

Attributes

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-

ACCELERATOR

Enables you to define accelerator keys. If the end user presses an accelerator key, the double-click event occurs for the dialog element, or if no double-click event is available, the click event occurs. The accelerator key does not work if the corresponding event is suppressed.

Note:

User-defined accelerator keys overwrite identical operating system accelerator keys, with the exception of hot keys such as "Alt+Tab", "Ctrl+Esc", "Ctrl+Alt+Del", etc.

Applies to	Bitmap control, list box control, menu item, OLE container control, push button control, radio button control, signal, toggle button control, tool bar item.
Data Type	A253
Default Value	None
Possible Values	<p>The standard syntax is: [Ctrl+][Alt+][Shift+]<key> where <key> can be any of the following values: "A" to "Z" "0" to "9" (but not in conjunction with shift key) "F1" to "F12" (but not F1 on its own) "Num 0" to "Num 9" (=numeric keypad number keys) "Num Dec" (=numeric keypad decimal point key) "Num +" (=numeric keypad add key) "Num -" (=numeric keypad subtract key) "Num *" (=numeric keypad multiply key) "Num /" (=numeric keypad divide key) "Space" "Backspace" "Tab" "Enter" (=return key) "Esc" (=escape key) "Ins" (=insert key) "Del" (=delete key) "Home" "End" "Page Up" or "Page Down" "Left Arrow", "Right Arrow", "Up Arrow" or "Down Arrow" Examples: "3", "F7", "Shift+Page Up", "Alt+Enter", "Ctrl+Alt+G". Note that the key modifiers ("Ctrl", "Alt" and "Shift") can be specified in any order. Accelerators are not case-sensitive. Please keep in mind that F1 cannot be an accelerator and therefore help topics cannot be invoked this way.</p>

ACTIVE-CHILD

Specifies the active MDI child dialog (if any) for the specified MDI frame dialog.

Applies to	Dialog (MDI frame).
Data Type	HANDLE
Default Value	None
Possible Values	NULL-HANDLE / MDI child dialog handle

AUTOADJUST

Indicates whether the coordinates specified on dialog element creation are to be scaled in the case of scalable dialogs (i.e., dialogs created with a non-zero DPI attribute). This is useful for dynamically creating controls in scalable dialogs whose size and/or position is based on an existing dialog element.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	BOOLEAN
Default Value	TRUE for scalable dialogs; FALSE otherwise.
Possible Values	TRUE / FALSE

AUTOSELECT

Specifies whether the list box item under the mouse cursor is to be selected automatically, if not already selected, before a context menu is displayed. If the list box item is not already selected, the existing selection (if any) is cleared before selecting it in the case of multi-selection list boxes. Otherwise the existing selection is left intact.

Applies to	List box control.
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

BACKGROUND-COLOUR-NAME

Provides a choice of existing background colors.

When setting background colors, you have four possibilities:

- Use the BACKGROUND-COLOUR-NAME attribute and leave the value at DEFAULT (0). The color will then be determined by your color settings in the operating system.
- Use the BACKGROUND-COLOUR-NAME attribute and choose from one of the dialog editor's predefined colors. These are represented by the values 1 to 18.
- Define your own color by using the BACKGROUND-COLOUR-VALUE attribute in a dialog editor attributes window. To do so, you must first set the BACKGROUND-COLOUR-NAME attribute to CUSTOM (50). A dialog box appears where you can set values for the red, green, and blue elements of your color (RGB model).
- Set the color dynamically in event handler code by assigning a value to the attribute.

Note:

Under Windows NT Version 4.0, the push button control's background color will be displayed as the system default at runtime, regardless of the BACKGROUND-COLOUR-NAME value.

Applies to	Canvas control, control box control dialog (window, MDI frame, MDI child), edit area control, group frame control, input field control, list box control, OLE container control, push button control, radio button control, rectangle control, scroll bar control, selection box control, signal, table control, text constant control, toggle button control.
Data Type	I4
Default Value	DEFAULT (0)
Possible Values	See table below.

Possible Values

DEFAULT (0)	WHITE (1)	BLACK (2)
LTGRAY (3)	GRAY (4)	DKGRAY (5)
RED (6)	GREEN (7)	BLUE (8)
CYAN (9)	MAGENTA (10)	BROWN (11)
YELLOW (12)	LIGHTRED (13)	LIGHTGREEN (14)
LIGHTBLUE (15)	LIGHTCYAN (16)	LIGHTMAGENTA (17)
BRIGHTWHITE (18)	CUSTOM (50)	

Note:

The text representation can be substituted for the integer representation because the local data area NGULKEY1 (supplied in library SYSTEM) is automatically included in the event handler code.

BACKGROUND-COLOUR-VALUE

Provides a facility to define customized background colors.

When setting background colors, you have four possibilities:

- Define your own color by using the BACKGROUND-COLOUR-VALUE attribute in a dialog editor Attributes window. To do so, you must first set the BACKGROUND-COLOUR-NAME attribute to CUSTOM (50). A dialog box appears where you can set values for the red, green, and blue elements of your color (RGB model).
- Use the BACKGROUND-COLOUR-NAME attribute and leave the value at DEFAULT (0). Your color will then be determined by your color settings in the operating system.
- Use the BACKGROUND-COLOUR-NAME attribute and choose from one of the dialog editor's predefined colors. These are represented by the values 1 to 18.
- Set the color dynamically in event handler code by assigning a set of three RGB values to the attribute. To do so, you must first set the BACKGROUND-COLOUR-NAME attribute to CUSTOM (50). You enter the three RGB values in hexadecimal form, such as "H'FF0000".

Note:

Under Windows NT Version 4.0, the push button control's background color will be displayed as the system default at runtime, regardless of the BACKGROUND-COLOUR-VALUE value.

Applies to	Canvas control, control box control dialog (window, MDI frame, MDI child), edit area control, group frame control, input field control, list box control, OLE container control, push button control, radio button control, rectangle control, scroll bar control, selection box control, signal, table control, text constant control, toggle button control.
Data Type	B3
Default Value	None
Possible Values	Any red, green, and blue value from 1 to 253

BAR-ID

Specifies an identifier for a status bar or tool bar control. The value is used to identify the control between sessions when the bar layout is saved and restored via the SAVE-LAYOUT and LOAD-LAYOUT actions, and must therefore be unique within a dialog.

Applies to	Status bar control, tool bar control.
Data Type	I4
Default Value	0
Possible Values	0 to 250

BITMAP-FILE-NAME

Assigns a bitmap file to a dialog element or assigns an icon to a dialog. If no path information is supplied, the bitmap is searched for in the logon library's RES subdirectory first, then in the RES subdirectory of each steplib, then in the directory assigned to the environment variable NATGUI_BMP. If no bitmap file with this name exists in any of the search paths, the file "default.bmp" in the NATGUI_BMP directory is assigned.

Applies to	Dialogs (window, MDI frame, MDI child), bitmap control, menu item, signal, status bar pane, tool bar item.
Data Type	A253
Default Value	Empty string
Possible Values	Empty string, or file name of up to 253 alphanumeric characters

CELL-ATTRIBUTES

Determines whether the attributes FOREGROUND-COLOUR-NAME, BACKGROUND-COLOUR-NAME, FOREGROUND-COLOUR-VALUE, BACKGROUND-COLOUR-VALUE and DIL-TEXT of the table control apply to the whole table (FALSE) or to a single cell of the table (TRUE). If the above attributes apply to a cell, the ROW and COLUMN attribute of the table specify which cell is changed.

Applies to	Table Control
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

CHECKED

Determines whether a dialog element is checked (selected) or not.

Applies to	Menu item, radio button control, signal, table control, toggle button control, tool bar item.
Data Type	I4
Default Value	UNCHECKED
Possible Values	UNCHECKED / CHECKED

CLIENT-DATA

Data associated with a dialog element. Often, it is useful to store information such as a database key or an array index with a dialog element. This allows for quick retrieval of the client data. If you use this attribute with a dialog (window, MDI frame, MDI child), Natural automatically assigns the dialog ID and you may therefore only query this attribute.

Applies to	ActiveX control, Bitmap control, canvas control, context menu, column specification control, control box control dialog (window, MDI frame, MDI child), edit area control, graphic text control, input field control, line control, list box control, list box item, menu bar, menu item, OLE container control, push button control, radio button control, rectangle control, scroll bar control, selection box control, selection-box item, signal, status bar control, status bar pane, submenu control, table control, timer, tool bar control, toggle button control, tool bar, tool bar item.
Data Type	I4
Default Value	0
Possible Values	Any I4 value

CLIENT-HANDLE

Specifies a general-purpose attribute that can be used to store the handle of any GUI object. This attribute is not used by Natural itself.

Applies to	Dialogs (window, MDI frame, MDI child) and all dialog elements.
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE / any dialog or dialog element handle

CLIENT-KEY

Alphanumeric data associated with a dialog or a dialog element. Often, it is useful to store a text string with a dialog element to allow for direct access of the string. The CLIENT-DATA attribute enables you to assign an integer value to many dialog elements; the CLIENT-KEY attribute is used in conjunction with the attribute CLIENT-VALUE and enables you to store alphanumeric key/string pairs.

You first assign a value to the CLIENT-KEY attribute. This determines the key under which the string is to be stored for an instance of a dialog element. You then assign an alphanumeric string to the CLIENT-VALUE attribute of the dialog element.

It is advisable to reuse keys that are not needed because you may use only a limited number of keys.

