SAP Textedit

HELP.BCCITEXTEDIT

Release 4.6C

Copyright

Icons

Icon	Meaning
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SAP Textedit

Use

You can use the SAP Textedit control to implement an editor for entering and working with text. It can be used as a simple multi-line editor and as an editor for ABAP code. It provides temporary additions that allow you to change the display (for example, to highlight text). Temporary in this sense means that the additions are set and managed at the frontend, but not passed back to the controller. The textedit control does not allow you to set permanent format information or use graphics.

Features

The SAP Textedit has three parts:

- An application toolbar containing predefined pushbuttons
- The editor window for displaying text
- The status bar, containing the following five fields:
  - Text message display
  - Details of the text currently selected
  - Current cursor position and total number of lines
  - Change status (‘*’ = changed, ‘ ’ = unchanged)
  - Insert and overwrite modes (‘Ins’ and ‘Ovr’)

The application toolbar and status bar display is optional.

SAP Textedit

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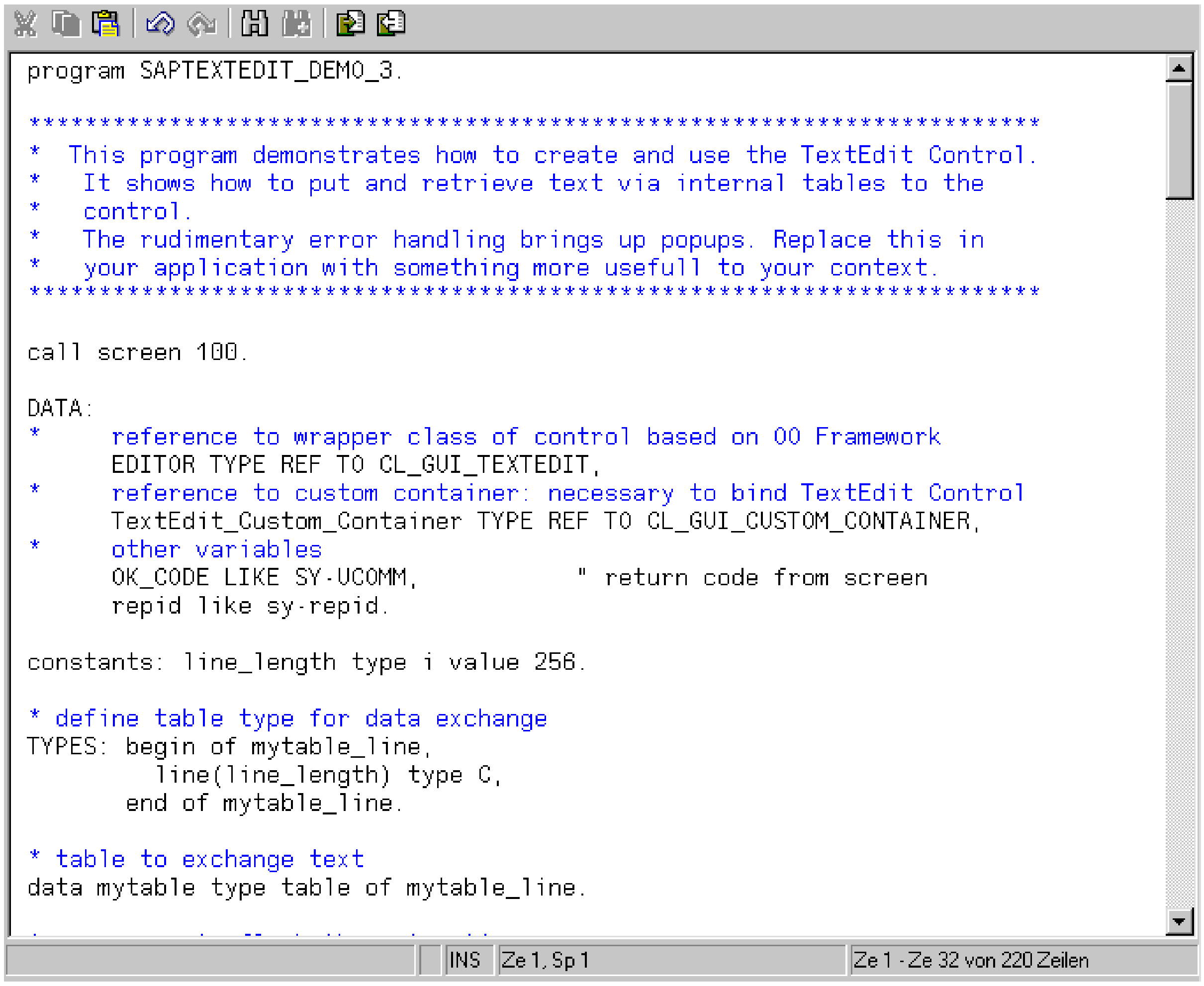

```
program SAPTEXTEDIT_DEMO_3.

************************************************************************
*  This program demonstrates how to create and use the TextEdit Control.
*   It shows how to put and retrieve text via internal tables to the
*   control.
*   The rudimentary error handling brings up popups. Replace this in
*   your application with something more usefull to your context.
************************************************************************

call screen 100.

DATA:
*     reference to wrapper class of control based on OO Framework
      EDITOR TYPE REF TO CL_GUI_TEXTEDIT,
*     reference to custom container: necessary to bind TextEdit Control
      TextEdit_Custom_Container TYPE REF TO CL_GUI_CUSTOM_CONTAINER,
*     other variables
      OK_CODE LIKE SY-UCOMM,            " return code from screen
      repid like sy-repid.

constants: line_length type i value 256.

* define table type for data exchange
TYPES: begin of mytable_line,
         line(line_length) type C,
       end of mytable_line.

* table to exchange text
data mytable type table of mytable_line.
```

INS | Ze 1, Sp 1 | Ze 1 - Ze 32 von 220 Zeilen

The control provides the following functions:

- Passing text to and from the control using tables
- Display and change modes
- Insert and overwrite mode
- Setting the maximum line length
- Highlighting (also with prefixes at the beginning of the line) and protection against entry for text areas
- Finding out the current cursor position and the position of a selected area
- Finding out and setting the first line displayed in the editor
- Varying line break behavior
  - Code editor:
    The line break is line-oriented. You can set the maximum line length yourself. The technical implementation uses internal tables.

  - Text editor
    a) Maximum line length set to width of window
    b) No maximum line length and no line breaks.
- Local context menu containing the same functions as the toolbar
- Optional toolbar for local operations in the control
- A set of keyboard commands for simple navigation within the text Local operations are simplified by the optional toolbar
- Cut, copy, and paste for selected text areas, using either the keyboard or the application toolbar
- Indentation of selected text blocks
- Import or export local files
- Multi-step undo and redo
- Find and replace with the following options:
  - String or part of string
  - Whole word
  - With or without differentiating between upper- and lowercase
  - Within a set of lines
  - Find next
- Events for double-click, F1, F4, drag and drop, and context menus
- Various drag and drop behaviors for files:
  - Display a file without triggering an event
  - Only a single file can be retrieved using drag and drop, and an event is triggered
  - Multiple files can be retrieved using drag and drop, and an event is triggered
- Status indicating whether a text has been changed or not

The control wrapper is implemented in the global class CL_GUI_TEXTEDIT in development class SAPTEXTEDIT.

The development class SAPTEXTEDIT contains example and test programs.

Using Controls in a WAN

When you use controls in your programs, you place an extra load on the communication channel between the frontend and backend. In a LAN, and particularly in a WAN environment, this can be a critical factor.

The problem is alleviated somewhat by buffering mechanisms (see also Automation Queue [Ext.]). Use these points as a guideline to using controls in a WAN.

The documentation for the individual controls also contains more specific notes about using that control in a WAN.

Using CL_GUI_CFW=>FLUSH

The method CL_GUI_CFW=>FLUSH [Page 70] synchronizes the automation queue and the ABAP variables in it. Calling it often generates a synchronous RFC call from the application server to the frontend. To optimize the performance of your application, you should call this method as little as possible.

It is often a good idea to read all control attributes in a single automation queue (for example, at the beginning of the PAI) and retrieve them in a single synchronization. You should, in particular, do this when you read attributes that are not necessary in your event handlers or the PAI/PBO cycle.

