Programming Microsoft Windows with Visual Basic

Appendix I. Visual Basic Symbolic Constants

Contents

Alignment Constants

Align Property

Constant	Value	Description
vbAlignNone	0	Size and location set at design time or in code.
vbAlignTop	1	Picture box at top of form.
vbAlignBottom	2	Picture box at bottom of form.
vbAlignLeft	3	Picture box at left of form.
vbAlignRight	4	Picture box at right of form.

Alignment Property

Constant	Value	Description
vbLeftJustify	0	Left align.
vbRightJustify	1	Right align.
vbCenter	2	Center.

Border Property Constants

BorderStyle Property (Form)

Constant	Value	Description
vbBSNone	0	No border.
vbFixedSingle	1	Fixed single.
vbSizable	2	Sizable (forms only)
vbFixedDouble	3	Fixed double (forms only)

BorderStyle Property (Shape and Line)

Constant	Value	Description
vbTransparent	0	Transparent.
vbBSSolid	1	Solid.
vbBSDash	2	Dash.
vbBSDot	3	Dot.
vbBSDashDot	4	Dash-dot.
vbBSDashDotDot	5	Dash-dot-dot.
vbBSInsideSolid	6	Inside solid.

Clipboard Object Constants

Constant	Value	Description
vbCFLink	0xBF00	DDE conversation information.
vbCFRTF	0xBF01	Rich Text Format (.RTF file)
vbCFText	1	Text (.TXT file)
vbCFBitmap	2	Bitmap (.BMP file)
vbCFMetafile	3	Metafile (.WMF file)
vbCFDIB	8	Device-independent bitmap.
vbCFPalette	9	Color palette.

Color Constants

Colors

Constant	Value	Description
vbBlack	0x0	Black.
vbRed	0xFF	Red.
vbGreen	0xFF00	Green.
vbYellow	0xFFFF	Yellow.
vbBlue	0xFF0000	Blue.
vbMagenta	0xFF00FF	Magenta.
vbCyan	0xFFFF00	Cyan.
vbWhite	0xFFFFFF	White.

System Colors

Constant	Value	Description
vbScrollBars	0x80000000	Scroll bar color.
vbDesktop	0x80000001	Desktop color.
vbActiveTitleBar	0x80000002	Color of the title bar for the active window.
vbInactiveTitleBar	0x80000003	Color of the title bar for the inactive window.
vbMenuBar	0x80000004	Menu background color.
vbWindowBackground	0x80000005	Window background color.
vbWindowFrame	0x80000006	Window frame color.
vbMenuText	0x80000007	Color of text on menus.
vbWindowText	0x80000008	Color of text in windows.
vbTitleBarText	0x80000009	Color of text in caption, size box, and scroll arrow.
vbActiveBorder	0x8000000A	Border color of active window.
vbInactiveBorder	0x8000000B	Border color of inactive window.
vbApplicationWorkspace	0x8000000C	Background color of multiple-document interface (MDI)

System Colors (continued)

Constant	Value	Description
vbHighlight	0x8000000D	Background color of items selected in a control.
vbHighlightText	0x8000000E	Text color of items selected in a control.
vbButtonFace	0x8000000F	Color of shading on the face of command buttons.
vbButtonShadow	0x80000010	Color of shading on the edge of command buttons.
vbGrayText	0x80000011	Grayed (disabled)
vbButtonText	0x80000012	Text color on push buttons.
vbInactiveCaptionText	0x80000013	Color of text in an inactive caption.
vb3DHighlight	0x80000014	Highlight color for 3D display elements.
vb3DDKShadow	0x80000015	Darkest shadow color for 3D display elements.
vb3DLight	0x80000016	Second lightest of the 3D colors after vb3DHighlight.
vbInfoText	0x80000017	Color of text in ToolTips.
vbInfoBackground	0x80000018	Background color of ToolTips.

Control Constants

ComboBox Control

Constant	Value	Description
vbComboDropdown	0	Dropdown Combo.
vbComboSimple	1	Simple Combo.
vbComboDropdownList	2	Dropdown List.

ListBox Control

Constant	Value	Description
vbMultiSelectNone	0	None.
vbMultiSelectSimple	1	Simple.
vbMultiSelectExtended	2	Extended.

ScrollBar Control

Constant	Value	Description
vbSBNone	0	None.
vbHorizontal	1	Horizontal.
vbVertical	2	Vertical.
vbBoth	3	Both.

Shape Control

Constant	Value	Description
vbShapeRectangle	0	Rectangle.
vbShapeSquare	1	Square.
vbShapeOval	2	Oval.
vbShapeCircle	3	Circle.
vbShapeRoundedRectangle	4	Rounded rectangle.
vbShapeRoundedSquare	5	Rounded square.

Data Control Constants

Error Event Constants

Constant	Value	Description
vbDataErrContinue	0	Continue.
vbDataErrDisplay	1	(Default)

EditMode Property Constants

Constant	Value	Description
vbDataEditNone	0	No editing operation in progress.
vbDataEditMode	1	Edit method invoked; current record in copy buffer.
vbDataEditAdd	2	AddNew method invoked; current record hasn't been saved.