You can query the CLIENT-VALUE of a dialog element by first setting the CLIENT-KEY attribute of the dialog element to the desired value and then accessing the CLIENT-VALUE attribute.

Note:

You cannot query the CLIENT-KEY for any type of dialog element (GUI control) because there can be several keys for one dialog element and it would not be clear which one should be queried in the particular context. To avoid this, you must know which CLIENT-KEY value your dialog element is using.

Applies to	Dialogs (window, MDI frame, MDI child) and all dialog elements.
Data Type	A253
Default Value	Empty string (no key/value pair will be assigned to the dialog element)
Possible Values	Empty string or any text string

CLIENT-VALUE

Alphanumeric data associated with a dialog or a dialog element. For a description of the context in which this attribute is used, see the attribute CLIENT-KEY.

Applies to	Dialogs (window, MDI frame, MDI child) and all dialog elements.
Data Type	A253
Default Value	Empty string (no key/value pair will be assigned to the dialog element)
Possible Values	Empty string or any text string

COLUMN

A COLUMN attribute value corresponds to exactly one ROW attribute value. The combination of these two denotes a cell inside a table control.

- To denote a cell of the table: COLUMN must be ≥ 1 and ROW must be ≥ 1 .
- To denote the first column in the table: COLUMN must be 0 and ROW must be 1.
- To denote the header row in the table: COLUMN must be 1 and ROW must be 0.

Applies to	Table control.
Data Type	I4
Default Value	1
Possible Values	0 - 9999

COLUMN-COUNT

Enables you to query the current number of columns in a table control. This table is set internally on creation of the table control. It cannot be changed.

Applies to	Table control.
Data Type	I4
Default Value	1
Possible Values	0 - 9999

COLUMN-TYPE

Determines the type of column in a column specification control (which itself is part of a table control). If, for example, the value is set to INPUTFIELD, all cells in this column behave as if they were input field controls.

Applies to	Column specification control.
Data Type	I4
Default Value	INPUTFIELD
Possible Values	INPUTFIELD / SELECTIONBOX / TOGGLEBUTTON

CONTEXT-MENU

Specifies the handle of the context menu associated with the control. A value of NULL-HANDLE indicates that the control has no context menu assigned. The context menu specified here overrides any default context menu displayed by the system. Note that, for table controls, the specified context menu is not displayed for a cell which is being edited. For MDI frames, the context menu applies to the MDI client area.

Applies to	ActiveX control, bitmap control, canvas control, dialog (window, MDI frame, MDI child), edit area control, input field control, list box control, push button control, radio button control, scroll bar control, selection box control, status bar control, table control, toggle button control, tool bar control.
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE / handle value of context menu.

DEFAULT-BUTTON

If you assign the handle value of a push button control to the dialog's DEFAULT-BUTTON attribute, the push button control's click event handler is triggered when the end user presses ENTER in the dialog. This is true unless another push button control has the focus, in which case pressing of ENTER triggers the focused button's click event handler. A push button control defined as DEFAULT-BUTTON overrides a push button control defined as OK button (STYLE = 'O'). Alternatively to a push button also an ActiveX control can be assigned to the DEFAULT_BUTTON attribute, provided it behaves like a button. These ActiveX controls are marked in the system registry with the style OLEMISC_ACTSLIKEBUTTON.

Note:

Default buttons have a black margin.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE or any push button control handle

DIL-TEXT

Determines the DIL text for a dialog element. The dynamic information line and the status line are updated with this text when this dialog element gets the focus. However, the text will only be displayed if HAS-DIL is TRUE. Then the DIL-TEXT will overlap the STATUS-TEXT value or vice versa, depending on which was modified last.

Applies to	ActiveX control, Bitmap control, canvas control, column specification control, edit area control, input field control, list box control, menu item, OLE container control, push button control, radio button control, scroll bar control, selection box control, signal, table control, toggle button control, tool bar item.
Data Type	A253
Default Value	Empty string
Possible Values	Empty string / any text

DOCKING

Specifies the sides of the owning dialog on which docking is allowed. In order for a dockable tool bar control to be able to dock, both the tool bar control and the owning dialog must allow docking on the specified side(s). The supported docking positions are: none (tool bar control may only be floated), top only, bottom only, left only, right only, horizontal (top or bottom), vertical (left or right) or any side.

Applies to	Dialog (window, MDI Frame), tool bar control.
Data Type	I4
Default Value	DL-ANY
Possible Values	DL-NONE / DL-LEFT / DL-TOP / DL-RIGHT / DL-BOTTOM / DL-VERT / DL-HORZ / DL-ANY

DPI

Specifies the number of dots (pixels) per logical inch in effect at the time the dialog was last saved from within the editor. This attribute, if non-zero, also indicates that the dialog is scalable.

Note:

The value of this attribute varies depending on whether small or large fonts (or a custom font size setting) are being used.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	I4
Default Value	0
Possible Values	0 - 200

DRAGGABLE

Determines whether the end user can use the mouse to drag a bitmap control onto another bitmap control in the same dialog. When dropping the bitmap control by releasing the mouse button, a drag and drop event will occur for the target bitmap control. Whenever a bitmap control is DRAGGABLE, you can also use the INQ-DRAG-DROP action provided with the PROCESS GUI statement to find out where the bitmap control was dropped.

Applies to	Bitmap control, tool bar control.
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

EDIT-MASK

Specifies a Natural edit mask for a dialog element that requires end user input. (An edit mask determines character by character the format in which the field values are to be entered and displayed.) You use this attribute to validate end user input. You can, however, only validate input if you use the "Linked Variable" option in the Attribute Source dialog box, which can be accessed by clicking on the STRING's "Source" button in the dialog element's Attributes window. When the dialog element loses the focus (the end user leaves the input-field), the content of the field is checked against the edit mask. If the input is not compatible with the edit mask, Natural displays a message box asking the end user to "Retry" or "Cancel".

Applies to	Input field control, selection box control.
Data Type	A253
Default Value	Empty string
Possible Values	Empty string / any Natural edit mask

EMBEDDED-OBJECT

The value of this attribute is the name of a Natural embedded object, which has the default file extension ".neo". When a value is assigned to an OLE container control's EMBEDDED-OBJECT attribute, Natural loads the embedded object into the container, discarding any previously loaded object. If the values of the SERVER-OBJECT and SERVER-PROGID attributes are set for the OLE container control, the value of the EMBEDDED-OBJECT attribute is removed.

Applies to	OLE container control.
Data Type	A253
Default Value	None
Possible Values	All file names (if a file name is specified without an extension, the extension ".neo" is added by default)

ENABLED

Determines whether the end user may use the dialog element (for input, for example) or whether the dialog element is disabled (greyed, for example).

Applies to	ActiveX control, Bitmap control, canvas control, context menu, control box control dialog (window, MDI frame, MDI child), edit area control, group frame control, input field control, list box control, menu item, OLE container control, push button control, radio button control, scroll bar control, selection box control, signal, status bar control, status bar pane, table control, toggle button control, tool bar control, tool bar item.
Data Type	BOOLEAN
Default Value	TRUE
Possible Values	TRUE / FALSE

EVENT-QUEUEING

Determines whether messages received from the windowing system for this dialog should be processed immediately. By default, certain messages are queued in order to be compatible with the behaviour of older Natural versions under Windows 3.x. This attribute allows event queueing to be disabled at the dialog level, causing these messages to be processed immediately.

Event queueing was introduced under Windows 3.x to serialize messages dispatched via nested message loops. Such nested message loops were common under Windows 3.x in order to wait for a potentially lengthy operation (such as a remote database access) without hanging Windows. This is no longer a problem under newer versions of Windows, because these are pre-emptive operating systems. As such, it is no longer possible for an application that is not processing its messages to hang the system. Therefore, it is usually preferable (especially for newly written applications) to turn event queueing off.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	BOOLEAN
Default Value	TRUE
Possible Values	TRUE / FALSE

FIRST-CHILD

The FIRST-CHILD attribute serves as a tool to query the first created child dialog element, that is, the dialog element one level below the (parent) dialog element. An example of such a child-parent relationship between dialog elements is the relationship between a dialog and several push button controls inside. With the FIRST-CHILD attribute, you query the push button control that has been created first inside the dialog. You use this attribute in conjunction with the SUCCESSOR attribute to "travel" through the hierarchy of dialog elements.

Applies to	Dialogs (window, MDI frame, MDI child) and all dialog elements.
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE (no child existing) / any dialog element handle

FIRST-COLUMN-WIDTH

Determines the width in pixels of the first column in a table control. The attribute is used if the HAS-FIRST-COLUMN attribute is TRUE for the table control.

Applies to	Table control.
Data Type	I4
Default Value	50
Possible Values	0 - 9999

FIRST-VISIBLE-COLUMN

Determines the index of the first visible column.

- If no frozen columns are defined, the first visible column is the leftmost column of the table.
- If frozen columns *are* defined, the first visible column is the first column displayed to the right of the frozen columns.

Applies to	Table control.
Data Type	I4
Default Value	1
Possible Values	0 - 9999

FIRST-VISIBLE-ROW

Determines the index of the row which is displayed at the top of the table.