You do not need to include a "safety flush" at the end of the PBO to ensure that all method calls are transported to the frontend. A flush at the end of the PBO is guaranteed. Consequently, you cannot construct an automation queue spread over several screens.

There is no guarantee that an automation queue will be sent when you call `CL_GUI_CFW=>FLUSH`. The queue recognizes whether it contains any return values. If this is not the case, it is not sent.

If you have a queue with no return values, and want to ensure that it is synchronized, you can use the Control Framework method CL_GUI_CFW=>UPDATE_VIEW [Page 71]. You should only use this method if you absolutely need to update the GUI. For example, you might have a long-running application in which you want to provide the user with regular updates on the status of an action.

After you have read the attributes of a control, the contents of the corresponding ABAP variables are not guaranteed until after the next flush. The contents of the ABAP variables remain undefined until this call occurs. In the future, there will be cases in which this flush is unnecessary. They will be recognized by the automation queue and the corresponding flush call will be ignored.

Creating Controls and Passing Data

Creating controls and passing data to them is normally a one-off procedure, which in comparison to using normal screen elements can be very runtime-intensive. You should therefore not use any unnecessary controls, or pass unnecessary data to the controls that you are using.

A typical example is a tabstrip control with several tab pages. If the pages contain controls, you should consider using application server scrolling instead of local scrolling, and not loading the controls until the corresponding page is activated by the user. The same applies to passing data to the controls on tab pages.

If you want to differentiate between LAN and WAN environments when you pass data to a control, you can use the function module **`SAPGUI_GET_WANFLAG`**. In some applications, you may need to pass different amounts of data or use a complete fallback in a WAN application. The environment affects, for example, the number of same-level nodes that you can transfer to a tree control without having to introduce artificial intermediate levels.

Unlike screen elements, controls only have to be created and filled with data once. From a performance point of view, this means that they become more profitable the longer they exist. In applications that are called repeatedly, and therefore initialized repeatedly, controls can have a negative effect on performance. In applications that use the same screen for a long time, on the other hand, you may find that using controls results in improved performance.

You can always use the performance tools [Ext.] to check the advantages and disadvantages in terms of network load that using a control brings.

Storing Documents, Picture, and Other Data

Release 4.6A sees the introduction of a frontend cache for accessing documents from the Business Document Service (BDS). You are strongly recommended to store desktop documents, images, and other data in the BDS and not in the R/3 database. Documents from the BDS can be cached at the frontend, and therefore only have to be loaded over the network once.

Special Considerations for the SAP Textedit

Modified texts are always transferred synchronously to and from the frontend as a whole text. This means that, in a WAN, transfer times may be very long, regardless of the available bandwidth.

The worst-affected methods are those in which you pass tables as parameters. These are:

SET_TEXT_AS_STREAM [Page 52]

SET_SELECTED_TEXT_AS_STREAM [Page 46]

GET_TEXT_AS_STREAM [Page 24]

GET_SELECTED_TEXT_AS_STREAM [Page 21]

SET_TEXT_AS_R3TABLE [Page 51]

SET_SELECTED_TEXT_AS_R3TABLE [Page 45]

GET_TEXT_AS_R3TABLE [Page 23]

GET_SELECTED_TEXT_AS_R3TABLE [Page 20]

The SAP Textedit uses an attribute cache, which stores information about whether the text has been modified, and the current line and column position. Reading these attributes therefore does not necessarily involve round trips to the frontend, since the relevant data is often available from the attribute cache. The call CL_GUI_CFW=>FLUSH [Page 70] is still necessary, however, since you cannot tell as the user when the data from the cache is valid.

Methods

Arranged Alphabetically [Page 11]

Arranged by Function [Page 57]

Alphabetical Listing

You requested application help. The following help is available for the current R/3 context:

AUTO_REDRAW

Use

This method uses the administration of the reference counter M_AUTOREDRAW_REFCOUNTER (a read-only instance attribute [Page 62]) to determine when the control is redrawn. The control is only redrawn when the value of the reference counter is zero. This allows you to nest calls.

Features

```
call method textedit–>auto_redraw
  exporting
    enable_redraw = enable_redraw
  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description	Possible values
enable_redraw	Reference counter	`false`: Reference counter is increased `true`: Reference counter is decreased

⚠ You should only use this method when absolutely necessary. If another window is open over the text window and you set the focus to the text window, parts of the other window will appear in the text window. The text will not be displayed properly until the reference counter reaches zero.

COMMENT_LINES

Use

Use this method to designate a set of lines as comment lines.

Features

```
call method textedit->comment_lines
  exporting
    from_line = from_line
    to_line = to_line
    enable_editing_protected_text = enable_editing_protected_text
  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description	Possible values
from_line	First line of block	
to_line	End of block	

enable_editing_protected_text	Editing for protected sections of text	`false` Protected sections cannot be edited (default value) `true` Protected sections can be edited

COMMENT_SELECTION

Use

Use this method to make the selected lines into comment lines. The starting and finishing lines are always converted entirely to comment lines, even if the user did not select all of them.

Features

```
call method textedit->comment_selection
  exporting
    enable_editing_protected_text = enable_editing_protected_text
  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description	Possible values
enable_editing_protected_text	Editing for protected sections of text	`false` Protected sections cannot be edited (default value) `true` Protected sections can be edited

CONSTRUCTOR

Use

The constructor creates, initializes, and positions the control.

The constructor method is called automatically when you instantiate the class (**`create object`** statement). You generally pass the parameters of the method in the **`create object`** statement.

Features

```
create object textedit
  exporting
    parent = parent
    lifetime = lifetime
    max_number_chars = max_number_chars
    style = style
    filedrop_mode = filedrop_mode
    wordwrap_mode = wordwrap_mode
    wordwrap_position = wordwrap_position
    wordwrap_to_linebreak_mode = wordwrap_to_linebreak_mode
  exceptions
    error_cntl_create = 1
    error_cntl_init = 2
    error_cntl_link = 3
    error_dp_create = 4
    gui_type_not_supported = 5.
```

Parameters	Description	Possible values
parent	Parent of the instance, that is, the contain in which the control is to be displayed	
lifetime	Lifetime management parameter specifying the lifetime of the control	**`cntl_lifetime_imode`**: The control remains alive for the lifetime of the internal session (that is, until a statement such as **`leave program`** or **`leave to transaction`**) **`cntl_lifetime_dynpro`**: The control remains alive for the lifetime of the screen (that is, while it remains in the screen stack). It is not destroyed, for example, by a **`call screen`** or **`call transaction`** statement.
max_number_chars	Sets the maximum number of characters that can be entered in the control	

style	Controls the appearance and behavior of the control	Constants from the class CL_GUI_CONTROL that begin with WS_* You can combine styles by adding the constants together. The default value sets a suitable combination of style constants internally.
filedrop_mode	Parameter controlling drag and drop behavior	**`dropfile_event_off`** Only a file that replaces the full existing text can be used (default value). **`dropfile_event_single`** Only one file can be used. The file is not included in the editor. The file drop event is triggered instead. You can specify the path of the dropped file using the method GET_PATH_OF_DROPPED_FILES [Page 20]. **`dropfile_event_multiple`** You can use more than one file. The file is not included in the editor. The file drop event is triggered instead. You can specify a list of the paths of the dropped files using the method GET_PATH_OF_DROPPED_FILES [Page 20].
wordwrap_mode	Line break behavior	**`wordwrap_off`** No line break **`wordwrap_at_windowborder`** Line break at the edge of the window (default value) **`wordwrap_at_fixed_position`** Line break at a fixed position For further information, refer to Class Constants [Page 61]

wordwrap_position	If **wordwrap_mode = textedit->wordwrap_at_fixed_position**: Position for the automatic line break in a line	Default value: -1
wordwrap_to_linebreak_mode	Converts soft line breaks to hard ones when you save in the R/3 System	**false** Soft line breaks are ignored when you save **true** Soft line breaks are converted to hard breaks when you save

The advantage of using containers is that you can set certain essential display attributes (position on the screen, behavior when the window is resized, and so on) when you create them. If you do not use a container, you must set all of the attributes by hand, using the method SET_WINDOW_PROPERTY [Ext.].

DELETE_TEXT

Use

This method deletes all of the text in the control.

Features