Options Property Constants

Constant	Value	Description
vbDataDenyWrite	1	Other users can't change records in recordset.
vbDataDenyRead	2	Other users can't read records in recordset.
vbDataReadOnly	4	No user can change records in recordset.
vbDataAppendOnly	8	New records can be added to the recordset, but existing records can't be read.
vbDataInconsistent	16	Updates can apply to all fields of the recordset.
vbDataConsistent	32	Updates apply only to those fields that will not affect other records in the recordset.
vbDataSQLPassThrough	64	Sends an SQL statement to an ODBC database.

Validate Event Action Constants

Constant	Value	Description
vbDataActionCancel	0	Cancel the operation when the Sub exits.
vbDataActionMoveFirst	1	MoveFirst method.
vbDataActionMovePrevious	2	MovePrevious method.
vbDataActionMoveNext	3	MoveNext method.
vbDataActionMoveLast	4	MoveLast method.
vbDataActionAddNew	5	AddNew method.
vbDataActionUpdate	6	Update operation (not UpdateRecord)
vbDataActionDelete	7	Delete method.
vbDataActionFind	8	Find method.
vbDataActionBookmark	9	The Bookmark property is set.
vbDataActionClose	10	Close method.
vbDataActionUnload	11	The form is being unloaded.

Beginning-of-File Constants

Constant	Value	Description
vbMoveFirst	0	Move to first record.
vbBOF	1	Move to beginning of file.

End-of-File Constants

Constant	Value	Description
vbMoveLast	0	Move to last record.
vbEOF	1	Move to end of file.
vbAddNew	2	Add new record to end of file.

Recordset-Type Constants

Constant	Value	Description
vbRSTypeTable	0	Table-type recordset.
vbRSTypeDynaset	1	Dynaset-type recordset.
vbRSTypeSnapShot	2	Snapshot-type recordset.

Date Constants

firstdayofweek Argument Values

Constant	Value	Description
vbUseSystem	0	Use NLS API setting.
vbSunday	1	Sunday
vbMonday	2	Monday
vbTuesday	3	Tuesday
vbWednesday	4	Wednesday
vbThursday	5	Thursday
vbFriday	6	Friday
vbSaturday	7	Saturday

firstweekofyear Argument Values

Constant	Value	Description
vbUseSystem	0	Use application setting if one exists; otherwise use NLS API setting.
vbFirstJan1	1	Start with week in which January 1 occurs (default)
vbFirstFourDays	2	Start with the first week that has at least four days in the new year.
vbFirstFullWeek	3	Start with the first full week of the year.

Return Values

Constant	Value	Description
vbSunday	1	Sunday
vbMonday	2	Monday
vbTuesday	3	Tuesday
vbWednesday	4	Wednesday
vbThursday	5	Thursday
vbFriday	6	Friday
vbSaturday	7	Saturday

DBGrid Control Constants

Alignment Constants

Constant	Value	Description
dbgLeft	0	Left.
dbgRight	1	Right.
dbgCenter	2	Center.
dbgGeneral	3	General.

BorderStyle Constants

Constant	Value	Description
dbgNone	0	None.
dbgFixedSingle	1	FixedSingle.

DataMode Constants

Constant	Value	Description
dbgBound	0	Bound.
dbgUnbound	1	Unbound.

DividerStyle Constants

Constant	Value	Description
dbgNoDividers	0	NoDividers.
dbgBlackLine	1	BlackLine.
dbgDarkGrayLine	2	DarkGrayLine.
dbgRaised	3	Raised.
dbgInset	4	Inset.
dbgUseForeColor	5	UseForeColor.

RowDividerStyle Constants

Constant	Value	Description
dbgNoDividers	0	NoDividers.
dbgBlackLine	1	BlackLine.
dbgDarkGrayLine	2	DarkGrayLine.
dbgRaised	3	Raised.
dbgInset	4	Inset.
dbgUseForeColor	5	UseForeColor.

Scroll Bar Constants

Constant	Value	Description
dbgNone	0	None.
dbgHorizontal	1	Horizontal.
dbgVertical	2	Vertical.
dbgBoth	3	Both.
dbgAutomatic	4	Automatic.

DDE Constants

linkerr (LinkError Event)

Constant	Value	Description
vbWrongFormat	1	Another application requested data in wrong format.
vbDDESourceClosed	6	Destination application attempted to continue after source closed.
vbTooManyLinks	7	All source links are in use.
vbDataTransferFailed	8	Failure to update data in destination.

LinkMode Property (Forms and Controls)

Constant	Value	Description
vbLinkNone	0	None.
vbLinkSource	1	Source (forms only)
vbLinkAutomatic	1	Automatic (controls only)
vbLinkManual	2	Manual (controls only)
vbLinkNotify	3	Notify (controls only)

Dir, GetAttr, and SetAttr Constants

Constant	Value	Description
vbNormal	0	Normal (default for Dir and SetAttr)
vbReadOnly	1	Read-only.
vbHidden	2	Hidden.
vbSystem	4	System file.
vbVolume	8	Volume label.
vbDirectory	16	Directory.
vbArchive	32	File has changed since last backup.

Drag-and-Drop Constants

DragOver Event

Constant	Value	Description
vbEnter	0	Source control dragged into target.
vbLeave	1	Source control dragged out of target.
vbOver	2	Source control dragged from one position in target to another.

Drag Method (Controls)

Constant	Value	Description
vbCancel	0	Cancel drag operation.
vbBeginDrag	1	Begin dragging control.
vbEndDrag	2	Drop control.