Applies to	Table control.
Data Type	I4
Default Value	1
Possible Values	0 - 9999

FOLLOWS

Specifies the preceding dialog element in the (new) control sequence. The control sequence determines the order in which dialog elements receive the focus on repeated pressing of the TAB key (or arrow keys, for controls with the same group ID). It also determines which dialog element gets the focus on input of a mnemonic corresponding to a dialog element which cannot receive the focus itself (for example, a text-constant or group frame). By default, the FOLLOWS attribute is based on the SUCCESSOR chain. You can use this attribute to move a dialog element from its default position. Assigning a value of NULL-HANDLE moves the dialog element to the end of the control sequence, whereas assigning the handle of the parent dialog itself moves the dialog to the front of the control sequence. Assigning the handle of the control itself has the effect of removing the control from the control sequence such that it can no longer be reached via the TAB key.

When applied to dialogs, the FOLLOWS attribute returns the last dialog element in the control sequence. This enables complete enumeration of the control sequence in reverse order.

Applies to	ActiveX control, bitmap control, canvas control, control box control, dialog (window, MDI frame, MDI child), edit area control, group frame control, input field control, list box control, OLE container control, push button control, radio button control, scroll bar control, selection box control, status bar control, table control, text constant control, toggle button control, tool bar control.
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE / handle value of the desired predecessor in the control sequence.

FONT-HANDLE

Serves as a handle to assign a certain combination of font face, font size, and font style to a dialog element.

Assigning an existing font handle value to this attribute leads to the STRING of the dialog element being displayed in this font. You can use the same FONT-HANDLE for several dialog elements.

Applies to	Edit area control, graphic text control, group frame control, input field control, list box control, push button control, radio button control, selection box control, status bar control, table control, text constant control, toggle button control.
Data Type	HANDLE
Default Value	System font
Possible Values	System font / any other defined fonts

FONT-STRING

Sets the default font throughout a dialog. The default font must be set as a parameter while the dialog is being created with PROCESS GUI action ADD. If a dialog element inside the dialog contains text with no particular font assigned to it, this text will be displayed in the font specified by FONT-STRING. When you assign a FONT-STRING to a dialog, a font control is created internally, with the dialog being the parent of the font control. The font's handle can be queried from the dialog's FONT-HANDLE attribute.

Note:

If the FONT-STRING attribute has created fonts that are too large or too small for the dialog window layout, you can use this attribute to resize all fonts evenly throughout the dialog.

Applies to	Dialog.
Data Type	A253
Default Value	System font
Possible Values	Encoded string which can be edited in the dialog editor's dialog attributes window. Font strings consist of several fields separated by a delimiter character.

Possible Delimiter Characters

The default delimiter character is the slash "/".

Possible delimiter characters are:

"/", ",", "#", ":", ";", "|", "@", "\$", "%", "&".

Fields

1. The font's face name.
2. The font style: Empty, or equivalently, the word "Regular", or a combination of the keywords "Bold", "Italic", "Strikeout", and "Underlined", separated by blanks.
3. The font size: Either the size in points (here, an optional decimal point followed by one digit is allowed), or the size as "*width x height*". A positive value indicates character size, a negative value indicates cell size. A zero indicates that the system should choose a value for the field. The "*width x height*" notation allows for better portability across screen resolutions.
4. Character set information. A combination of keywords, one from each of the following subgroups, separated by blanks:

Character sets:	ANSI or SYMBOL or SHIFTJIS or OEM.
Fixed or variable-width font:	FIXED or VARIABLE.
Font family:	ROMAN or SCRIPT or SWISS or MODERN or DECORATIVE.
Print quality:	DRAFT or PROOF.

5. A character indicating the platform. For fonts selected under windows, this character is "W".
6. Platform-dependent field. For Windows, this is the clipping precision.
7. Platform-dependent field. For Windows, this is the output precision.

Sample String

/Arial/Bold/0 x -19/ ANSI VARIABLE SWISS DRAFT/W/2/0/

FOREGROUND-COLOUR-NAME

Provides a choice of existing foreground colors. Foreground colors also refer to text.

When setting foreground colors, you have four possibilities:

- Use the FOREGROUND-COLOUR-NAME attribute and leave the value at DEFAULT (0). The color will then be determined by your color settings in the operating system.
- Use the FOREGROUND-COLOUR-NAME attribute and choose from one of the dialog editor's predefined colors. These are represented by the values 1 to 18.
- Define your own color by using the FOREGROUND-COLOUR-VALUE attribute in a dialog editor attributes window. Here, you must first set the FOREGROUND-COLOUR-NAME attribute to CUSTOM (50). A dialog box appears where you can set values for the red, green, and blue elements of your color (RGB model).
- Set the color dynamically in the event handler code by assigning a value to the attribute.

Note:

Under Windows NT Version 4.0 and under Windows 95, a push button control's foreground color will be displayed as the system default at runtime, regardless of the FOREGROUND-COLOUR-NAME value.

Applies to	Canvas control, edit area control, graphic text control, group frame control, input field control, line control, push button control, radio button control, rectangle control, selection box control, table control, text constant control, toggle button control.
Data Type	I4
Default Value	DEFAULT (0)

Possible Values

DEFAULT (0)	WHITE (1)	BLACK (2)
LTGRAY (3)	GRAY (4)	DKGRAY (5)
RED (6)	GREEN (7)	BLUE (8)
CYAN (9)	MAGENTA (10)	BROWN (11)
YELLOW (12)	LIGHTRED (13)	LIGHTGREEN (14)
LIGHTBLUE (15)	LIGHTCYAN (16)	LIGHTMAGENTA (17)
BRIGHTWHITE (18)	CUSTOM (50)	

Note:

The text representation can be substituted for the integer representation because the local data area NGULKEY1 (supplied in library SYSTEM) is automatically included in the event handler code.

FOREGROUND-COLOUR-VALUE

Provides a facility to define customized foreground colors. Foreground colors also refer to text.

When setting foreground colors, you have four possibilities:

- Define your own color by using the FOREGROUND-COLOUR-VALUE attribute in a dialog editor Attributes window. Here, you must first set the FOREGROUND-COLOUR-NAME attribute to CUSTOM (50). A dialog box appears where you can set values for the red, green, and blue elements of your color (RGB model).
- Use the FOREGROUND-COLOUR-NAME attribute and leave the value at DEFAULT (0). Your color will then be determined by your color settings in the operating system.
- Use the FOREGROUND-COLOUR-NAME attribute and choose from one of the dialog editor's predefined colors. These are represented by the values 1 to 18.
- Set the color dynamically in event handler code by assigning a set of three RGB values to the attribute. To do so, you must first set the FOREGROUND-COLOUR-NAME attribute to CUSTOM (50). You enter the three RGB values in hexadecimal form, such as "H'FF0000".

Note:

Under Windows NT Version 4.0 and under Windows 95, a push button control's foreground color will be displayed as the system default at runtime, regardless of the FOREGROUND-COLOUR-VALUE value.

Applies to	Canvas control, edit area control, graphic text control, group frame control, input field control, line control, push button control, radio button control, rectangle control, selection box control, table control, text constant control, toggle button control.
Data Type	B3
Default Value	None
Possible Values	Any red, green, and blue value from 1 to 253

FROZEN-COLUMNS

Determines the number of columns on the left side of the table control that cannot be scrolled horizontally.

Applies to	Table control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

GROUP-ID

Assigns a group ID to a radio button control. Radio button controls with the same GROUP-ID value are regarded as a group; that is, only one radio button control out of this group may be CHECKED at any time.

Applies to	Radio button control.
Data Type	I4
Default Value	0
Possible Values	0 or any other integer value

HANDLE-VARIABLE

This attribute is only used in the context of the PROCESS GUI statement action ADD. It identifies the Natural variable which receives the handle of the newly created dialog element. Note that the value of this attribute is set at creation time of the corresponding dialog element; it cannot be queried or modified.

Data Type	HANDLE
Possible Values	Any Natural variable

Example:

```
DEFINE DATA LOCAL 1
#NEW2 HANDLE OF INPUTFIELD END-DEFINE
...
PROCESS GUI ACTION ADD WITH PARAMETERS HANDLE-VARIABLE
= #NEW2 TYPE = INPUTFIELD STRING
= 'NEW2' RECTANGLE-X
= 24 RECTANGLE-Y
= 30 RECTANGLE-W
= 176 RECTANGLE-H
= 28 ENABLED
= TRUE VISIBLE
= TRUE PARENT
= #DLG$WINDOW
END-PARAMETERS
```

HAS-DIL

Determines whether a status bar control or the status line of a dialog is updated with DIL-TEXTs. When applied to a dialog, the following interdependencies exist for the display of DIL-TEXTs and STATUS-TEXTs:

HAS-DIL	HAS-STATUS-BAR	DIL-TEXT	STATUS-TEXT
TRUE	TRUE	displayed	displayed
TRUE	FALSE	-	-
FALSE	TRUE	-	displayed
FALSE	FALSE	-	-

Applies to	Dialog (window, MDI frame, MDI child), status bar control.
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

HAS-FIRST-COLUMN

Determines whether the table control displays a first column to the left of the other columns. This first column consists of a button series to the left of each row. Each button is inscribed with the number of the row.

Applies to	Table control.
Data Type	BOOLEAN
Default Value	TRUE
Possible Values	TRUE / FALSE

HAS-HELP-BUTTON

Determines whether the dialog title bar has a help button or not. Selection of this button invokes help mode. You can then display help for a control simply by clicking on it with the left mouse button.