```
call method textedit->delete_text
  exceptions
    error_cntl_call_method = 1.
```

EMPTY_UNDO_BUFFER

Use

Use this method to empty the undo buffer of the control. After the method has been executed, no previous actions can be undone (including the method call itself). The undo buffer is built up again by subsequent actions in the control. The undo buffer is also implicitly deleted when you protect text areas against input using the PROTECT_LINES [Page 30] and PROTECT_SELECTION [Page 31] methods.

Features

```
call method textedit–>empty_undo_buffer
```

```
 exceptions
   error_cntl_call_method = 1.
```

FIND_AND_REPLACE

Use

This method allows you to find and replace text.

Features

```
call method textedit–>find_and_replace
  exporting
    case_sensitive_mode = case_sensitive_mode
    replace_string = replace_string
    search_string = search_string
    whole_word_mode = whole_word_mode
  changing
    string_found = string_found
  exceptions
    invalid_parameter = 1
    error_cntl_call_method = 2.
```

Parameters	**Description**	**Possible values**
case_sensitive_mode	Upper- and lowercase	`true` Observe `false` Do not observe (default value)
replace_string	Text to replace occurrences of the search string	
search_string	Text to be found/replaced	
whole_word_mode	Only find whole words	`true` Only find whole words `false` Find whole words and parts of words (default value)
string_found	Return value specifying how often the text was found	

If you do not specify REPLACE_STRING or SEARCH_STRING, the system calls the *Find and Replace* dialog box.

If no text is selected, the search starts at the current cursor position. If text is selected, the search starts at the second character of the selection, but is not restricted to the selected text.

When it reaches the end of the text, the method returns to the beginning of the text. The text may thus be searched more than once.

If you want to replace all occurrences of a search string in a text, use the method REPLACE_ALL [Page 37].

FIND_AND_SELECT_TEXT

Use

This method allows you to find and select text.

Features

```
call method textedit–>find_and_select_text
  exporting
    case_sensitive_mode = case_sensitive_mode
    search_string = search_string
    whole_word_mode = whole_word_mode
  changing
    string_found = string_found
  exceptions
    invalid_parameter = 1
    error_cntl_call_method = 2.
```

Parameters	Description	Possible values
case_sensitive_mode	Upper- and lowercase	`true` Observe `false` Do not observe (default value)
search_string	Text to be found/replaced	
whole_word_mode	Only find whole words	`true` Only find whole words `false` Find whole words and parts of words (default value)
string_found	Return value specifying how often the text was found	

If you do not specify the SEARCH_STRING parameter, the system calls the *Find* dialog box.

If no text is selected, the search starts at the current cursor position. If text is selected, the search starts at the second character of the selection, but is not restricted to the selected text.

When it reaches the end of the text, the method returns to the beginning of the text. The text may thus be searched more than once.

GET_FIRST_VISIBLE_LINE

Use

This method returns the line number of the topmost visible line in the control.

Features

```
call method textedit–>get_first_visible_line
  importing
    line = line
  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description
line	Line number. The line numbering begins at one.

GET_LINE_TEXT

Use

This method returns the text in line number LINE_NUMBER.

Features

```
call method textedit–>get_line_text
  exporting
    line_number = line_number
  importing
    text = text
  exceptions
    invalid_parameter = 1
    error_cntl_call_method = 2.
```

Parameters	Description

line_number	Line number. The line numbering begins at one.
text	Text in the line

⚠

Due to restrictions on communication between the frontend and backend, texts can only be transferred with a length of up to 256 characters.

Workaround for texts longer than 256 characters:

Select a whole line and use the method GET_SELECTED_TEXT_AS_R3TABLE [Page 20] or GET_SELECTED_TEXT_AS_STREAM [Page 21] .

GET_PATH_OF_DROPPED_FILES

Use

This method returns a list of the paths of files used in drag and drop. The list is updated in every drag and drop operation. To set various drag and drop attributes, use the method SET_FILEDROP_MODE [Page 41].

Features

```
call method textedit->get_path_of_dropped_files

  exporting
    table = table

  exceptions
    error_dp = 1.
```

Parameters	Description	Possible values
table	R/3 table containing the paths	

GET_SELECTED_TEXT_AS_R3TABLE

Use

This method allows you to save the selected text as an R/3 table (without information about the line breaks). This depends on the behavior of the line breaks that you have defined in the CONSTRUCTOR [Page 13], especially for soft carriage returns.

Features

```
call method textedit–>get_selected_text_as_r3table
```

```
  importing
    table = table

  exceptions
    error_dp = 1
    potential_data_loss = 2.
```

Parameters	Description
table	R/3 table

If you use a table with shorter lines than those in the SAP Textedit, the text from the control is only passed up to the length of the table line. The remaining text is lost.

If the lines of the table are longer than the lines of the control, the table lines are filled with trailing spaces.

GET_SELECTED_TEXT_AS_STREAM

Use

This method allows you to place the entire text from the editor in an R/3 table as a stream (with information about line breaks).

Features

```
call method textedit–>get_selected_text_as_stream

  importing
    selected_text = selected_text

  exceptions
    error_dp = 1.
```

Parameters	Description
selected_text	R/3 table

For an example of how to work with line break information, refer to the demonstration program SAPTEXTEDIT_TEST_1, include SAPTEXTEDIT_TEST_1F01, subroutine FIND_CR, which replaces the carriage return line feeds.

GET_SELECTION_INDEXES

Use

This method returns information (in characters) about the position of a selected text.

Features

```
call method textedit–>get_selection_indexes
  importing
    from_index = from_index
    to_index = to_index
  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description
from_index	Character at which the selection starts. The index is relative to the first character in the editor.
to_index	Character at which the selection ends.

GET_SELECTION_POS

Use

This method returns the position of a selected text.

Features

```
call method textedit–>get_selection_pos
  importing
    from_line = from_line
    from_pos = from_pos
    to_line = to_line
    to_pos = to_pos
  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description
from_line	Line in which the selection starts
from_pos	Position in the line at which the selection starts
to_line	Line in which the selection ends
to_pos	Position in the line at which the selection ends

GET_TEXTMODIFIED_STATUS

Use

This method returns the change status of the text. You can use the method SET_TEXTMODIFIED_STATUS [Page 50] to set the changed status for a text.

> If you get text using the methods GET_TEXT_AS_R3TABLE [Page 23] and GET_TEXT_AS_STREAM [Page 24], the changed status is not reset.

Features

```
call method textedit–>get_textmodified_status
 importing
   status = status
 exceptions
   error_cntl_call_method = 1.
```

Parameters	Description	Possible values

status	Changed status	`true`
		Text changed
		`false`
		Text not changed

GET_TEXT_AS_R3TABLE

Use

This method allows you to save the entire text from the editor as an R/3 table (without information about line feeds). This depends on the behavior of the line breaks that you have defined in the CONSTRUCTOR [Page 13], especially for soft carriage returns.

Features

```
call method textedit–>get_text_as_r3table
 exporting
   only_when_modified = only_when_modified
 importing
   table = table
   is_modified = is_modified
 exceptions
   error_db = 1
   error_cntl_call_method = 2
```

error_db_create =3
potential_data_loss = 4.

Parameters	Description	Possible values
table	R/3 table	
only_when_modified	Attribute when you get text	`true` The text is only written to the R/3 table if the changed status IS:MODIFIED = TRUE. Otherwise, an empty table is passed. `false` The text is retrieved regardless of whether it has been changed (default value)
is_modified	Changed status of the text	`true` Text changed `false` Text not changed

If you use a table with shorter lines than those in the SAP Textedit, the text from the control is only passed up to the length of the table line. The remaining text is lost.

If the lines of the table are longer than the lines of the control, the table lines are filled with trailing spaces.

Setting the parameter ONLY_WHEN_MODIFIED to TRUE can improve performance, since it minimizes the data exchange between the frontend and backend (and the database).

GET_TEXT_AS_STREAM

Use

This method allows you to place the entire text from the editor in an R/3 table as a stream (with information about line breaks).

Features

```
call method textedit–>get_text_as_r3table
 exporting
   only_when_modified = only_when_modified
 importing
   text = text
   is_modified = is_modified
 exceptions
   error_db = 1
   error_cntl_call_method = 2.
```

Parameters	Description	Possible values
text	R/3 table with text	
only_when_modified	Attribute when you get text	`true` The text is only written to the R/3 table if the changed status IS:MODIFIED = TRUE. Otherwise, an empty table is passed. `false` The text is retrieved regardless of whether it has been changed (default value)
is_modified	Changed status of the text	`true` Text changed `false` Text not changed

Setting the parameter ONLY_WHEN_MODIFIED to TRUE can improve performance, since it minimizes the data exchange between the frontend and backend (and the database).