DragMode Property

Constant	Value	Description
vbManual	0	Manual.
vbAutomatic	1	Automatic.

Drawing Constants

DrawMode Property

Constant	Value	Description
vbBlackness	1	Black.
vbNotMergePen	2	Not Merge pen.
vbMaskNotPen	3	Mask Not pen.
vbNotCopyPen	4	Not Copy pen.
vbMaskPenNot	5	Mask pen Not.
vbInvert	6	Invert.
vbXorPen	7	Xor pen.
vbNotMaskPen	8	Not Mask pen.
vbMaskPen	9	Mask pen.
vbNotXorPen	10	Not Xor pen.
vbNop	11	No operation; output remains unchanged.
vbMergeNotPen	12	Merge Not pen.
vbCopyPen	13	Copy pen.
vbMergePenNot	14	Merge pen Not.
vbMergePen	15	Merge pen.
vbWhiteness	16	White.

DrawStyle Property

Constant	Value	Description
vbSolid	0	Solid.
vbDash	1	Dash.
vbDot	2	Dot.
vbDashDot	3	Dash-dot.
vbDashDotDot	4	Dash-dot-dot.
vbInvisible	5	Invisible.
vbInsideSolid	6	Inside solid.

Form Constants

Show Parameters

Constant	Value	Description
vbModal	1	Modal form.
vbModeless	0	Modeless form.

Arrange Method for MDI Forms

Constant	Value	Description
vbCascade	0	Cascade all nonminimized MDI child forms.
vbTileHorizontal	1	Horizontally tile all nonminimized MDI child forms.
vbTileVertical	2	Vertically tile all nonminimized MDI child forms.
vbArrangeIcons	3	Arrange icons for minimized MDI child forms.

WindowState Property

Constant	Value	Description
vbNormal	0	Normal.
vbMinimized	1	Minimized.
vbMaximized	2	Maximized.

Graphics Constants

FillStyle Property

Constant	Value	Description
vbFSSolid	0	Solid.
vbFSTransparent	1	Transparent.
vbHorizontalLine	2	Horizontal line.
vbVerticalLine	3	Vertical line.
vbUpwardDiagonal	4	Upward diagonal.
vbDownwardDiagonal	5	Downward diagonal.
vbCross	6	Cross.
vbDiagonalCross	7	Diagonal cross.

ScaleMode Property

Constant	Value	Description
vbUser	0	User.
vbTwips	1	Twips.
vbPoints	2	Points.
vbPixels	3	Pixels.
vbCharacters	4	Characters.
vbInches	5	Inches.
vbMillimeters	6	Millimeters.
vbCentimeters	7	Centimeters.

Grid Control Constants

ColAlignment, FixedAlignment Properties

Constant	Value	Description
grdAlignCenter	2	Center data in column.
grdAlignLeft	0	Left-align data in column.
grdAlignRight	1	Right-align data in column.

FillStyle Property

Constant	Value	Description
grdSingle	0	Changing Text property setting affects only active cell.
grdRepeat	1	Changing Text property setting affects all selected cells.

Help Constants

Constant	Value	Description
cdlHelpContext	0x1	Displays Help for a particular topic.
cdlHelpQuit	0x2	Notifies the Help application that the specified Help file is no longer in use.
cdlHelpIndex	0x3	Displays the index of the specified Help file.
cdlHelpContents	0x3	Displays the contents topic in the current Help file.
cdlHelpHelpOnHelp	0x4	Displays Help for using the Help application itself.
cdlHelpSetIndex	0x5	Sets the current index for multi-index Help.
cdlHelpSetContents	0x5	Designates a specific topic as the contents topic.
cdlHelpContextPopup	0x8	Displays a topic identified by a context number.
cdlHelpForceFile	0x9	Creates a Help file that displays text in only one font.
cdlHelpKey	0x101	Displays Help for a particular keyword.
cdlHelpCommandHelp	0x102	Displays Help for a particular command.
cdlHelpPartialKey	0x105	Calls the search engine in Windows Help.

Key Code Constants

Key Codes

Constant	Value	Description
vbKeyLButton	0x1	Left mouse button.
vbKeyRButton	0x2	Right mouse button.
vbKeyCancel	0x3	CANCEL key.
vbKeyMButton	0x4	Middle mouse button.
vbKeyBack	0x8	BACKSPACE key.
vbKeyTab	0x9	TAB key.
vbKeyClear	0xC	CLEAR key.
vbKeyReturn	0xD	ENTER key.
vbKeyShift	0x10	SHIFT key.
vbKeyControl	0x11	CTRL key.
vbKeyMenu	0x12	MENU key.

Key Codes (continued)

Constant	Value	Description
vbKeyPause	0x13	PAUSE key.
vbKeyCapital	0x14	CAPS LOCK key.
vbKeyEscape	0x1B	ESC key.
vbKeySpace	0x20	SPACEBAR key.
vbKeyPageUp	0x21	PAGE UP key.
vbKeyPageDown	0x22	PAGE DOWN key.
vbKeyEnd	0x23	END key.
vbKeyHome	0x24	HOME key.
vbKeyLeft	0x25	LEFT ARROW key.
vbKeyUp	0x26	UP ARROW key.
vbKeyRight	0x27	RIGHT ARROW key.
vbKeyDown	0x28	DOWN ARROW key.
vbKeySelect	0x29	SELECT key.
vbKeyPrint	0x2A	PRINT SCREEN key.
vbKeyExecute	0x2B	EXECUTE key.
vbKeySnapshot	0x2C	SNAPSHOT key.
vbKeyInsert	0x2D	INS key.
vbKeyDelete	0x2E	DEL key.
vbKeyHelp	0x2F	HELP key.
vbKeyNumlock	0x90	NUM LOCK key.