Note:

Even if this attribute is set to TRUE, Windows will not display the help button if the maximize and minimize buttons are also present.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

HAS-MENU-BAR

Indicates whether the dialog has a menu bar.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

HAS-STATUS-BAR

Determines whether a status bar is displayed at the bottom of the dialog window. This status bar displays the value of the STATUS-TEXT attribute or, if applicable, of the DIL-TEXT attribute of the dialog element that currently has the focus. For the display of DIL-TEXTs and STATUS-TEXTs, the following interdependencies exist:

HAS-DIL	HAS-STATUS-BAR	DIL-TEXT	STATUS-TEXT
TRUE	TRUE	displayed	displayed
TRUE	FALSE	-	-
FALSE	TRUE	-	displayed
FALSE	FALSE	-	-

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

HAS-SYSTEM-BUTTON

Determines whether the dialog has a system button or not. The system button is in the top left corner of the window and provides a menu with the platform's standard window functions (like Close or Minimize).

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	BOOLEAN
Default Value	TRUE
Possible Values	TRUE / FALSE

HAS-TOOLBAR

Determines whether the tool bar of a dialog (that is, the tool bar plus the tool bar items) is to be displayed or not. You use this attribute to dynamically switch the tool bar on and off. Note that the handle value of the tool bar must be assigned to the TOOLBAR-HANDLE attribute.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

HAS-TOOLTIP

Indicates whether tool tips are to be displayed for a tool bar or status bar control. If this attribute is set to FALSE, tool tip display is suppressed.

Applies to	Status-bar control, tool bar control.
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

HEADER-FONT-HANDLE

Serves as a handle to assign a certain combination of font face, font size, and font style to the first column and the header line of a table control. Assigning an existing font handle value to this attribute leads to the header being displayed in this font.

Applies to	Table control.
Data Type	HANDLE
Default Value	System font
Possible Values	System font / any other defined fonts

HEADER-HEIGHT

Determines the height (in pixels) of the header line in a table control. To add a header line, the table control's STYLE attribute must include the letter "h".

Applies to	Table control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

HELP-FILENAME

Determines a dialog's help file name usually without extension. It is assumed that the extension is ".chm" or ".hlp". If the end user presses F1 in an active dialog, Natural first queries for a file with the value of HELP-FILENAME plus the extension ".chm". If it does not find such a file, it queries for a file with the value of HELP-FILENAME plus the extension ".hlp". If HELP-FILENAME is not specified for the current dialog, the HELP-FILENAME of the parent dialog (if any) is used, if specified. This process is repeated as necessary until a top-level dialog is reached. If no non-empty HELP-FILENAME attribute is found for any of these dialogs, Natural searches for the file *libraryname.chm* first, then (if not found) *libraryname.hlp*, where *libraryname* is the name of the logon library.

The HELP-FILENAME attribute can also contain path information. If this is the case, then only that path is searched. If no path information is supplied, the help file is searched for in the logon library's RES subdirectory first, then in the RES subdirectory of each steplib, then in the directory assigned to the environment variable NATGUI_BMP.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	A253
Default Value	None
Possible Values	Any file name

HELP-ID

The help ID to be passed to the help system whenever the end user requests help for the dialog or dialog element that has the focus by pressing F1. In most help systems, this help ID is referred to as topic number.

If the dialog or dialog element with the focus does not provide a HELP-ID, the HELP-ID of its parent is taken.

Applies to	ActiveX control, Bitmap control, canvas control, column specification control, context menu dialog (window, MDI frame, MDI child), edit area control, input field control, list box control, menu bar, OLE container control, push button control, radio button control, scroll bar control, selection box control, submenu control, table control, toggle button control.
Data Type	I4
Default Value	0
Possible Values	0 or any other integer value

HORIZ-SCROLLABLE

Determines whether the dialog or dialog element has a horizontal scroll bar or not.

Applies to	Dialog (window, MDI frame, MDI child), edit area control, table control.
Data Type	BOOLEAN
Default Value	TRUE
Possible Values	TRUE / FALSE

ICONIZED

Determines whether the OLE container control represents data visually inside the control's borders or whether data are displayed as the server application's icon (useful for sound or video).

Applies to	OLE container control.
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

INPLACE-ACTIVE

Determines whether the server of the OLE container control is in-place active or not.

Applies to	OLE container control.
Data Type	BOOLEAN
Default Value	TRUE
Possible Values	TRUE / FALSE

ITEM-H

Determines the height of all items in the tool bar. For status bar controls, this is the minimum pane height.

Applies to	Status bar control, tool bar, tool bar control.
Data Type	I4
Default Value	0 (system default)
Possible Values	0 - 9999

ITEM-W

Determines the width of all items in the tool bar.

Applies to	Tool bar, tool bar control.
Data Type	I4
Default Value	0 (system default)
Possible Values	0 - 9999

LAST-CHILD

Contains the handle of the dialog element's last child dialog element, or NULL-HANDLE if the dialog element has no children. You can use this attribute in conjunction with the PREDECESSOR and PARENT attributes to traverse the parent/child hierarchy in the reverse direction.

Applies to	Dialogs (window, MDI frame, MDI child) and all dialog elements.
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE (no child existing) / any dialog element handle.

LENGTH

Specifies the maximal length of a string to be entered by the end user. If you have set an EDIT-MASK attribute for the same dialog element, the edit mask overrides the LENGTH specified here.

Applies to	Column specification control, edit area control, input field control, selection box control.
Data Type	I4
Default Value	0 (= unlimited) 253 for input field controls and selection box controls. Maximum system limits for edit area controls.
Possible Values	0 - 30000 for edit area controls, or 0 - 253 for input field controls and selection box controls (and column specification controls based on these two types).

LINE

Determines the number of logical units by which a scroll bar control's slider moves if the end user presses the UP ARROW and DOWN ARROW buttons.

Inside a numeric scale limited by the values of the scroll bar control's MIN and MAX attributes, the value of this attribute determines the size of the steps by which the slider will be moved. If you set a small value in relation to the MIN and MAX attributes, the slider will move continuously. If you set a larger value, the slider will move in visible steps.

Applies to	Scrollbar control.
Data Type	I4
Default Value	0
Possible Values	0 or any integer value

LINKED

Determines whether the variable specified for the dialog element is linked or not. Setting this attribute to TRUE and then assigning a Natural variable to the VARIABLE attribute has the same effect as specifying a "Linked Variable" in a source dialog box of a "String" attribute window.

Applies to	Input field control, selection box control.
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

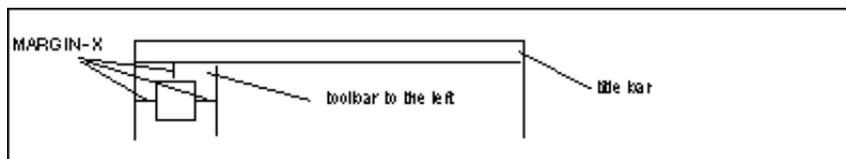
LOCATION

Specifies the position (top, bottom, left, right) of a status bar or tool bar control relative to the associated dialog. For dockable tool bars floated in a separate window, the location is represented by the value TB-FLOAT. Status-bar controls may only be positioned at the top or bottom of a dialog.

Applies to	Status-bar control, tool bar control.
Data Type	I4
Default Value	TB-TOP
Possible Values	TB-TOP / TB-BOTTOM / TB-LEFT / TB-RIGHT / TB-FLOAT

MARGIN-X

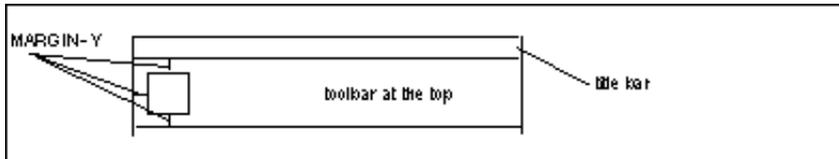
Determines which margin to the left, to the right and above the tool bar items is displayed in the tool bar area. This attribute only applies if TOOLBAR-POS is set to TB-LEFT or TB-RIGHT.



Applies to	Status bar control, tool bar, tool bar control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

MARGIN-Y

Determines which margin to the left, above and below the tool bar items is displayed in the tool bar area. This attribute only applies if TOOLBAR-POS is set to TB-TOP or TB-BOTTOM.



Applies to	Status bar control, tool bar, tool bar control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

MAX

Determines the maximum value on a scroll bar control's (numeric) scale. When using a scroll bar control, you must always determine values for the MIN and MAX attributes to set limits to the scale.

Note:

The difference between the values of the MAX and MIN attributes must be less than 32767.

Applies to	Scrollbar control.
Data Type	I4
Default Value	0
Possible Values	0 or any integer value between -32767 and 32767; must be larger than the value of the MIN attribute.

MAXIMIZABLE

Determines whether the dialog has a maximize button in the top right corner. This button enables you to maximize the dialog so that it covers the whole screen.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	BOOLEAN
Default Value	TRUE
Possible Values	TRUE / FALSE

MAXIMIZED

If this attribute is set, the dialog is maximized to full screen size and the dialog's size event occurs. If you have specified a size event handler code section, this code section will be triggered. An MDI child window will be maximized to fill the MDI frame window's client area.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

MENU-HANDLE

When used with a dialog, it creates a link between a menu bar plus its submenu controls, its items, and this dialog. The menu is then displayed at the top of the dialog. When the MENU-HANDLE attribute is modified to NULL-HANDLE, the menu disappears without being destroyed. When used with a menu item, it creates a link between a submenu control and this menu item. The menu structure is then nested by one more level. Several dialogs may be linked to the same menu bar, but you may only link one menu bar to a dialog.