For an example of how to work with line break information, refer to the demonstration program SAPTEXTEDIT_TEST_1, include SAPTEXTEDIT_TEST_1F01, subroutine FIND_CR, which replaces the carriage return line feeds.

GO_TO_LINE

Use

Use this method to navigate the cursor to the specified line. The cursor position within the line is the same as it was before the call.

Features

```
call method textedit–>go_to_line
  exporting
    line = line
  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description
line	Line to which you want to navigate

HIGHLIGHT_BREAKPOINT_LINE

Use

Use this method to set a breakpoint.

This method is only used in the ABAP Editor.

Features

```
call method textedit–>highlight_breakpoint_line
  exporting
    line = line
    highlight_mode = highlight_mode
  exceptions
    has_no_effect = 1
    error_cntl_call_method = 2
    invalid_parameter = 3.
```

Parameters	Description	Possible values
line	Line in which you want to set the breakpoint	

highlight_mode	Switches highlighting on or off (true/false)	**true** Switched on (default value) **false** Switched off

HIGHLIGHT_LINES

Use

Use this method to switch the highlighting mode on and off for a range of lines.

Features

```
call method textedit–>highlight_lines
  exporting
    from_line = from_line
    to_line = to_line
    highlight_mode = highlight_mode
  exceptions
    has_no_effect = 1
    error_cntl_call_method = 2
    invalid_parameter = 3.
```

Parameters	Description	Possible values
from_line	Starting line for the range	
to_line	Final line (inclusive) of the range	
highlight_mode	Switches highlighting on or off (true/false)	**true** Switched on (default value) **false** Switched off

If you used the method SET_HIGHLIGHT_COMMENTS_MODE [Page 43] to highlight all comment lines automatically, the method HIGHLIGHT_LINES has no effect.

HIGHLIGHT_SELECTION

Use

This method allows you to switch the highlighting mode for a selection of lines on and off.

Features

```
call method textedit–>highlight_selection
 exporting
  highlight_mode = highlight_mode
 exceptions
  has_no_effect = 1
  error_cntl_call_method = 2
  invalid_parameter = 3.
```

Parameters	Description	Possible values
highlight_mode	Switches highlighting on or off (true/false)	`true` Switched on (default value) `false` Switched off

If you used the method SET_HIGHLIGHT_COMMENTS_MODE [Page 43] to highlight all comment lines automatically, the method HIGHLIGHT_SELECTION has no effect.

INDENT_LINES

Use

Use this method to indent a set of lines by a given number of spaces. Use the parameter M_SPACES_ON_INDENT of the method SET_SPACES_ON_INDENT [Page 49] to set the number of spaces.

Features

```
call method textedit->indent_lines
 exporting
  from_line = from_line
  to_line = to_line
  enable_editing_protected_text = enable_editing_protected_text
 exceptions
  error_cntl_call_method = 1.
```

Parameters	**Description**	**Possible values**
from_line	Beginning of the section you want to indent	
to_line	End of the section you want to indent	
enable_editing_protected_text	Editing for protected sections of text	**`false`** Protected sections cannot be edited (default value) **`true`** Protected sections can be edited

INDENT_SELECTION

Use

Use this method to indent a selected area by a given number of spaces. Use the parameter M_SPACES_ON_INDENT of the method SET_SPACES_ON_INDENT [Page 49] to set the number of spaces.

Only the text that is actually selected is indented (important if you did not select from the beginning of a line or to the end of a line).

Features

call method textedit->indent_selection

exporting
enable_editing_protected_text = enable_editing_protected_text

exceptions
error_cntl_call_method = 1.

Parameters	**Description**	**Possible values**
enable_editing_protected_text	Editing for protected sections of text	**`false`** Protected sections cannot be edited (default value) **`true`** Protected sections can be edited

MAKE_SELECTION_VISIBLE

Use

This method allows you to move a selected area into the visible part of the editor window.

Features

```
call method textedit–>make_selection_visible
  exceptions
    error_cntl_call_method = 1.
```

OPEN_LOCAL_FILE

Use

This method allows you to open a local file.

Features

```
call method textedit–>open_local_file
  exporting
    file_name = file_name
  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description
file_name	Name of the file you want to open. You can specify the path in UNC format.

If you do not set the FILE_NAME parameter, a dialog box appears in which you can enter the name and path of the file.

PROTECT_LINES

Use

You can protect ranges of lines against changes. Use this method to switch the protection on and off.

When a line is protected, its background color changes. If you try to enter text in a protected line, a warning signal sounds.

Features

```
call method textedit–>protect_lines
  exporting
    from_line = from_line
    to_line = to_line
    protect_mode = protect_mode
    enable_editing_protected_text = enable_editing_protected_text
  exceptions
    error_cntl_call_method = 1
    invalid_parameter = 2.
```

Parameters	**Description**	**Possible values**
from_line	Starting line for the range	
to_line	Final line (inclusive) of the range	
protect_mode	Switches input protection on or off	`true` Protection switched on (default value) `false` Protection switched off (default value)
enable_editing_protected_text	Editing for protected sections of text	`false` Protected sections cannot be edited (default value) `true` Protected sections can be edited

PROTECT_SELECTION

Use

You can protect selections against changes. Use this method to switch the protection on and off.

When a selection is protected, its background color changes. If you try to enter text in a protected line, a warning signal sounds.

Features

```
call method textedit–>protect_selection
  exporting
    protect_mode = protect_mode
  exceptions
    error_cntl_call_method = 1
    invalid_parameter = 2.
```

Parameters	Description	Possible values
protect_mode	Switches input protection on or off	**true** Protection switched on (default value) **false** Protection switched off (default value)
enable_editing_protected_text	Editing for protected sections of text	**false** Protected sections cannot be edited (default value) **true** Protected sections can be edited

REGISTER_EVENT_CONTEXT_MENU

Use

Use this method to register context menu event.

To make your coding easier to understand, you should call this method directly after you have created the instance (**CREATE OBJECT**).

Features

```
call method textedit–>register_event_context_menu
  exporting
    register = register
    appl_event = appl_event
    local_entries = local_entries
```

```
 exceptions
   error_regist_event = 1
   error_unregist_event = 2
   cntl_error = 3
   event_already_registered = 4
   event_not_registered = 5.
```

Parameters	Description	Possible values
register	Registering the events	**`true`** Register events (default value) **`false`** Do not register events
appl_event	Choice between system and application events	**`space`** System event (default value) **`'X'`** Application event
local_entries	Displays the local entries in the context menu	**`true`** Display entries (default value) **`false`** Do not display entries

REGISTER_EVENT_DBLCLICK

Use

Use this method to register the event DBLCLICK [Ext.] (double click).

To make your coding easier to understand, you should call this method directly after you have created the instance (**`CREATE OBJECT`**).

Features

```
call method textedit–>register_event_dblclick
 exporting
   register = register
   appl_event = appl_event
   navigate_on_dblclick = navigate_on_dblclick
```

```
exceptions
  error_regist_event = 1
  error_unregist_event = 2
  cntl_error = 3
  event_already_registered = 4
  event_not_registered = 5.
```

Parameters	Description	Possible values
register	Registering the events	**`true`** Register events (default value) **`false`** Do not register events
appl_event	Choice between system and application events	**`space`** System event (default value) **`'X'`** Application event
navigate_on_dblclick	Local navigation	**`false`** No local navigation (default value) **`true`** local navigation

REGISTER_EVENT_F1

Use

Use this method to register the F1 (function key) event.

To make your coding easier to understand, you should call this method directly after you have created the instance (**`CREATE OBJECT`**).

Features

```
call method textedit–>register_event_f1
  exporting
    register = register
    appl_event = appl_event
```

```
 exceptions
   error_regist_event = 1
   error_unregist_event = 2
   cntl_error = 3
   event_already_registered = 4
   event_not_registered = 5.
```

Parameters	**Description**	**Possible values**
register	Registering the events	**`true`** Register events (default value) **`false`** Do not register events
appl_event	Choice between system and application events	**`space`** System event (default value) **`'X'`** Application event

REGISTER_EVENT_F4

Use

Use this method to register the F4 (function key) event.