KeyA Through KeyZ Are the Same as Their ASCII Equivalents: 'A' Through 'Z'

Constant	Value	Description
vbKeyA	65	A key.
vbKeyB	66	B key.
vbKeyC	67	C key.
vbKeyD	68	D key.
vbKeyE	69	E key.
vbKeyF	70	F key.
vbKeyG	71	G key.
vbKeyH	72	H key.
vbKeyI	73	I key.
vbKeyJ	74	J key.
vbKeyK	75	K key.
vbKeyL	76	L key.
vbKeyM	77	M key.
vbKeyN	78	N key.
vbKeyO	79	O key.
vbKeyP	80	P key.
vbKeyQ	81	Q key.
vbKeyR	82	R key.
vbKeyS	83	S key.
vbKeyT	84	T key.

KeyA Through KeyZ (continued)

Constant	Value	Description
vbKeyU	85	U key.
vbKeyV	86	V key.
vbKeyW	87	W key.
vbKeyX	88	X key.
vbKeyY	89	Y key.
vbKeyZ	90	Z key.

Key0 Through Key9 Are the Same as Their ASCII Equivalents: '0' Through '9'

Constant	Value	Description
vbKey0	48	0 key.
vbKey1	49	1 key.
vbKey2	50	2 key.
vbKey3	51	3 key.
vbKey4	52	4 key.
vbKey5	53	5 key.
vbKey6	54	6 key.
vbKey7	55	7 key.
vbKey8	56	8 key.
vbKey9	57	9 key.

Keys on the Numeric Keypad

Constant	Value	Description
vbKeyNumpad0	0x60	0 key.
vbKeyNumpad1	0x61	1 key.
vbKeyNumpad2	0x62	2 key.
vbKeyNumpad3	0x63	3 key.
vbKeyNumpad4	0x64	4 key.
vbKeyNumpad5	0x65	5 key.
vbKeyNumpad6	0x66	6 key.
vbKeyNumpad7	0x67	7 key.
vbKeyNumpad8	0x68	8 key.
vbKeyNumpad9	0x69	9 key.
vbKeyMultiply	0x6A	MULTIPLICATION SIGN (*)
vbKeyAdd	0x6B	PLUS SIGN (+)
vbKeySeparator	0x6C	ENTER key.
vbKeySubtract	0x6D	MINUS SIGN (-)
vbKeyDecimal	0x6E	DECIMAL POINT (.)
vbKeyDivide	0x6F	DIVISION SIGN (/)

Function Keys

Constant	Value	Description
vbKeyF1	0x70	F1 key.
vbKeyF2	0x71	F2 key.
vbKeyF3	0x72	F3 key.
vbKeyF4	0x73	F4 key.
vbKeyF5	0x74	F5 key.
vbKeyF6	0x75	F6 key.
vbKeyF7	0x76	F7 key.
vbKeyF8	0x77	F8 key.
vbKeyF9	0x78	F9 key.
vbKeyF10	0x79	F10 key.
vbKeyF11	0x7A	F11 key.
vbKeyF12	0x7B	F12 key.
vbKeyF13	0x7C	F13 key.
vbKeyF14	0x7D	F14 key.
vbKeyF15	0x7E	F15 key.
vbKeyF16	0x7F	F16 key.

Menu Accelerator Constants

Constant	Value	Description
vbMenuAccelCtrlA	1	User-defined shortcut keystrokes.
vbMenuAccelCtrlB	2	User-defined shortcut keystrokes.
vbMenuAccelCtrlC	3	User-defined shortcut keystrokes.
vbMenuAccelCtrlD	4	User-defined shortcut keystrokes.
vbMenuAccelCtrlE	5	User-defined shortcut keystrokes.
vbMenuAccelCtrlF	6	User-defined shortcut keystrokes.
vbMenuAccelCtrlG	7	User-defined shortcut keystrokes.
vbMenuAccelCtrlH	8	User-defined shortcut keystrokes.
vbMenuAccelCtrlI	9	User-defined shortcut keystrokes.
vbMenuAccelCtrlJ	10	User-defined shortcut keystrokes.
vbMenuAccelCtrlK	11	User-defined shortcut keystrokes.

Menu Accelerator Constants (continued)