Applies to	Dialog (window, MDI frame, MDI child), menu item.
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE / any handle of a menu bar

MENU-ITEM-OLE

Determines whether a top-level menu item or a submenu control represents the OLE Container or File or Window group or not. If a dialog has a menu bar and an OLE container control is being edited in-place, the submenus of the OLE server application are merged into the Natural menu bar. The Natural contribution to the merged menu consists of the submenu controls called File, Container, and Window, depending on what you set with this attribute. The server application's contribution are the submenu controls called Edit, Object, and Help.

Applies to	Menu item, submenu control.
Data Type	I4
Default Value	MO-NORMAL

Possible Values

MO-NORMAL	No OLE menu item.
MO-CONTAINER	OLE Container group.
MO-FILE	OLE File group.
MO-WINDOW	OLE Window group.

MENU-ITEM-TYPE

Determines the function of a menu item.

The values MT-CUT, MT-COPY, MT-PASTE, MT-DELETE and MT-UNDO are predefined functions that are executed by the windowing system. They are automatically enabled or disabled depending on the focus and on the selection.

Applies to	Menu item, signal, tool bar item.
Data Type	I4
Default Value	MT-NORMAL

Possible Values

MT-NORMAL	This is a menu item on the lowest level of the menu structure. Only items of this type can have an event handler.
MT-SEPARATOR	Items of this type are displayed as horizontal line in a submenu to separate menu items optically.
MT-CUT	Items of this type allow the end user to cut a selected portion of text and copy it to the clipboard. (The cut text is in the dialog element that currently has the focus).
MT-COPY	Items of this type allow the end user to copy a selected portion of text to the clipboard. (The copied text is in the dialog element that currently has the focus).
MT-PASTE	Items of this type allow the end user to paste the portion of text that is in the clipboard. (The text is pasted into the dialog element that currently has the focus).
MT-DELETE	Items of this type allow the end user to delete a selected portion of text. (The deleted text is in the dialog element that currently has the focus).
MT-UNDO	Items of this type allow the end user to undo a text input operation. The previous text input operation is undone in the dialog element that currently has the focus.
MT-SUBMENU	Items of this type represent a submenu. When selected, a (*) submenu drops down.
MT-WINDOWMENU	Items of this type also represent a submenu, only that all MDI (*) children are entered automatically into it.
MT-MDITILE	Arranges the MDI children of an MDI frame dialog in a tile (**) manner.
MT-MDICASCADE	Arranges the MDI children of an MDI frame dialog in a cascade (**) manner.
MT-MDIARRANGE (**)	Arranges the iconized MDI children of an MDI frame dialog.
MT-OBJECTVERBS	Displays and enables the verbs (actions) available for an OLE container control in the current dialog if the OLE container control has the focus and is assigned to an OLE server application. If the focus is on another dialog element, the disabled entry "Object" appears.

* If you create a menu item of this type, you must assign the handle value of the submenu control to the MENU-HANDLE attribute.

** Menu items of this type must be contained in a menu item of type MT-WINDOWMENU.

Note:

The local data area NGULKEY1 in library SYSTEM lists reserved keywords to be used in any event handler code. This enables you to refer to the above attribute values by the more meaningful keywords rather than by the IDs. It

also enables you to use meaningful dialog element names as parameters in a CALLNAT to an NGU-prefixed subprogram or in an OPEN DIALOG to an NGU-prefixed Dialog or in a PROCESS GUI statement action.

MIN

Determines the minimum value on a scroll bar control's (numeric) scale. When using a scroll bar control, you must always determine values for the MIN and MAX attributes to set limits to the scale.

Note:

The difference between the values of the MAX and MIN attributes must be less than 32767.

Applies to	Scrollbar control.
Data Type	I4
Default Value	0
Possible Values	0 or any integer value between -32767 and 32767; must be smaller than the value of the MAX attribute.

MINIMIZABLE

Determines whether the dialog has a minimize button in the top right corner. This button enables you to minimize the dialog to an icon.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	BOOLEAN
Default Value	TRUE
Possible Values	TRUE / FALSE

MINIMIZED

If this attribute is set, the dialog is minimized and appears as an icon and the dialog's size event occurs. If you have specified a size event handler code section, this code section will be triggered.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

MODIFIABLE

Determines whether the content in a dialog element can be edited or not. If the attribute's value is set to TRUE, the dialog element's text can be edited; if the value is set to FALSE, the dialog element can only be used for output (but it remains scrollable, as opposed to ENABLED = FALSE). If MODIFIABLE is FALSE for an OLE container control that has been activated for in-place editing, the OLE object can not be modified.

Applies to	Column specification control, edit area control, input field control, OLE container control, selection box control, table control.
Data Type	BOOLEAN
Default Value	TRUE
Possible Values	TRUE / FALSE

MODIFIED

If set to TRUE, the content of a dialog element (e.g., *STRING* attribute for an input field control, *CHECKED* attribute for a toggle button control, etc.) has been modified since the last resetting of the *MODIFIED* attribute. It may be modified either directly by user interaction or indirectly by an event handler: either the open event handler resets it indirectly on opening the dialog or the user resets it directly in the attributes window of the dialog that contains the dialog element in question.

Applies to	Dialog (window, MDI frame, MDI child), edit area control, input field control, list box control, radio button control, scroll bar control, selection box control, table control, toggle button control.
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

MODIFIED-SUCCESSOR

Gets all modified dialog elements of a dialog one after the other. To get the first modified dialog element in a dialog, you use the handle of the dialog to query the attribute value. To get the next modified dialog element, you use the handle of the dialog element queried last. If no more modified dialog elements are found, a NULL-HANDLE is returned and the query for a modified successor is ended. If you query the MODIFIED-SUCCESSOR of a dialog (window, MDI frame, MDI child), the handle value of the dialog's first modified child will be returned.

To get the selected items of a list box control, you use the SELECTED-SUCCESSOR attribute.

Applies to	Dialog (window, MDI frame, MDI child), edit area control, input field control, list box control, radio button control, scroll bar control, selection box control, table control, toggle button control.
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE / any dialog element handle

MULTI-SELECTION

Determines whether a list box control offers a multiple selection or not. If set to TRUE, you can get the selected items using the SELECTED-SUCCESSOR attribute.

Applies to	List box control.
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

NAME

Specifies the dialog's object name, without the ".NS3" file extension.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	A8
Default Value	None
Possible Values	Name of dialog object.

OBJECT-SIZE

Determines the size of the object in the OLE container control.

Applies to	OLE container control.
Data Type	I4
Default Value	0
Possible Values	0 or any other integer value.

OFFSET-X

Determines the x-axis offset on a canvas control. If, for example, a line control that was created on a canvas control exceeds the size of the canvas control, the line is clipped and the exceeding rectangular area is not displayed. The OFFSET-X attribute determines the x-axis offset of the canvas control's upper border against the upper border of the exceeding area.

Applies to	Canvas control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

OFFSET-Y

Determines the y-axis offset on a canvas control. If, for example, a line control that was created on a canvas control exceeds the size of the canvas control, the line is clipped and the exceeding rectangular area is not displayed. The OFFSET-Y attribute determines the y-axis offset of the canvas control's upper border against the upper border of the exceeding area.

Applies to	Canvas control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

P1-X

Determines a line control's start position on the x-axis.

Applies to	Line control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

P1-Y

Determines a line control's start position on the y-axis.

Applies to	Line control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

P2-X

Determines a line control's end (target) position on the x-axis.

Applies to	Line control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

P2-Y

Determines a line control's end (target) position on the y-axis.

Applies to	Line control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

PAGE

Determines the number of logical units by which a scroll bar control's slider moves if the end user clicks inside the scroll bar control's shaft.

Within a numeric scale limited by the values of the scroll bar control's MIN and MAX attributes, the value of this attribute determines the size of the steps by which the slider will be moved. If you set a small value in relation to the MIN and MAX attributes, the slider will move continuously. If you set a larger value, the slider will move in visible steps.

Applies to	Scrollbar control.
Data Type	I4
Default Value	0
Possible Values	0 or any other integer value

PARENT

Determines the parent handle of a dialog or a dialog element in the hierarchy. At the top of the hierarchy are one or several base dialogs; these are the parents of the dialog elements contained in them. These children may themselves contain children, such as controls in a child dialog. Children on the same level are called siblings. They may be enumerated using the SUCCESSOR attribute with the same parent.

The parent/child relationship can only be changed by "deleting" a child and creating a new one.

Applies to	Dialogs (window, MDI frame, MDI child) and all dialog elements.
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE / any dialog element

POPUP-HELP

Determines whether help invoked for the dialog or one of its controls via the title bar help button or pressing F1 should be displayed in a popup window. A popup window is a tool tip style window usually containing only text, which is automatically removed when the window loses the focus.

Help for popup windows can be created via the Help Organizer in the same way as for non-popup help. For HTML help, it is currently necessary to enter popup help text into a separate text file, which is then compiled into the help file together with the HTML topics.

Note:

To invoke the popup help in the latter case, it is necessary to explicitly specify the name of the text file in the HELP-FILENAME attribute via the syntax "*helpfilename.chm::/textfilename.txt*". Please refer to your HTML authoring tool help for further information.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

PREDECESSOR

Contains the handle of the previous dialog element with the same PARENT in the parent/child hierarchy, or NULL-HANDLE if no such dialog element exists. You can use this attribute to go through all dialog elements in one parent dialog or dialog element in reverse order.

