect given to child controls.

Usage

[form.]TabFrame.ChildBevelWidth [= *numericexpression*]

Remarks

The bevel width property is in pixels.

Data Type

Integer

See Also

Child3D Property, ChildBevel Property

Events

The following events are supported by the TabFrame control.

Standard Events

Click	DragOver	MouseUp
DblClick	MouseDown	
DragDrop	MouseMove	

Custom Properties

Activated   Deactivated

Standard Events

For complete documentation on the standard events supported by the TabFrame control please refer to the Visual Basic Language Reference. The comments below indicate where the TabFrame control differs from other controls in the use of these events.

Click and DblClick - These events will occur for the <u>active tab</u> whenever the mouse button is clicked (or double clicked) within the active tab area. Clicking the mouse button on an inactive tab will make that tab active while clicking in the tab area but not over a tab will be ignored.

MouseDown, MouseUp and MouseMove - These events will occur for the active tab whenever the mouse is moved or clicked within the area of the TabSet.

Activated Event

Description

Occurs whenever the TabFrame becomes active. This may be caused by the user clicking on the (inactive) tab with the left mouse button or when the TabFrame Active property is set True in code.

Syntax

Sub *ctlname_*Activated([Index as Integer])

Remarks

The argument Index identifies the control if it is part of a control array.

The activated event occurs after the new tab has become active.

See Also

Active Property, Deactivated Event

Deactivated Event

Description

Occurs whenever the TabFrame becomes inactive as a result of another TabFrame becoming active. This may be caused by the user clicking on another (inactive) tab with the left mouse button or when the TabFrame Active property for another tab is set True in code.

Syntax

Sub *ctlname*_Deactivated([Index as Integer,] Cancel as Integer)

Remarks

The argument index identifies the control if it is part of a control array.

The deactivated event occurs before the tab becomes inactive. Deactivation of the tab (and activation of a new tab) can be cancelled by setting the Cancel argument to True before returning.

See Also

Active Property, Activated Event

Methods

The following methods are supported by the TabFrame control.

     Drag   Move   Refresh   ZOrder

Registration

This version of the TabFrame control is fully functional but may only be used in the development environment. Any attempt to use this version in conjunction with an EXE file will display a dialog box identifying this as a demonstration version and the control will fail to load.

If you find the TabFrame control useful then you can receive a full version by registering as follows :

1) In the SWREG forum on Compuserve. The fee will be $40 and the registration ID will be posted in the MSBASIC forum as soon as it is assigned.

2) By sending a cheque or money order for £25 to :

     GC Consulting Services Ltd
     Fellsgarth House
     Hognaston
     Ashbourne
     Derbyshire DE6 1PR
     ENGLAND

In return for your registration you will receive the latest version of the TabFrame control and be eligible for product support (via the MSBASIC forum on Compuserve) and free product upgrades for a period of 12 months.

Any questions should be sent to Graham Cockell (Compuserve ID 100113,2774) via e-mail or the MSBASIC forum.