Constant	Value	Description
vbMenuAccelCtrlL	12	User-defined shortcut keystrokes.
vbMenuAccelCtrlM	13	User-defined shortcut keystrokes.
vbMenuAccelCtrlN	14	User-defined shortcut keystrokes.
vbMenuAccelCtrlO	15	User-defined shortcut keystrokes.
vbMenuAccelCtrlP	16	User-defined shortcut keystrokes.
vbMenuAccelCtrlQ	17	User-defined shortcut keystrokes.
vbMenuAccelCtrlR	18	User-defined shortcut keystrokes.
vbMenuAccelCtrlS	19	User-defined shortcut keystrokes.
vbMenuAccelCtrlT	20	User-defined shortcut keystrokes.
vbMenuAccelCtrlU	21	User-defined shortcut keystrokes.
vbMenuAccelCtrlV	22	User-defined shortcut keystrokes.
vbMenuAccelCtrlW	23	User-defined shortcut keystrokes.
vbMenuAccelCtrlX	24	User-defined shortcut keystrokes.
vbMenuAccelCtrlY	25	User-defined shortcut keystrokes.
vbMenuAccelCtrlZ	26	User-defined shortcut keystrokes.
vbMenuAccelF1	27	User-defined shortcut keystrokes.
vbMenuAccelF2	28	User-defined shortcut keystrokes.
vbMenuAccelF3	29	User-defined shortcut keystrokes.
vbMenuAccelF4	30	User-defined shortcut keystrokes.
vbMenuAccelF5	31	User-defined shortcut keystrokes.
vbMenuAccelF6	32	User-defined shortcut keystrokes.
vbMenuAccelF7	33	User-defined shortcut keystrokes.

Menu Accelerator Constants (continued)

Constant	Value	Description
vbMenuAccelF8	34	User-defined shortcut keystrokes.
vbMenuAccelF9	35	User-defined shortcut keystrokes.
vbMenuAccelF11	36	User-defined shortcut keystrokes.
vbMenuAccelF12	37	User-defined shortcut keystrokes.
vbMenuAccelCtrlF1	38	User-defined shortcut keystrokes.
vbMenuAccelCtrlF2	39	User-defined shortcut keystrokes.
vbMenuAccelCtrlF3	40	User-defined shortcut keystrokes.
vbMenuAccelCtrlF4	41	User-defined shortcut keystrokes.
vbMenuAccelCtrlF5	42	User-defined shortcut keystrokes.
vbMenuAccelCtrlF6	43	User-defined shortcut keystrokes.
vbMenuAccelCtrlF7	44	User-defined shortcut keystrokes.
vbMenuAccelCtrlF8	45	User-defined shortcut keystrokes.
vbMenuAccelCtrlF9	46	User-defined shortcut keystrokes.
vbMenuAccelCtrlF11	47	User-defined shortcut keystrokes.
vbMenuAccelCtrlF12	48	User-defined shortcut keystrokes.
vbMenuAccelShiftF1	49	User-defined shortcut keystrokes.
vbMenuAccelShiftF2	50	User-defined shortcut keystrokes.
vbMenuAccelShiftF3	51	User-defined shortcut keystrokes.
vbMenuAccelShiftF4	52	User-defined shortcut keystrokes.
vbMenuAccelShiftF5	53	User-defined shortcut keystrokes.
vbMenuAccelShiftF6	54	User-defined shortcut keystrokes.
vbMenuAccelShiftF7	55	User-defined shortcut keystrokes.

Menu Accelerator Constants (continued)

Constant	Value	Description
vbMenuAccelShiftF8	56	User-defined shortcut keystrokes.
vbMenuAccelShiftF9	57	User-defined shortcut keystrokes.
vbMenuAccelShiftF11	58	User-defined shortcut keystrokes.
vbMenuAccelShiftF12	59	User-defined shortcut keystrokes.
vbMenuAccelShiftCtrlF1	60	User-defined shortcut keystrokes.
vbMenuAccelShiftCtrlF2	61	User-defined shortcut keystrokes.
vbMenuAccelShiftCtrlF3	62	User-defined shortcut keystrokes.
vbMenuAccelShiftCtrlF4	63	User-defined shortcut keystrokes.
vbMenuAccelShiftCtrlF5	64	ser-defined shortcut keystrokes.
vbMenuAccelShiftCtrlF6	65	User-defined shortcut keystrokes.
vbMenuAccelShiftCtrlF7	66	User-defined shortcut keystrokes.
vbMenuAccelShiftCtrlF8	67	User-defined shortcut keystrokes.
vbMenuAccelShiftCtrlF9	68	ser-defined shortcut keystrokes.
vbMenuAccelShiftCtrlF11	69	User-defined shortcut keystrokes.
vbMenuAccelShiftCtrlF12	70	User-defined shortcut keystrokes.
vbMenuAccelCtrlIns	71	User-defined shortcut keystrokes.
vbMenuAccelShiftIns	72	User-defined shortcut keystrokes.
vbMenuAccelDel	73	User-defined shortcut keystrokes.
vbMenuAccelShiftDel	74	User-defined shortcut keystrokes.
vbMenuAccelAltBksp	75	User-defined shortcut keystrokes.

Menu Control Constants

PopupMenu Method Alignment

Constant	Value	Description
vbPopupMenuLeftAlign	0	Pop-up menu left-aligned.
vbPopupMenuCenterAlign	4	Pop-up menu centered.
vbPopupMenuRightAlign	8	Pop-up menu right-aligned.

PopupMenu Mouse Button Recognition

Constant	Value	Description
vbPopupMenuLeftButton	0	Pop-up menu recognizes left mouse button only.
vbPopupMenuRightButton and left mouse buttons.	2	Pop-up menu recognizes right

Miscellaneous Constants

ZOrder Method

Constant	Value	Description
vbBringToFront	0	Bring to front.
vbSendToBack	1	Send to back.

QueryUnload Method

Constant	Value	Description
vbAppWindows	2	Current Windows session ending.
vbFormMDIForm	4	MDI child form is closing because the MDI form is closing.
vbFormCode	1	Unload method invoked from code.
vbFormControlMenu	0	User has chosen Close command from the Control-menu box on a form.
vbAppTaskManager	3	Windows Task Manager is closing the application.