Applies to	Dialogs (window, MDI frame, MDI child) and all dialog elements.
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE / handle value of the predecessor.

RECTANGLE-H

Represents the height of a dialog element.

Applies to	ActiveX control, Bitmap control, canvas control, control box control dialog (window, MDI frame, MDI child), edit area control, graphic text control, group frame control, input field control, list box control, OLE container control, push button control, radio button control, rectangle control, scroll bar control, selection box control, status bar control, table control, text constant control, tool bar control, toggle button control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

RECTANGLE-W

Represents the width of a dialog element. If used with a column specification control, it represents the width of the column in pixels.

Applies to	ActiveX control, Bitmap control, canvas control, column specification control, control box control dialog (window, MDI frame, MDI child), edit area control, graphic text control, group frame control, input field control, list box control, OLE container control, push button control, radio button control, rectangle control, scroll bar control, selection box control, status bar control, status bar pane, table control, text constant control, tool bar control, toggle button control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

RECTANGLE-X

Represents the dialog element's location on the x-axis relative to the top left corner of its parent's client area.

Applies to	ActiveX control, Bitmap control, canvas control, control box control dialog (window, MDI frame, MDI child), edit area control, graphic text control, group frame control, input field control, list box control, OLE container control, push button control, radio button control, rectangle control, scroll bar control, selection box control, status bar control, table control, text constant control, tool bar control, toggle button control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

RECTANGLE-Y

Represents the dialog element's location on the y-axis relative to the top left corner of its parent's client area.

Applies to	ActiveX control, Bitmap control, canvas control, control box control dialog (window, MDI frame, MDI child), edit area control, graphic text control, group frame control, input field control, list box control, OLE container control, push button control, radio button control, rectangle control, scroll bar control, selection box control, status bar control, table control, text constant control, tool bar control, toggle button control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

ROW

A ROW attribute value corresponds to exactly one COLUMN attribute value. The combination of these two denotes a cell inside a table control.

- To denote a cell of the table: COLUMN must be ≥ 1 and ROW must be ≥ 1 .
- To denote the first column in the table: COLUMN must be 0 and ROW must be 1.
- To denote the header row in the table: COLUMN must be 1 and ROW must be 0.

Applies to	Table control.
Data Type	I4
Default Value	1
Possible Values	0 - 9999

ROW-COUNT

Enables you to query the current number of rows in a table control. Does not allow you to set or modify this number.

Applies to	Table control.
Data Type	I4
Default Value	1
Possible Values	0 - 9999

ROW-HEIGHTx

Determines the height of all rows in a table control (except the header row).

Applies to	Table control.
Data Type	I4
Default Value	0
Possible Values	0 - 9999

SAME-AS

Specifies an equivalence relationship between two controls ("objects"), such that both objects are considered to represent the same user action ("command"). This allows Natural to ensure the coherency of the user interface implicitly. Coherency implies that all user interface elements representing the same command have the same state at all times. For example, if a menu item and a tool bar item represent the same command, then, at any one time, either both should be enabled, or both disabled. Furthermore, Natural ensures that the same event-handling code is executed when a command is invoked, regardless of which menu or tool bar item invoked it.

The referenced object may be a signal or a menu item. The referencing object may be a tool bar item or a menu item. A SAME-AS relationship between two menu items is not allowed. A two-step approach, whereby a tool bar item references a menu item, which itself references a signal, is permitted, but not recommended. Instead, the tool bar item should, like the menu item, reference the signal directly. Note that a SAME-AS relationship between objects belonging to different dialogs is permitted. Thus, objects in MDI child dialogs may reference objects in the MDI frame dialog.

For each command, the SAME-AS relationships form a dependency tree. The object within the tree that does not have a SAME-AS relationship to another object is the *root* object. Any object in the tree to which one or more SAME-AS relationships exist is referred to as a *referenced* object, and the objects which (directly or indirectly) reference it are referred to as that object's *dependent* objects.

- ACCELERATOR
- BACKGROUND-COLOUR-NAME
- BACKGROUND-COLOUR-VALUE
- BITMAP-FILE-NAME
- CHECKED
- DIL-TEXT
- ENABLED
- MENU-ITEM-TYPE
- SHARED
- TOOLTIP
- VISIBLE

Propagation implies that the same attribute is implicitly set to the same value for each object to which the attribute setting is propagated. Furthermore, when a SAME-AS relationship is set to any value other than NULL-HANDLE, the values of all the above attributes are immediately copied from the referenced object to the referencing object. Setting the SAME-AS attribute to NULL-HANDLE breaks the relationship and restores the object's creation-time attribute values.

In addition, a click received for a non-root object results in a CLICK event being raised for the root object instead. This ensures that the same code is executed regardless of how the command is accessed.

As an example, suppose a command may be accessed via a menu bar menu item, a context menu item, or a tool bar item. Instead of maintaining a set of state attributes for each of these three objects, it is easier to create a signal to represent the command, and to set the SAME-AS attribute of all three objects to the handle of this signal. Now, only the signal's attributes need to be maintained by the program. For example, setting the CHECKED attribute of the signal to TRUE implicitly also sets the CHECKED attribute of both menu items and the toolbar item to TRUE, thus checking them. Furthermore, regardless of which one of the menu or tool bar items the user clicks, a CLICK event is received for the signal instead.

Applies to	Menu item, tool bar item.
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE / any signal or (for tool bar items only) menu item handle

SCROLLRANGE-X

Determines the horizontal range within which the end user may scroll in a dialog window. The dialog editor automatically determines the scroll range so that it encloses all dialog elements. If the dialog's scroll bars are enabled, they are displayed if the dialog's size is smaller than the scroll range.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	I4
Default Value	0
Possible Values	0 - 9999

SCROLLRANGE-Y

Determines the vertical range within which the end user may scroll in a dialog window. The dialog editor automatically determines the scroll range so that it encloses all dialog elements. If the dialog's scroll bars are enabled, they are displayed if the dialog's size is smaller than the scroll range.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	I4
Default Value	0
Possible Values	0 - 9999

SELECTED

Determines whether a particular item in a list box control is selected.

Applies to	List box item.
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

SELECTED-SUCCESSOR

This attribute helps you determine which items have been selected inside a list box control or a selection box control. The first selected item will be retrieved by the control itself, the next selected item will be retrieved as the handle of the list box item or selection-box item. A handle value other than NULL-HANDLE is returned by selected items, but can also be returned by non-selected items. For programming techniques related to the SELECTED-SUCCESSOR attribute, please refer to **Working with List Box Controls and Selection Box Controls** in the section Event-driven Programming Techniques of your Natural User's Guide.

Applies to	List box control, list box item, selection box control.
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE / any dialog element handle

SERVER-OBJECT

Determines the file name of an external OLE object associated with an OLE server application. If you assign this value, the corresponding object is loaded into the OLE container control. When this object is loaded, the current value of the attributes SERVER-PROGID and EMBEDDED-OBJECT is removed.

Applies to	OLE container control.
Data Type	A253
Default Value	None
Possible Values	Any file name

SERVER-PROGID

Determines the programmatic identifier of an OLE server application. If you assign this value, a specific OLE server application is selected for the OLE container control. Any object previously loaded into the OLE container control is removed. The current values of the attributes SERVER-PROGID and EMBEDDED-OBJECT are also removed.

Applies to	OLE container control.
Data Type	A253
Default Value	None
Possible Values	Any program ID

SHARED

Determines the MDI dialog which is to receive the event notifications for a dialog element. If this attribute is set to FALSE, the events are sent to the owning dialog (typically the MDI frame dialog). If this attribute is set to TRUE, the events are sent to the active MDI child dialog (if any), or to the MDI frame dialog if no MDI child dialog is active. For non-MDI dialogs, this attribute has no effect.

Applies to	Menu item, signal, status bar pane, tool bar item.
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

SIZE-MODIFIABLE

Determines whether the dialog's size is modifiable by the end user or not. This implies that the dialog is surrounded by a thick border.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	BOOLEAN
Default Value	TRUE
Possible Values	TRUE / FALSE

SLIDER

Determines the position of the slider in a scroll bar control inside the numeric range limited by the values of the MIN and MAX attributes.

Applies to	Scrollbar control.
Data Type	I4
Default Value	0
Possible Values	All integer values between the MIN and the MAX value of the scroll bar control.

SORTED

Determines whether the items in a list box or in a selection-box are sorted when inserted into the box. Note that if you have SORTED list box item STRINGS and selection-box item STRINGS, you cannot modify them.

Applies to	List box control, selection box control.
Data Type	BOOLEAN
Default Value	FALSE
Possible Values	TRUE / FALSE

STATUS-HANDLE

Specifies the status bar control (if any) which is to receive output in the case where no status bar control handle is explicitly specified (for example, when the STATUS-TEXT attribute of the dialog is changed). If the value of this attribute is NULL-HANDLE, the output will be sent to the implicit status bar (if any) that is created when the dialog's HAS-STATUS-BAR attribute is set to TRUE.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE / status bar control handle

STATUS-TEXT

By modifying the value of this attribute, you display the assigned text in the status bar of a dialog. The text will only be displayed if HAS-STATUS-BAR is TRUE. Then the DIL-TEXT will overlap the STATUS-TEXT value or vice versa, depending on which was modified last. For MDI child windows, the status bar is located in the MDI frame window.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	A253
Default Value	Empty string
Possible Values	Empty string / any text string

STRING

Determines the text string associated with a dialog element, for example, the title of a dialog window or the label of a push button control. For a font control, this text string is invisible to the end user.