To make your coding easier to understand, you should call this method directly after you have created the instance (**`CREATE OBJECT`**).

Features

```
call method textedit–>register_event_f4
 exporting
   register = register
   appl_event = appl_event
 exceptions
   error_regist_event = 1
   error_unregist_event = 2
   cntl_error = 3
   event_already_registered = 4
   event_not_registered = 5.
```

Parameters	**Description**	**Possible values**

register	Registering the events	**true** Register events (default value) **false** Do not register events
appl_event	Choice between system and application events	**space** System event (default value) **'X'** Application event

REGISTER_EVENT_FILEDROP

Use

Use this method to register the filedrop event.

To make your coding easier to understand, you should call this method directly after you have created the instance (**CREATE OBJECT**).

Features

```
call method textedit–>register_event_filedrop
  exporting
    register = register
    appl_event = appl_event
  exceptions
    error_regist_event = 1
    error_unregist_event = 2
    cntl_error = 3
    event_already_registered = 4
    event_not_registered = 5.
```

Parameters	Description	Possible values
register	Registering the events	**true** Register events (default value) **false** Do not register events

appl_event	Choice between system and application events	`space` System event (default value) `'X'` Application event

REPLACE_ALL

Use

This method allows you to replace found text.

Features

```
call method textedit–>replace_all
  exporting
    case_sensitive_mode = case_sensitive_mode
    replace_string = replace_string
    search_string = search_string
    whole_word_mode = whole_word_mode
  changing
    counter = counter
  exceptions
    error_cntl_call_method = 1
    invalid_parameter = 2.
```

Parameters	**Description**	**Possible values**
case_sensitive_mode	Upper-/lowercase	`false` Do not observe (default value) `true` Observe
replace_string	Text to replace the occurrences of SEARCH_STRING	
search_string	Text to be replaced	

whole_word_mode	Only replace whole words	**false** Find whole words and parts of words (default value) **true** Only find whole words
counter	Return value specifying how many times the search string was replaced	

If you do not set the parameters SEARCH_STRING and REPLACE_STRING, the *Find and Replace* dialog box appears.

The method starts at the cursor position and searches to the end of the text. You can use the methods SET_SELECTION_INDEXES [Page 47], SET_SELECTION_POS [Page 47], or SET_SELECTION_POS_IN_LINE [Page 48] to set the cursor position. If you want to replace all occurrences within a text, you should set the selection to the first character in the text.

Text replacement is not restricted to the selected area.

SAVE_AS_LOCAL_FILE

Use

Use this method to save text in a local file.

Features

```
call method textedit–>save_as_local_file
 exporting
  file_name = file_name
 exceptions
  error_cntl_call_method = 1.
```

Parameters	Description
file_name	Name of the file you want to save. You can specify the path in UNC format.

If you do not set the FILE_NAME parameter, a dialog box appears in which you can enter the name and path of the file.

SELECT_LINES

Use

Use this method to select a range of lines. The range is automatically placed within the visible section of the control.

Features

```
call method textedit–>select_lines
  exporting
    from_line = from_line
    to_line = to_line
  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description
from_line	Starting line for the range
to_line	Final line (inclusive) of the range

You can make the selection invisible to the user as follows:

1. Get the current cursor position
2. Switch off the redraw function by calling the method AUTO_REDRAW [Page 12] and setting the ENABLE_REDRAW parameter to false.
3. Set the required selection. Other actions may follow at this point.
4. If required, set the new position.
5. Reenable the automatic redraw by calling the method AUTO_REDRAW [Page 12] and setting the ENABLE_REDRAW parameter to true.

SET_AUTOINDENT_MODE

Use

Use this method to switch the automatic indentation mode on or off.

For further information about indenting lines, refer to INDENT_LINES [Page 28], UNINDENT_LINES [Page 55], INDENT_SELECTION [Page 29], and UNINDENT_SELECTION [Page 56].

Features

```
call method textedit–>set_autoindent_mode
  exporting
    auto_indent = auto_indent
  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description	Possible values
auto_indent	Switches the automatic mode for line indentation on or off	`true` Switch on `false` Switch off

SET_COMMENTS_STRING

Use

Use this method to comment out lines beginning with a particular string.

In the ABAP Editor, the comment character is the asterisk (*).

To switch highlighting on or off for comment lines, use the method SET_HIGHLIGHT_COMMENTS_MODE [Page 43].

Features

```
call method textedit–>set_comments_string
  exporting
    comments_string = comments_string
  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description
comments_string	String

SET_DRAGDROP

Use

Use this method to set the drag and drop behavior.

Features

```
call method textedit–>set_dragdrop
  exporting
    dragdrop = dragdrop.
```

Parameters	Description
dragdrop	Drag and drop object with type CL_DRAGDROP. You must first create and initialize this object. For further information, refer to Drag and Drop [Ext.]

SET_FILEDROP_MODE

Use

Use this method to set the mode used in drag and drop operations with files.

You can also set the mode in the CONSTRUCTOR [Page 13] method when you create an instance.

Features

```
call method textedit->set_filedrop_mode
  exporting
    filedrop_mode = filedrop_mode
  exceptions
    error_cntl_call_method = 1
    invalid_parameter = 2.
```

Parameters	Description	Possible values
filedrop_mode	Parameter controlling drag and drop behavior	**`dropfile_event_off`** Only a file that replaces the full existing text can be used (default value) **`dropfile_event_single`** Only one file can be used. The file is not included in the editor. The file drop event is triggered instead. You can specify the path of the dropped file using the method GET_PATH_OF_DROPPED_FILES [Page 20]. **`dropfile_event_multiple`** You can use more than one file. The file is not included in the editor. The file drop event is triggered instead. You can specify a list of the paths of the dropped files using the method GET_PATH_OF_DROPPED_FILES [Page 20].

SET_FIRST_VISIBLE_LINE

Use

Use this method to set the specified line as the first visible line in the editor window.

Features

```
call method textedit–>set_first_visible_line

  exporting
    line = line

  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description
line	Line number

SET_HIGHLIGHT_BREAKPOINTS_MODE

Use

This method allows you to switch the highlighting mode for breakpoints on and off.

This method is only used in the ABAP Editor.

Features

```
call method textedit–>set_highlight_breakpoints_mode

  exporting
    highlight_breakpoints_mode = highlight_breakpoints_mode

  exceptions
    error_cntl_call_method = 1
    invalid_parameter = 2.
```

Parameters	Description	Possible values
highlight_breakpoints_mode	Switches breakpoint highlighting on or off	`true` Switch on (default value) `false` Switch off

If this mode is switched on, the methods HIGHLIGHT_SELECTION [Page 27] and HIGHLIGHT_LINES [Page 27] for highlighting areas of text have no effect.

SET_HIGHLIGHT_COMMENTS_MODE

Use

Use this method to switch automatic highlighting for comment lines on or off. The method SET_COMMENTS_STRING [Page 40] determines the lines that are recognized as comments.

Features

```
call method textedit–>set_highlight_comments_mode
  exporting
    highlight_comments_mode = highlight_comments_mode
  exceptions
    error_cntl_call_method = 1
    invalid_parameter = 2.
```

Parameters	**Description**	**Possible values**
highlight_comments_mode	Switches automatic highlighting on or off	`true` Switch on (default value) `false` Switch off

If this mode is switched on, the methods HIGHLIGHT_SELECTION [Page 27] and HIGHLIGHT_LINES [Page 27] for highlighting areas of text have no effect.

SET_LOCAL_CONTEXTMENU_MODE

Use

Use this method to make the local context menu visible or invisible.

Features

call method textedit–>set_local_contextmenu_mode

```
  exporting
    visible = visible

  exceptions
    error_cntl_call_method = 1
    invalid_parameter = 2.
```

Parameters	Description	Possible values
visible	Visibility of local context menu	**`false`** Context menu invisible (default) **`true`** Context menu visible

SET_NAVIGATE_ON_DBLCLICK

Use

Use this method to set the reaction to a double-click in the control.

Features

call method textedit–>set_navigate_on_dblclick

```
  exporting
    navigate_on_dblclick_mode = navigate_on_dblclick_mode

  exceptions
    error_cntl_call_method = 1
    invalid_parameter = 2.
```

Parameters	Description	Possible values
navigate_on_dblclick_mode	Mode for reacting to a double-click	**`true`** Forward navigation switched on (default value) Forward navigation switched off

SET_READONLY_MODE

Use

Use this method to switch between read mode and input mode in the textedit control.