Shift Parameter Masks

Constant	Value	Description
vbShiftMask	1	SHIFT key bit mask.
vbCtrlMask	2	CTRL key bit mask.
vbAltMask	4	ALT key bit mask.

Button Parameter Masks

Constant	Value	Description
vbLeftButton	1	Left mouse button.
vbRightButton	2	Right mouse button.
vbMiddleButton	4	Middle mouse button.

Application Start Mode

Constant	Value	Description
vbSModeStandalone	0	Stand-alone application.
vbSModeAutomation	1	OLE automation server.

LoadResPicture Method

Constant	Value	Description
vbResBitmap	0	Bitmap resource.
vbResIcon	1	Icon resource.
vbResCursor	2	Cursor resource.

Check Value

Constant	Value	Description
vbUnchecked	0	Unchecked.
vbChecked	1	Checked.
vbGrayed	2	Grayed.

Mouse Pointer Constants

Constant	Value	Description
vbDefault	0	Default.
vbArrow	1	Arrow.
vbCrosshair	2	Cross.
vbIbeam	3	I beam.
vbIconPointer	4	Icon.
vbSizePointer	5	Size.
vbSizeNESW	6	Size NE, SW.
vbSizeNS	7	Size N, S.
vbSizeNWSE	8	Size NW, SE.
vbSizeWE	9	Size W, E.
vbUpArrow	10	Up arrow.
vbHourglass	11	Hourglass.
vbNoDrop	12	No drop.
vbArrowHourglass	13	Arrow and hourglass. (Only available in 32-bit Visual Basic 4.0.)
vbArrowQuestion	14	Arrow and question mark. (Only available in 32-bit Visual Basic 4.0.)
vbSizeAll	15	Size all. (Only available in 32-bit Visual Basic 4.0.)
vbCustom	99	Custom icon specified by the MouseIcon property.

MsgBox Constants

MsgBox Arguments

Constant	Value	Description
vbOKOnly	0	OK button only (default)
vbOKCancel	1	OK and Cancel buttons.
vbAbortRetryIgnore	2	Abort, Retry, and Ignore buttons.
vbYesNoCancel	3	Yes, No, and Cancel buttons.
vbYesNo	4	Yes and No buttons.
vbRetryCancel	5	Retry and Cancel buttons.
vbCritical	16	Critical message.
vbQuestion	32	Warning query.
vbExclamation	48	Warning message.
vbInformation	64	Information message.
vbDefaultButton1	0	First button is default (default)
vbDefaultButton2	256	Second button is default.
vbDefaultButton3	512	Third button is default.
vbApplicationModal	0	Application modal message box (default)
vbSystemModal	4096	System modal message box.

MsgBox Return Values

Constant	Value	Description
vbOK	1	OK button pressed.
vbCancel	2	Cancel button pressed.
vbAbort	3	Abort button pressed.
vbRetry	4	Retry button pressed.
vbIgnore	5	Ignore button pressed.
vbYes	6	Yes button pressed.
vbNo	7	No button pressed.

OLE Container Control Constants

OLEType Property

Constant	Value	Description
vbOLELinked	0	OLE container control contains a linked object.
vbOLEEmbedded	1	OLE container control contains an embedded object.
vbOLENone	3	OLE container control doesn't contain an object.

OLETypeAllowed Property

Constant	Value	Description
vbOLEEither	2	OLE container control can contain either a linked or an embedded object.

UpdateOptions Property

Constant	Value	Description
vbOLEAutomatic	0	Object is updated each time the linked data changes.
vbOLEFrozen	1	Object is updated whenever the user saves the linked document from within the application in which it was created.
vbOLEManual	2	Object is updated only when the Action property is set to 6 (Update)

AutoActivate Property

Constant	Value	Description
vbOLEActivateManual	0	OLE object isn't automatically activated.
vbOLEActivateGetFocus	1	Object is activated when the OLE container control gets the focus.
vbOLEActivateDoubleclick	2	Object is activated when the OLE container control is double-clicked.
vbOLEActivateAuto	3	Object is activated based on the object's default method of activation.

SizeMode Property

Constant	Value	Description
vbOLESizeClip	0	Object's image is clipped by the OLE container control's borders.
vbOLESizeStretch	1	Object's image is sized to fill the OLE container control.
vbOLESizeAutoSize	2	OLE container control is automatically resized to display the entire object.
vbOLESizeZoom	3	Object's image is stretched but in proportion.

DisplayType Property

Constant	Value	Description
vbOLEDisplayContent	0	Object's data is displayed in the OLE container control.
vbOLEDisplayIcon	1	Object's icon is displayed in the OLE container control.

Updated Event Constants

Constant	Value	Description
vbOLEChanged	0	Object's data has changed.
vbOLESaved	1	Object's data has been saved by the application that created the object.
vbOLEClosed	2	Application file containing the linked object's data has been closed.
vbOLERenamed	3	Application file containing the linked object's data has been renamed.

Special Verb Values

Constant	Value	Description
vbOLEPrimary	0	Default action for the object.
vbOLEShow	-1	Activates the object for editing.
vbOLEOpen	-2	Opens the object in a separate application window.
vbOLEHide	-3	For embedded objects, hides the application that created the object.
vbOLEInPlaceUIActivate	-4	All UI's associated with the object are visible and ready for use.
vbOLEInPlaceActivate	-5	Object is ready for the user to click inside it and start working with it.
vbOLEDiscardUndoState	-6	For discarding all record of changes that the object's application can undo.