By default, the system font is used to display the STRING. You should, however, be aware that the size of the system font depends on your operating system and on your screen driver. As a result of this, a STRING may not fit in the dialog element's rectangle.

Applies to	Column specification control, dialog (window, MDI frame, MDI child), edit area control, font control, graphic text control, group frame control, input field control, list box item, menu item, push button control, radio button control, selection box control, selection-box item, status bar control, status bar pane, table control, text constant control, tool bar control, toggle button control.
Data Type	A253
Default Value	Empty string
Possible Values	Empty string / any text string

STYLE

Determines a set of properties of the above-mentioned dialog elements. For one instance of a dialog element, several properties may be set. The style of a dialog element is represented by a set of characters. Each character determines a property specific to the dialog element.

Applies to	ActiveX control, Bitmap control, canvas control, column specification control, dialog (window), edit area control, graphic text control, input field control, line control, OLE container control, push button control, rectangle control, scroll bar control, selection box control, status bar control, status bar pane, table control, text constant control, tool bar, tool bar control, tool bar item. The attribute applies only to those ActiveX controls that behave like buttons. These ActiveX controls are marked in the system registry with the style OLEMISC_ACTSLIKEBUTTON.
Data Type	A253

Possible Values for ActiveX Controls

Value	Meaning
O	OK button: is pushed if the end user presses ENTER. This attribute is available only for ActiveX controls with the style OLEMISC_ACTSLIKEBUTTON.
C	Cancel button: is pushed if the end user presses ESC. This attribute is available only for ActiveX controls with the style OLEMISC_ACTSLIKEBUTTON.

Possible Values for Bitmap Controls

Value	Meaning
c	Align the bitmap to the center of the dialog element's rectangle.
l	Align to the left.
r	Align to the right.
v	Align to the vertical center.
t	Align to the top.
b	Align to the bottom.
s	Scale the bitmap to fit into the dialog element's rectangle.
F	Three-dimensional frame.
T	Transparent: Bitmap pixels matching the background color are not drawn. If the background color is specified as "default", the color of the first pixel in the bitmap is assumed to be the background color.

Possible Value for Canvas Controls

Value	Meaning
F	Frame (border) around the canvas control (reduces the visible area of the canvas).

Possible Values for Control Box Controls

Value	Meaning
F	Framed: Frame around the control box control.
L	Lowered: Creates a 3-D border with a sunken appearance.
E	Exclusive: Hide all other sibling control boxes with this style automatically when this control is made visible.
T	Transparent: (The control itself is not visible, but children may be).
z	Resize: To fill parents client area whenever parent is resized.

Possible Values for Dialogs (WINDOW)

Value	Meaning
c	Center dialog on screen.
P	Modeless (Pop-up; window is independent of its parent).
M	Modal.
X	Dialog box.
d	Default position; will be ignored if "Dialog box" is set as well..
D	Default rectangle; will be ignored if "Dialog box" is set as well.
Z	Control clipping. Prevents controls overprinting other controls which are "in front" in the so-called Z order. The position of a control in the Z-order sequence is determined via the control's SUCCESSOR attribute.
3	3-D border: Dialog interior drawn with sunken 3-D appearance.

Possible Values for Edit Area Controls

Value	Meaning
w	Wordwrapped (if text exceeds the width of the edit area control, it is automatically wrapped to the next line).
F	Frame around the edit area control.
v	Autoscroll: Text is automatically scrolled upwards if ENTER key is pressed on the last displayed line. This style also enables scrolling in the absence of a vertical scroll bar (e.g. via cursor keys or mouse wheel).Note: An edit area with a vertical scroll bar is implicitly autoscrollable.

Possible Value for Group Frame Controls

Value	Meaning
p	Group frame becomes parent of any controls placed within it.

Possible Values for Input Field Controls

Value	Meaning
l	Left-justified input.
r	Right-justified input.
c	Horizontally centered input.
N	Non-displayed input (for example, for passwords).
U	Upper-case input.
M	Input is mandatory.

Possible Values for Line Controls and Rectangle Controls

Value	Meaning
S	Solid line (default).
-	Dashed line pattern.
.	Dotted line pattern.
!	Dash-dot line pattern.
:	Dash-dot-dot line pattern.

Possible Value for List Box Control

Value	Meaning
3	3-D border: Border with sunken 3-D appearance around the list box control.
I	Integral height. Partial rows are not displayed.

Possible Values for Menu Items

Value	Meaning
s	Scaled: Bitmaps are scaled to match the image height and width specified for the parent menu.
T	Transparent: Bitmap pixels matching the background color are not drawn. If the background color is specified as "default", the color of the first pixel in the bitmap is assumed to be the background color.

Possible Value for OLE Container Controls

Value	Meaning
F	Framed: Frame around the OLE container control.

Possible Values for Push Button Controls

Value	Meaning
O	OK button: is pushed if the end user presses ENTER.
C	Cancel button: is pushed if the end user presses ESC.

Possible Values for Scrollbar Controls

Value	Meaning
h	Slider will scroll horizontally.
v	Slider will scroll vertically.

Note:

When you edit the STYLE attribute value in the scroll bar control attributes window, setting "h" instead of "v" and vice versa, the RECTANGLE-H and RECTANGLE-W attribute values are exchanged. The dialog editor thus ensures that the scroll bar control will not provide for vertical scrolling in a horizontal shape and vice versa.

Possible Values for Selection Box Controls

Value	Meaning
M	Input into this selection box control is mandatory.
X	Box is pulled down all the time.

Possible Values for Status Bar Controls

Value	Meaning
3	3-D border: border will be drawn with a 3-D appearance.
t	Top border: border will be drawn along top edge of control.
b	Bottom border: border will be drawn along bottom edge of control.
g	Gripper: control has a sizing grip.

Possible Values for Status Bar Panes

Value	Meaning
c	Centered: text will be centered within the pane.
H	Hide pane text (instead of graying it out) if pane is disabled.
R	Raised: pane will be drawn with a raised 3-D appearance.
n	No borders: pane will be drawn without borders.

Possible Value for Submenus and Context Menus

Value	Meaning
c	Cool menu: menu items are drawn with their bitmap (if any).

Possible Values for Table Controls

Value	Meaning
h	Columns header: buttons with field names are displayed at the top of each column.
I	Integral height: partial rows are not displayed.
n	No lines: the table control is displayed without the lines that normally separate the cells.
s	Single cell selection: If this attribute is set, end users may only select single cells. If not set, end users may select ranges of cells.
w	Whole row selection: selecting an individual cell sets the selection to the entire row.
e	Extendable: end users can delete and insert rows using DEL and INS.
c	Resize columns: end users may resize the columns horizontally.
r	Resize rows: end users may resize the rows vertically.
d	Draggable columns: If this attribute is set, end users may drag the columns.

Possible Values for Text Constant Controls

Value	Meaning
l	Left-justified input.
r	Right-justified input.
c	Horizontally centered input.
F	Frame around the text constant control.

Possible Values for Tool Bars

Value	Meaning
w	Wrapped: if set and there are more tool bar items than can be displayed on the top of the dialog, the tool bar wraps around to a new line. (The default: the tool bar can be scrolled with the two small arrow push buttons on the left of the tool bar.)

Possible Values for Tool Bar Controls

Value	Meaning
3	3-D border: border will be drawn with a 3-D appearance.
t	Top border: border will be drawn along top edge of control. This style is implicitly set for dockable tool bar controls.
b	Bottom border: border will be drawn along bottom edge of control. This style is implicitly set for dockable tool bar controls.
l	Left border: border will be drawn along left edge of control. This style is implicitly set for dockable tool bar controls.
r	Right border: border will be drawn along right edge of control. This style is implicitly set for dockable tool bar controls.
g	Gripper: control has a gripper bar.
L	Tool bar items are drawn with a flat (rather than raised) appearance.
Y	Dynamic: tool bar control cannot be resized when floated, and cannot contain any child controls.

Possible Values for Tool Bar Items

Value	Meaning
s	Scaled: bitmaps are scaled to fit on the tool bar items.
T	Transparent: Bitmap pixels matching the background color are not drawn. If the background color is specified as "default", the color of the first pixel in the bitmap is assumed to be the background color.

SUCCESSOR

Determines the next sibling of a dialog element in the parent/child hierarchy. A SUCCESSOR refers to the next created dialog element on the same level (with the same PARENT). You can use this attribute to go through all dialog elements in one parent dialog or dialog element.

Applies to	Dialogs (window, MDI frame, MDI child) and all dialog elements.
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE / handle value of the successor

SUPPRESS-ACTIVATE-EVENT

Determines whether the activate event will be suppressed for the dialog element or not. If it is suppressed, the event handler will not get control when the corresponding OLE server application has just been activated in-place.

Applies to	OLE container control.
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-BEFORE-OPEN-EVENT

Determines whether the before-open event will be suppressed for the context menu (or submenu) or not. If it is suppressed, the event handler will not get control when a context menu (or submenu) is displayed. Note that this attribute cannot be used to suppress the before-open event for a dialog.

Applies to	Context menus, Submenus
Data Type	I4
Default Value	1 (SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-CHANGE-EVENT

Determines whether the change event will be suppressed for the dialog element or not. If it is suppressed, the event handler will not get control when the content of an input field control changes, for example.