You can tell the difference between the two modes from the background colors. The colors are taken from the general SAPgui settings.

Features

call method textedit–>set_readonly_mode

  exporting
    read_only = read_only

  exceptions
    error_cntl_call_method = 1
    invalid_parameter = 2.

Parameters	**Description**	**Possible values**
read_only	Input mode for the SAP Textedit	`true` Input not possible (default value) `false` Input possible

SET_SELECTED_TEXT_AS_R3TABLE

Use

This method allows you to insert text from an R/3 table as a stream. The text is inserted at the cursor position. Any selected text is overwritten. The text is passed without information about line breaks.

Features

call method textedit–>set_selected_text_as_r3table

  exporting
    table = table
    enable_editing_protected_text = enable_editing_protected_text

  exceptions
    error_dp = 1
    error_db_create = 2.

Parameters	**Description**	**Possible values**
table	R/3 table with text	

enable_editing_protected_text	Editing for protected sections of text	**false** Protected sections cannot be edited (default value) **true** Protected sections can be edited

⚠

If you use a table with shorter lines than those in the SAP Textedit, the text from the control is only passed up to the length of the table line. The remaining text is lost.

If the lines of the table are longer than the lines of the control, the table lines are filled with trailing spaces.

SET_SELECTED_TEXT_AS_STREAM

Use

This method allows you to insert text from an R/3 table as a stream. The text is inserted at the cursor position. Any selected text is overwritten. The text is passed with information about line breaks.

Features

```
call method textedit–>set_selected_text_as_stream
  exporting
    selected_text = selected_text
    enable_editing_protected_text = enable_editing_protected_text
  exceptions
    error_dp = 1
    error_db_create = 2.
```

Parameters	**Description**	**Possible values**
selected_text	R/3 table with text	
enable_editing_protected_text	Editing for protected sections of text	**false** Protected sections cannot be edited (default value) **true** Protected sections can be edited

SET_SELECTION_INDEXES

Use

Use this method to set a selection for a text area based on character index. The position is automatically placed within the visible section of the control.

Features

```
call method textedit–>set_selection_indexes

 exporting
  from_index = from_index
  to_index = to_index

 exceptions
  error_cntl_call_method = 1.
```

Parameters	Description
from_index	Character index at which the selection begins. The index is relative to the first character in the control.
to_index	Character index at which the selection ends. The index is relative to the first character in the control.

If the “from” and “to” character positions are the same, no text is selected, but the cursor is placed at the corresponding position.

You can make the selection invisible to the user as follows:

1. Get the current cursor position
2. Switch off the redraw function by calling the method AUTO_REDRAW [Page 12] and setting the ENABLE_REDRAW parameter to false.
3. Set the required selection. Other actions may follow at this point.
4. If required, set the old position.
5. Reenable the automatic redraw by calling the method AUTO_REDRAW [Page 12] and setting the ENABLE_REDRAW parameter to true.

SET_SELECTION_POS

Use

Use this method to set a selection for a text area. The position is automatically placed within the visible section of the control.

Features

call method textedit–>set_selection_pos

```
  exporting
    from_line = from_line
    from_pos = from_pos
    to_line = to_line
    to_pos = to_pos
  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description
from_line	Line number at which the selection should begin
from_pos	Position within the line at which the selection should begin
to_line	Line number at which the selection should end
to_pos	Position within the line at which the selection should end

If the “from” and “to” line and position numbers are the same, no text is selected, but the cursor is placed at the corresponding position.

You can make the selection invisible to the user as follows:

6. Get the current cursor position
7. Switch off the redraw function by calling the method AUTO_REDRAW [Ext.] and setting the ENABLE_REDRAW parameter to false.
8. Set the required selection. Other actions may follow at this point.
9. If required, set the old position.
10. Reenable the automatic redraw by calling the method AUTO_REDRAW [Ext.] and setting the ENABLE_REDRAW parameter to true.

SET_SELECTION_POS_IN_LINE

Use

Use this method to position the cursor within a line.

Features

call method textedit–>set_selection_pos_in_line

```
  exporting
    line = line
    pos = pos
```

```
 exceptions
   error_cntl_call_method = 1.
```

Parameters	Description
line	Line number at which the selection should begin
pos	Position within the line

SET_SPACES_ON_INDENT

Use

Use this method to set the number of spaces by which lines or a selected section are indented. For further information, refer to INDENT_LINES [Page 28], UNINDENT_LINES [Page 55], INDENT_SELECTION [Page 29], and UNINDENT_SELECTION [Page 56] . You specify the number of spaces in the class constant M_SPACES_ON_INDENT (for further information, refer to Class Constants [Page 61]).

Features

```
call method textedit->set_spaces_on_indent

 exporting
   number_of_spaces = number_of_spaces

 exceptions
   error_cntl_call_method = 1
   invalid_parameter = 2.
```

Parameters	Description
number_of_spaces	Number of spaces

SET_STATUSBAR_MODE

Use

Use this method to show or hide the status bar of the control.

Features

```
call method textedit–>set_statusbar_mode

 exporting
   statusbar_mode = statusbar_mode
```

```
  exceptions
    error_cntl_call_method = 1
    invalid_parameter = 2.
```

Parameters	Description	Possible values
statusbar_mode	Status bar mode	**`false`** Status bar invisible (default value) **`true`** Status bar visible

SET_STATUS_TEXT

Use

Use this method to display a text in the status bar of the control. To show or hide the status bar, use the method SET_STATUSBAR_MODE [Page 49].

Features

```
call method textedit–>set_status_text

  exporting
    status_text = status_text

  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description
status_text	Text to be displayed in the status bar

SET_TEXTMODIFIED_STATUS

Use

Use this method to set the changed status of the text. The method GET_TEXTMODIFIED_STATUS [Page 23] returns the current changed status of a text.

If you get text using the methods GET_TEXT_AS_R3TABLE [Page 51] and GET_TEXT_AS_STREAM [Page 52], the changed status is not reset.

This method is useful if you want to ignore changes to a text. For example, if you receive text from the control and want to store it permanently in the database, you can set it to unchanged without having to specify any parameters.

Features

call method textedit–>set_textmodified_status

exporting
  status = status

exceptions
  error_cntl_call_method = 1.

Parameters	Description	Possible values
status	Changed status	`false` Text not changed (default value) `true` Text changed

SET_TEXT_AS_R3TABLE

Use

This method allows you to place text from the control into an R/3 table. Existing text is overwritten. The text is passed without information about line breaks.

Features

call method textedit–>set_text_as_r3table

exporting
  table = table

exceptions
  error_dp =1
  error_dp_create = 2.

Parameters	Description
table	R/3 table with text

If you use a table with shorter lines than those in the SAP Textedit, the text from the control is only passed up to the length of the table line. The remaining text is lost.

If the lines of the table are longer than the lines of the control, the table lines are filled with trailing spaces.

SET_TEXT_AS_STREAM

Use

This method allows you to set text from an R/3 table as a stream. Existing text is overwritten. The text is passed with information about line breaks.

Features

```
call method textedit–>set_text_as_stream
 exporting
  text = text
 exceptions
  error_dp =1
  error_dp_create = 2.
```

Parameters	Description
text	R/3 table with text

SET_TOOLBAR_MODE

Use

Use this method to show or hide the toolbar.

Features

```
call method textedit–>set_toolbar_mode
 exporting
  toolbar_mode = toolbar_mode
 exceptions
  error_cntl_call_method = 1
  invalid_parameter = 2.
```

Parameters	Description	Possible values
toolbar_mode	Toolbar mode	`false` Toolbar invisible (default value) `true` Toolbar visible

SET_WORDBREAK_PROCEDURE

Use

Use this method to control line break behavior for normal text and ABAP coding.

Features

```
call method textedit–>set_wordbreak_procedure
 exporting
  text_type = text_type
 exceptions
  error_cntl_call_method = 1.
```

Parameters	Description	Possible values
text_type	Line break behavior	**`text_standard`** Text **`text_abap`** ABAP coding

SET_WORDWRAP_BEHAVIOR

Use

Use this method to set the behavior of the line break.