Verb Flag Bit Masks

Constant	Value	Description
vbOLEFlagEnabled	0x0	Enabled menu item.
vbOLEFlagGrayed	0x1	Grayed menu item.
vbOLEFlagDisabled	0x2	Disabled menu item.
vbOLEFlagChecked	0x8	Checked menu item.
vbOLEFlagSeparator	0x800	Separator bar in menu item list.
vbOLEMiscFlagMemStorage	0x1	Causes control to use memory to store the object while it's loaded.
vbOLEMiscFlagDisableInPlace	0x2	Forces OLE container control to activate objects in a separate window.

VBTranslateColor/OLETranslateColor Constants

Constant	Value	Description
vbInactiveCaptionText	0x80000013	Color of text in an inactive caption.
vb3DHighlight	0x80000014	Highlight color for 3-D display elements.
vb3DFace	0x8000000F	Dark shadow color for 3-D display elements.
vbMsgBox	0x80000017	Background color for message boxes and system dialog boxes.
vbMsgBoxText	0x80000018	Color of text displayed in message boxes and system dialog boxes.
vb3DShadow	0x80000010	Color of automatic window shadows.
vb3DDKShadow	0x80000015	Darkest shadow.
vb3DLight	0x80000016	Second lightest of the 3-D colors (after vb3DHighlight)

Picture Object Constants

Constant	Value	Description
vbPicTypeBitmap	1	Bitmap type of Picture object.
vbPicTypeMetafile	2	Metafile type of Picture object.
vbPicTypeIcon	3	Icon type of Picture object.

Printer Object Constants

Printer Color Mode

Constant	Value	Description
vbPRCMMonochrome	1	Monochrome output.
vbPRCMColor	2	Color output.

Duplex Printing

Constant	Value	Description
vbPRDPSimplex	1	Single-sided printing.
vbPRDPHorizontal	2	Double-sided horizontal printing.
vbPRDPVertical	3	Double-sided vertical printing.

Printer Orientation

Constant	Value	Description
vbPRORPortrait	1	Documents print with the top at the narrow side of the paper.
vbPRORLandscape	2	Documents print with the top at the wide side of the paper.

Print Quality

Constant	Value	Description
vbPRPQDraft	-1	Draft print quality.
vbPRPQLow	-2	Low print quality.
vbPRPQMedium	-3	Medium print quality.
vbPRPQHigh	-4	High print quality.

PaperBin Property

Constant	Value	Description
vbPRBNUpper	1	Use paper from the upper bin.
vbPRBNLower	2	Use paper from the lower bin.
vbPRBNMiddle	3	Use paper from the middle bin.
vbPRBNManual	4	Wait for manual insertion of each sheet of paper.
vbPRBNEnvelope	5	Use envelopes from the envelope feeder.
vbPRBNEnvManual	6	Use envelopes from the envelope feeder, but wait for manual insertion.
vbPRBNAuto	7	(Default)
vbPRBNTractor	8	Use paper fed from the tractor feeder.

PaperBin Property (continued)

Constant	Value	Description
vbPRBNSmallFmt	9	Use paper from the small paper feeder.
vbPRBNLargeFmt	10	Use paper from the large paper bin.
vbPRBNLargeCapacity	11	Use paper from the large capacity feeder.
vbPRBNCassette	14	Use paper from the attached cassette cartridge.

PaperSize Property

Constant	Value	Description
vbPRPSLetter	1	Letter, 8 1/2 x 11 in.
vbPRPSLetterSmall	2	+A611Letter Small, 8 1/2 x 11 in.
vbPRPSTabloid	3	Tabloid, 11 x 17 in.
vbPRPSLedger	4	Ledger, 17 x 11 in.
vbPRPSLegal	5	Legal, 8 1/2 x 14 in.
vbPRPSStatement	6	Statement, 5 1/2 x 8 1/2 in.
vbPRPSExecutive	7	Executive, 7 1/2 x 10 1/2 in.
vbPRPSA3	8	A3, 297 x 420 mm.
vbPRPSA4	9	A4, 210 x 297 mm.
vbPRPSA4Small	10	A4 Small, 210 x 297 mm.
vbPRPSA5	11	A5, 148 x 210 mm.
vbPRPSB4	12	B4, 250 x 354 mm.
vbPRPSB5	13	B5, 182 x 257 mm.
vbPRPSFolio	14	Folio, 8 1/2 x 13 in.
vbPRPSQuarto	15	Quarto, 215 x 275 mm.
vbPRPS10x14	16	10 x 14 in.
vbPRPS11x17	17	11 x 17 in.
vbPRPSNote	18	Note, 8 1/2 x 11 in.
vbPRPSEnv9	19	Envelope #9, 3 7/8 x 8 7/8 in.
vbPRPSEnv10	20	Envelope #10, 4 1/8 x 9 1/2 in.
vbPRPSEnv11	21	Envelope #11, 4 1/2 x 10 3/8 in.
vbPRPSEnv12	22	Envelope #12, 4 1/2 x 11 in.
vbPRPSEnv14	23	Envelope #14, 5 x 11 1/2 in.
vbPRPSCSheet	24	C size sheet.
vbPRPSDSheet	25	D size sheet.
vbPRPSESheet	26	E size sheet.
vbPRPSEnvDL	27	Envelope DL, 110 x 220 mm.
vbPRPSEnvC3	29	Envelope C3, 324 x 458 mm.
vbPRPSEnvC4	30	Envelope C4, 229 x 324 mm.
vbPRPSEnvC5	28	Envelope C5, 162 x 229 mm.
vbPRPSEnvC6	31	Envelope C6, 114 x 162 mm.
vbPRPSEnvC65	32	Envelope C65, 114 x 229 mm.