Applies to	Canvas control, column specification control, edit area control, input field control, OLE container control, scroll bar control, selection box control, table control.
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-CLICK-EVENT

Determines whether the click event will be suppressed for the dialog element or not. If it is suppressed, the event handler will not get control when the end user makes a selection.

Applies to	Bitmap control, canvas control, column specification control, list box control, OLE container control, radio button control, status bar pane, table control, timer, toggle button control.
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-CLIENT-SIZE-EVENT

Determines whether the client-size event will be suppressed for the dialog or not. If it is suppressed, the event handler will not get control when the dialog's interior size changes. The dialog interior is the part of the dialog which does not include the menu bar (if any), tool bars (if any) or status bar (if any).

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	I4
Default Value	1 (SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

SUPPRESS-CLOSE-EVENT

Determines whether the close event will be suppressed for the dialog element or not. If it is suppressed, the event handler will not get control when the corresponding OLE server application is about to be terminated.

Applies to	OLE container control.
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-DBL-CLICK-EVENT

Determines whether the double-click event will be suppressed for the dialog element or not. If it is suppressed, the event handler will not get control when the end user double-clicks an item in a list box control.

Applies to	Bitmap control, canvas control, column specification control, list box control, OLE container control, status bar pane, table control.
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-DELETE-ROW-EVENT

Determines whether the delete-row event will be suppressed for the dialog element or not. If it is suppressed, the event handler will not get control when the end user deletes a row.

Applies to	Table control.
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-ENTER-EVENT

Determines whether the enter event will be suppressed for the dialog (element) or not. If it is suppressed, the event handler will not get control when the dialog (element) gets the focus or when the dialog is activated.

Applies to	Column specification control, dialog (window, MDI frame, MDI child), edit area control, input field control, selection box control, table control.
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-ENTER-CELL-EVENT

Determines whether the enter-cell event will be suppressed for the dialog element or not. If it is suppressed, the event handler will not get control when the end user enters a cell.

Applies to	Column specification control, table control.
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-FILL-EVENT

Determines whether the fill event will be suppressed for the dialog element or not. If it is suppressed, the event handler will not get control when the end user scrolls to the beginning or the end of the control (for example, the list box control).

Applies to	List box control, table control.
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-IDLE-EVENT

Determines whether the idle event will be suppressed for the dialog or not. If it is suppressed, the event handler will not get control when an action occurs which could affect the state of the dialog's user interface (for example, when a key or mouse button is pressed or released).

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	I4
Default Value	1 (SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

SUPPRESS-INSERT-ROW-EVENT

Determines whether the insert-row event will be suppressed for the dialog element or not. If it is suppressed, the event handler will not get control when the end user is about to insert a row.

Applies to	Table control.
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-LEAVE-EVENT

Determines whether the leave event will be suppressed for the dialog (element) or not. If it is suppressed, the event handler will not get control when the dialog (element) loses the focus or when a dialog is deactivated.

Applies to	Column specification control, dialog (window, MDI frame, MDI child), edit area control, input field control, selection box control, table control.
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-LEAVE-CELL-EVENT

Determines whether the leave-cell event will be suppressed for the dialog element or not. If it is suppressed, the event handler will not get control when the end user leaves a cell.

Applies to	Column specification control, table control.
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-SIZE-EVENT

Determines whether the size event will be suppressed for the dialog element or not. If it is suppressed, the event handler will not get control when the end user changes the dialog's size.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

SUPPRESS-COMMAND-STATUS-EVENT

Determines whether the command-status event will be suppressed for the dialog or not. If it is suppressed, the event handler will not get control when the state of the dialog's command UI (for example, menu items and tool bar items) is to be updated during idle processing.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	I4
Default Value	1 (SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

SUPPRESS-TOP-EVENT

Determines whether the top event will be suppressed for the dialog element or not. If it is suppressed, the event handler will not get control when the end user navigates to the top of a table control.

Applies to	Table control.
Data Type	I4
Default Value	0 (NOT SUPPRESSED)
Possible Values	0 (NOT SUPPRESSED) / 1 (SUPPRESSED)

Note:

You can use the symbols SUPPRESSED or NOT-SUPPRESSED defined in the local data area NGULKEY1. NGULKEY1 is automatically included in your application.

TIMER-INTERVAL

Determines the time interval (in milliseconds) at which the click event handler of the timer will be triggered, that is, the click event handler will be triggered every n milliseconds.

Applies to	Timer.
Data Type	I4
Default Value	0
Possible Values	0 or any other integer value

TOOLBAR-HANDLE

Associates a tool bar and a dialog. Several dialogs may share one tool bar. Please note that the handle value of the tool bar must be assigned to the TOOLBAR-HANDLE attribute before you can make the tool bar visible with the HAS-TOOLBAR attribute.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	HANDLE
Default Value	NULL-HANDLE
Possible Values	NULL-HANDLE / any handle of a tool bar

TOOLBAR-POS

Specifies the position of the tool bar relative to the associated dialog (top, bottom, left, right).

Applies to	Dialog (window, MDI Frame).
Data Type	I4
Default Value	TB-TOP
Possible Values	TB-TOP / TB-BOTTOM / TB-LEFT / TB-RIGHT

TOOLTIP

Specifies a dialog element's tool tip text, which is automatically displayed in a small pop-up window when the mouse pointer hovers over the dialog element. For menu items, the tool tip text is not displayed directly, but is "inherited" by any tool bar items referencing this menu item via their SAME-AS attribute. The specified tool tip text is only displayed if it is not an empty string and if the parent control's HAS-TOOLTIP attribute is set to TRUE.

Applies to	Menu item, signal, status bar pane, tool bar item.
Data Type	A253
Default Value	Empty string
Possible Values	Empty string / any text string

TYPE

Determines the type of dialog element to be created next. You can also use this attribute to query the type of an existing dialog element. You must use the TYPE value as a parameter in the PROCESS GUI statement action ADD. This will determine which type of dialog element is to be created.

Applies to	Dialogs (window, MDI frame, MDI child) and all dialog elements.
Data Type	I4
Default Value	undefined

Possible Values

BITMAP (0)	CANVAS (24)
COLUMNSPECIFICATION (29)	EDITAREA (1)
CONTEXTMENU (32)	CONTROLBOX (33)
FONT (2)	GRAPHICTEXT (27)
GROUPFRAME (3)	INPUTFIELD (4)
LINE (25)	LISTBOX (5)
LISTBOXITEM (6)	MENUBAR (7)
MENUITEM (8)	OLECONTAINER (30)
PUSHBUTTON (9)	RADIOBUTTON (10)
RECTANGLE (26)	SCROLLBAR (23)
SELECTIONBOX (11)	SELECTIONBOXITEM (12)
SUBMENU (20)	TABLE (28)
TEXTCONSTANT (13)	TIMER (22)
TOGGLEBUTTON (14)	TOOLBAR (15)
TOOLBARITEM (16)	WINDOW (17)
MDIFRAME (18)	MDICHILD (19)

Examples of usage in the PROCESS GUI statement action ADD:

```
PROCESS GUI  
ACTION ADD WITH #LISTBOX LISTBOXITEM #ITEM PROCESS GUI ACTION ADD WITH PARAMETERS  
PARENT = #LISTBOX STRING = 'Test' TYPE = LISTBOXITEM HANDLE-VARIABLE = #ITEM END-PARAMETERS
```

Note:

The text representation can be substituted for the integer representation because the local data area NGULKEY1 (supplied in library SYSTEM) is automatically included in the event handler code.

VARIABLE

Links a Natural variable such as EMP.PERSONNEL-ID to the dialog element. This attribute must always be used with the LINKED attribute. As an alternative to using the LINKED and the VARIABLE attributes, you can also specify "Linked Variable" in a "Source" dialog box of an attributes window.

Applies to	Input field control, selection box control.
Data Type	Any Natural data type
Default Value	No variable associated
Possible Values	Any Natural variable

VERSION

Indicates the Natural version with which the dialog was saved last; you can query it.

Applies to	Dialog (window, MDI frame, MDI child).
Data Type	A253
Default Value	223
Possible Values	Any Natural version (plus patch level information, if applicable).

VERT-SCROLLABLE

Determines whether the dialog or edit area control has a vertical scroll bar.

Applies to	Dialog (window, MDI frame, MDI child), edit area control, table control.
Data Type	BOOLEAN
Default Value	TRUE
Possible Values	TRUE / FALSE

VISIBLE

If this attribute is set, the dialog element is visible. You can use this attribute to hide dialog elements by setting it to FALSE, if, for example, a logical condition is fulfilled and displaying the dialog or dialog element does not make sense under this conditio

Applies to	ActiveX control, Bitmap control, canvas control, column specification control, control box control dialog (window, MDI frame, MDI child), edit area control, graphic text control, group frame control, input field control, list box control, line control, menu bar, OLE container control, push button control, radio button control, rectangle control, scroll bar control, selection box control, signal, submenu control, status bar control, status bar pane, table control, text constant control, tool bar control, toggle button control.
Data Type	BOOLEAN
Default Value	TRUE
Possible Values	TRUE / FALSE

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ZOOM-FACTOR

Magnifies or reduces the default representation of an OLE server object that has become visible in an OLE container control.

If you set this attribute to the value "0", the server application's object is scaled so that it fits into the OLE container control's rectangle. To avoid a distorted display, the OLE container control's rectangle should have a width/height ratio similar to that of the server object.

Applies to	OLE container control.
Data Type	I4
Default Value	100
Possible Values	0 to 500