Features

```
call method textedit–>set_wordwrap_behavior
 exporting
  wordwrap_mode = wordwrap_mode
  wordwrap_position = wordwrap_position
  wordwrap_to_linebreak_mode = wordwrap_to_linebreak_mode
 exceptions
  error_cntl_call_method = 1.
```

Parameters	Description	Possible values

wordwrap_mode	Line break behavior	**`wordwrap_off`** No line break **`wordwrap_at_windowborder`** Line break at the edge of the window (default value) **`wordwrap_at_fixed_position`** Line break at a fixed position For further information, refer to Class Constants [Page 61] and the CONSTRUCTOR [Page 13] method.
wordwrap_position	If **`wordwrap_mode = textedit->wordwrap_at_fixed_position`**: Position for the automatic line break in a line	Default value: -1

wordwrap_to_linebreak_mode	Converts soft line breaks to hard ones when you save in the R/3 System	**`false`**
		Soft line breaks are ignored when you save
		
		`true`
		Soft line breaks are converted to hard breaks when you save

UNCOMMENT_LINES

Use

Use this method to convert a set of comment lines back into normal lines.

Features

```
call method textedit->uncomment_lines
  exporting
    from_line = from_line
    to_line = to_line
    enable_editing_protected_text = enable_editing_protected_text
  exceptions
    error_cntl_call_method = 1.
```

Parameters	**Description**	**Possible values**

from_line	First line of block	
to_line	End of block	
enable_editing_protected_text	Editing for protected sections of text	`false` Protected sections cannot be edited (default value) `true` Protected sections can be edited

UNCOMMENT_SELECTION

Use

Use this method to convert the selected comment lines into normal lines.

Features

```
call method textedit->uncomment_selection
  exporting
    enable_editing_protected_text = enable_editing_protected_text
  exceptions
    error_cntl_call_method = 1.
```

Parameters	Description	Possible values
enable_editing_protected_text	Editing for protected sections of text	`false` Protected sections cannot be edited (default value) `true` Protected sections can be edited

UNINDENT_LINES

Use

Use this method to reduce the indentation of a set of lines by a certain number of spaces. Use the parameter M_SPACES_ON_INDENT of the method SET_SPACES_ON_INDENT [Page 49] to set the number of spaces. The indentation is only reduced if there are spaces at the beginning of the lines in question.

Features

call method textedit->unindent_lines

```
 exporting
  from_line = from_line
  to_line = to_line
  enable_editing_protected_text = enable_editing_protected_text
 exceptions
  error_cntl_call_method = 1.
```

Parameters	Description	Possible values
from_line	Beginning of the section you want to indent	
to_line	End of the section you want to indent	
enable_editing_protected_text	Editing for protected sections of text	**false** Protected sections cannot be edited (default value) **true** Protected sections can be edited

UNINDENT_SELECTION

Use

Use this method to reduce the indentation of the selection by a certain number of spaces. Use the parameter M_SPACES_ON_INDENT of the method SET_SPACES_ON_INDENT [Page 49] to set the number of spaces. The indentation is only reduced if there are spaces at the beginning of the lines in the selection.

Features

call method textedit->unindent_selection

```
 exporting
   enable_editing_protected_text = enable_editing_protected_text
 exceptions
   error_cntl_call_method = 1.
```

Parameters	Description	Possible values
enable_editing_protected_text	Editing for protected sections of text	`false` Protected sections cannot be edited (default value) `true` Protected sections can be edited

Functional Listing

You requested application help. The following help is available for the current R/3 context:

This functional listing allows you to find the right method of the SAP Textedit Control for the task you are trying to implement. The functions are divided up by themes. Within each thematic group, the relevant methods are arranged alphabetically.

Areas

Creating and Destroying a Control [Ext.]

Setting and Getting Text [Ext.]

Setting and Getting Text Positions [Ext.]

Highlighting and Protecting Text [Ext.]

Finding and Replacing Text [Ext.]

Status Bar [Ext.]

Toolbar [Ext.]

Other Functions [Ext.]

Creating a Control

CONSTRUCTOR [Page 13]

Setting and Getting Text

There are two different ways of exchanging data with tables. One way includes information about line breaks, the other does not. The sets of methods have the suffix AS_STREAM (containing line break information) or AS_R3TABLE (without line break information).

Getting Text	Setting Text
GET_LINE_TEXT [Page 19]	
GET_SELECTED_TEXT_AS_R3TABLE [Page 20]	SET_SELECTED_TEXT_AS_R3TABLE [Page 45]
GET_SELECTED_TEXT_AS_STREAM [Page 21]	SET_SELECTED_TEXT_AS_STREAM [Page 46]
GET_TEXT_AS_R3TABLE [Page 23]	SET_TEXT_AS_R3TABLE [Page 51]
GET_TEXT_AS_STREAM [Page 24]	SET_TEXT_AS_STREAM [Page 52]
OPEN_LOCAL_FILE [Page 30]	SAVE_AS_LOCAL_FILE [Page 38]

Deleting Text	
DELETE_TEXT [Page 16]	

⚠ If you use GET methods with the type AS_R3TABLE and use a table with shorter lines than those in the SAP Textedit, the text from the control is only passed up to the length of the table line. The remaining text is lost.

If the lines of the table are longer than the lines of the control, the table lines are filled with trailing spaces.

Setting and Getting Text Positions

There are two ways of accessing text positions. You can either use a line and position within the line, or the absolute character index. Character index means that all of the characters in the text are sequentially numbered.

The main difference is in the way the data passed to the control (as a table) is visualized. If you are using automatic line breaks in the textedit control, the line numbers in the table may not be the same as the line numbers in the control. The same applies, of course, to positions within a line. You define the behavior of the line break in the constructor (for further information, refer to CONSTRUCTOR [Page 13]).

The difference is particularly apparent when you set the line break to WORDWRAP_AT_WINDOWBORDER (automatic line break when the edge of the window is reached). If the user changes the size of the SAPgui and the control container can also be resized, the size of the textedit control will change. If the user makes the SAPgui window smaller, the textedit control will become narrower. Consequently, lines containing words that collide with the window border are automatically split. So even without the user entering any data, the lines and positions within a line are no longer the same as those stored in the internal table at the backend.

It is possible to create a similar example for the line break behavior using WORDWRAP_AT_FIXED_POSITION.

⚠ If you need a direct correspondence between a position in the internal table and a position in the textedit control, you should, because of the behavior described above, use the character index.

Access Using Line and Position Numbers

Line and position numbers in a line begin at 1, so the first character in a text is at line 1, position 1.

Lines and position numbers outside the text area have a logical value. If a number is less than 1, it is set to 1. If it is greater than the number of lines or positions, it is set to the number of the greatest existing line or position.

Getting Text Positions	Setting Text Positions
GET_FIRST_VISIBLE_LINE [Page 19]	SET_FIRST_VISIBLE_LINE [Page 42]
GET_SELECTION_POS [Page 22]	SET_SELECTION_POS [Page 47]
GO_TO_LINE [Page 26]	
	SELECT_LINES [Page 39]
	SET_SELECTION_POS_IN_LINE [Page 48]

Access Using the Character Index

The character index starts at 0. Position zero is the position before the first character. Information about the text position is independent of the line break behavior (see above).

Getting Text Positions	Setting Text Positions
GET_SELECTION_INDEXES [Page 21]	SET_SELECTION_INDEXES [Page 47]

Highlighting and Protecting Text

Redrawing the Control
AUTO_REDRAW [Page 12]

Switching Highlighting on and off
HIGHLIGHT_LINES [Page 27]
HIGHLIGHT_SELECTION [Page 27]

Switching Input Protection on and off
PROTECT_LINES [Page 30]

PROTECT_SELECTION [Page 31]

Comment Lines
SET_COMMENTS_STRING [Page 40]
SET_HIGHLIGHT_COMMENTS_MODE [Page 43]

Switching Between Display and Change Mode
SET_READONLY_MODE [Page 45]

Moving a Selection to the Visible Part of the Editor Window
MAKE_SELECTION_VISIBLE [Page 30]

Finding and Replacing Text

Finding and Replacing Text
EMPTY_UNDO_BUFFER [Page 16]
FIND_AND_REPLACE [Page 17]
FIND_AND_SELECT_TEXT [Page 18]
REPLACE_ALL [Page 37]

Status Bar

Setting the Status Bar	Read-Only Instance Attributes
SET_STATUSBAR_MODE [Page 49]	Instance Attributes [Page 62]
SET_STATUS_TEXT [Page 50]	

Toolbar

Setting the Toolbar	Read-Only Instance Attributes
SET_TOOLBAR_MODE [Page 52]	Instance Attributes [Page 62]

Other Functions

Setting the Line Break	
SET_WORDWRAP_BEHAVIOR [Page 53]	

Events

To react to an event in your ABAP program, you must have registered it. To register events, use the methods REGISTER_EVENT_CONTEXT_MENU [Page 32], REGISTER_EVENT_DBLCKICK [Page 33], REGISTER_EVENT_F1 [Page 34], REGISTER_EVENT_F4 [Page 35], and REGISTER_EVENT_FILEDROP [Page 36]. Events that are triggered but for which you are not registered are filtered by the presentation server, and not passed to the application server. For further information, refer to Event Handling [Ext.]