PaperSize Property (continued)

Constant	Value	Description
vbPRPSEnvB4	33	Envelope B4, 250 x 353 mm.
vbPRPSEnvB5	34	Envelope B5, 176 x 250 mm.
vbPRPSEnvB6	35	Envelope B6, 176 x 125 mm.
vbPRPSEnvItaly	36	Envelope, 110 x 230 mm.
vbPRPSEnvMonarch	37	Envelope Monarch, 3 7/8 x 7 1/2 in.
vbPRPSEnvPersonal	38	Envelope, 3 5/8 x 6 1/2 in.
vbPRPSFanfoldUS	39	U.S. Standard Fanfold, 14 7/8 x 11 in.
vbPRPSFanfoldStdGerman	40	German Standard Fanfold, 8 1/2 x 12 in.
vbPRPSFanfoldLglGerman	41	German Legal Fanfold, 8 1/2 x 13 in.
vbPRPSUser	256	User-defined.

RasterOp Constants

Constant	Value	Description
vbDstInvert	0x00550009	Inverts the destination bitmap.
vbMergeCopy	0x00C000CA	Combines the pattern and the source bitmap.
vbMergePaint	0x00BB0226	Combines the inverted source bitmap with the destination bitmap by using Or.
vbNotSrcCopy	0x00330008	Copies the inverted source bitmap to the destination.
vbNotSrcErase	0x001100A6	Inverts the result of combining the destination and source bitmaps by using Or.
vbPatCopy	0x00F00021L	Copies the pattern to the destination bitmap.
vbPatInvert	0x005A0049L	Combines the destination bitmap with the pattern by using Xor.
vbPatPaint	0x00FB0A09L	Combines the inverted source bitmap with the pattern by using Or. Combines the result of this operation with the destination bitmap by using Or.
vbSrcAnd	0x008800C6	Combines pixels of the destination and source bitmaps by using And.

RasterOp Constants (continued)

Constant	Value	Description
vbSrcCopy	0x00CC0020	Copies the source bitmap to the destination bitmap.
vbSrcErase	0x00440328	Inverts the destination bitmap and combines the result with the source bitmap by using And.
vbSrcInvert	0x00660046	Combines pixels of the destination and source bitmaps by using Xor.
vbSrcPaint	0x00EE0086	Combines pixels of the destination and source bitmaps by using Or.

Shell Constants

Constant	Value	Description
vbHide	0	Window is hidden and focus is passed to the hidden window.
vbNormalFocus	1	Window has focus and is restored to its original size and position.
vbMinimizedFocus	2	Window is displayed as an icon with focus.
vbMaximizedFocus	3	Window is maximized with focus.
vbNormalNoFocus	4	Window is restored to its most recent size and position. The currently active window remains active.
vbMinimizedNoFocus	6	Window is displayed as an icon. The currently active window remains active.

StrConv Constants

Constant	Value	Description
vbUpperCase	1	Uppercases the string.
vbLowerCase	2	Lowercases the string.
vbProperCase	3	Uppercases first letter of every word in string.
vbWide*	4*	Converts narrow (single-byte) (double-byte)
vbNarrow*	8*	Converts wide (double-byte) (single-byte)
vbKatakana**	16**	Converts Hiragana characters in string to Katakana characters.
vbHiragana**	32**	Converts Katakana characters in string to Hiragana characters.
vbUnicode***	64***	Converts the string to Unicode using the default code page of the system.
vbFromUnicode***	128***	Converts the string from Unicode to the default code page of the system.

*Applies to Far East locales
**Applies to Japan only.
***Specifying this bit on 16-bit systems causes a run-time error
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Variant Type Constants

Constant	Value	Description
vbVEmpty	0	Empty (uninitialized)
vbVNull	1	Null (no valid data)
vbVInteger	2	Integer data type.
vbVLong	3	Long integer data type.
vbVSingle	4	Single-precision floating-point data type.
vbVDouble	5	Double-precision floating-point data type.
vbVCurrency	6	Currency (scaled integer)
vbVDate	7	Date data type.
vbVString	8	String data type.

VarType Constants

Constant	Value	Description
vbEmpty	0	Uninitialized (default)
vbNull	1	Contains no valid data.
vbInteger	2	Integer.
vbLong	3	Long integer.
vbSingle	4	Single-precision floating-point number.
vbDouble	5	Double-precision floating-point number.
vbCurrency	6	Currency.
vbDate	7	Date.
vbString	8	String.
vbObject	9	OLE Automation object.
vbError	10	Error.
vbBoolean	11	Boolean.
vbVariant	12	Variant (used only for arrays of Variants)
vbDataObject	13	Non-OLE Automation object.
vbByte	17	Byte
vbArray	8192	Array.