Event	Description / Use
CONTEXT_MENU	Calls the context menu using the right-hand mouse button. For further information, refer to Context Menu [Ext.].
CONTEXT_MENU_SELECTED	Item selection in the context menu. For further information, refer to Context Menu [Ext.].
DBLCLICK	Double click
F1	Function key F1 pressed
F4	Function key F4 pressed
FILEDROP ON_DRAG ON_DROP ON_DROP_COMPLETE ON_GET_FLAVOR	Drag and drop events. For further information, refer to Drag and Drop [Ext.]

For an example of event handling, refer to the demonstration program SAPTEXTEDIT_TEST_EVENTS in development class SAPTEXTEDIT.

Class Constants

Class Constant	Type / Value	Description / Use

ABAP_COMMENTLINE_IDENTIFIER	TYPE C VALUE *	Used to highlight comment lines when you use the control as a program editor
BOOL_INITIAL FALSE TRUE	TYPE I VALUE -1 TYPE I VALUE 0 TYPE I VALUE 1	Simulation of type BOOL
STRING_LENGTH	TYPE I VALUE 256	Type for strings. When you pass parameters to the control, this definition corresponds to the maximum number of characters that can be transferred between the frontend and application server. ⚠There is no warning if you try to pass a longer string.
WORDWRAP_OFF	TYPE I VALUE 0	No automatic word-wrap in control. You only need this definition when you create an object in the constructor.
WORDWRAP_AT_WINDOWBORDER	TYPE I VALUE 1	Automatic word-wrap at the edge of the control window. You only need this definition when you create an object in the constructor.
WORDWRAP_AT_FIXED_POSITION	TYPE I VALUE 2	Automatic word-wrap at a fixed position in the control. You only need this definition when you create an object in the constructor.

ABAP does not contain any constants with type BOOL. Instead, this type is simulated using the integer constants **`false`** and **`true`**. You can address them using **`cl_gui_textedit=>true`** and **`cl_gui_textedit=>false`**.

Instance Attributes

The following instance attributes describe the state of the control. They are all flagged as Read Only, so you can use, but not change them.

The frontend attributes are not set from within the control. This means that you can only change them using SET methods from the ABAP proxy. This allows the values of the frontend properties to be reflected in attributes on the ABAP side. To set an attribute, you need to call the corresponding set method, which implicitly updates the corresponding instance attribute. This means that you do not need to call the get methods, thus avoiding flushes, which affect performance.

The instance attributes are initialized in the constructor [Page 13], and are updated when you call the corresponding set methods.

Instance Attributes	Type / Value	Description / Use
M_AUTOREDRAW_REFCOUNTER	TYPE I VALUE 0 READ-ONLY	Reference counter: Determines when the control is redrawn
M_AUTO_INDENT	TYPE I READ-ONLY	Value for automatic line indentation
M_COMMENTS_STRING(STRING_LENGTH)	TYPE C READ-ONLY	Character which, when placed at the beginning of a line, signals that the entire line is a comment. To set the value, use the method SET_COMMENTS_STRING [Page 40]. To set the highlighting, use the method SET_HIGHLIGHT_COMMENTS_MODE [Page 43].
M_FILEDROP_MODE	TYPE I VALUE DROPFILE_EVENT_OFF READ-ONLY	File mode in drag and drop. You set it using the SET_FILEDROP_MODE [Page 41] method.
M_HIGHLIGHT_BREAKPOINTS_MODE	TYPE I READ-ONLY	Breakpoint highlighting on or off (true or false). You set this using the method SET_HIGHLIGHT_BREAKPOINTS_MODE [Page 42].
M_HIGHLIGHT_COMMENTS_MODE	TYPE I READ-ONLY	Comment line highlighting on or off (true or false). To set the attribute, use the method SET_HIGHLIGHT_COMMENTS_MODE [Page 43].
M_LOCAL_CONTEXTMENU_MODE	TYPE I READ-ONLY	Visibility of context menu (True: Visible, False: Invisible). You set the attribute using the method SET_LOCAL_CONTEXTMENU_MODE [Page 43].
M_READONLY_MODE	TYPE I READ-ONLY	Text displayed in protected or input mode (true or false) To set the attribute, use the method SET_READONLY_MODE [Page 45].

M_SPACES_ON_INDENT	TYPE I VALUE 2 READ-ONLY	Number of spaces that you want to insert or delete for indentations. To set the attribute, use the method SET_SPACES_ON_INDENT [Page 49].
M_STATUS_TEXT(STRING_LENGTH)	TYPE C READ-ONLY	Text in first element of the status line. To set it, use the method SET_STATUS_TEXT [Page 50].
M_STATUSBAR_MODE	TYPE I READ-ONLY	Display or suppress the status bar (false or true). To set it, use the method SET_STATUSBAR_MODE [Page 49].
M_TOOLBAR_MODE	TYPE I READ-ONLY	Display or suppress the toolbar (false or true). To set it, use the method SET_TOOLBAR_MODE [Page 52].
M_WORDBREAK_PROCEDURE	TYPE I READ-ONLY	Line break behavior for normal text or ABAP code (TEXT_STANDARD or TEXT_ABAP)
M_WORDWRAP_MODE	TYPE I READ-ONLY	Line break behavior: • No line break (WORDWRAP_OFF) • Line break at edge of window (WORDWRAP_AT_WINDOWBORDER) • Line break at a fixed position (WORDWRAP_AT_FIXED_POSITION) You set these values when you create the instance (CONSTRUCTOR [Page 13] method) or explicitly using the method SET_WORDWRAP_BEHAVIOR [Page 53].

M_WORDWRAP_POSITION	TYPE I READ-ONLY	Position in a line at which the line break automatically occurs. You set this value when you create the SAP Textedit instance (CONSTRUCTOR [Page 13] method). This value is only used if you have set M_WORDWRAP_MODE to 2 or WORDWRAP_AT_FIXED_POSITION.
M_WORDWRAP_TO_LINEBREAK_MODE	TYPE I READ-ONLY	Converts soft line breaks to hard ones when you save in the R/3 System: • Soft line breaks are ignored when you save. Line ends at the next hard line break (false). • Soft line breaks are converted to hard breaks on saving (true) You set this value when you create the SAP Textedit instance (CONSTRUCTOR [Page 13] method).
M_NAVIGATE_ON_DBLCLICK	TYPE I READ-ONLY	Mode for reacting to a double-click To set the value, use the method SET_NAVIGATE_ON_DBLCLICK [Page 44]

Keyboard and Mouse Control in the Editor Window

Insert and overwrite mode

Keyboard command	Description
Ins	Switches between insert and overwrite mode

Clipboard Control

Keyboard command	Description
Ctrl + Ins Shift + Ctrl + Ins Ctrl + C Shift + Ctrl + C	Copies the selected text to the clipboard
Ctrl + Del Shift + Ctrl + Del Ctrl + X Shift + Ctrl + X	Cuts the selected text to the clipboard
Ctrl + Ins Shift + Ctrl + Ins Ctrl + V Shift + Ctrl + V	Pastes the contents of the clipboard at the cursor position

Undo / Redo

Keyboard command	Description
Ctrl + Z Alt + Backspace	Undo
Ctrl + Y	Redo

Navigating in the Text

Keyboard command	Description
-	Cursor moves one line higher
–{}–↓	Cursor moves one line lower
–{}–←	Cursor moves one character to the left
–{}–→	Cursor moves one character to the right
PgUp	Cursor moves up one page
PgDn	Cursor moves down one page
Home	Cursor moves to beginning of line
End	Cursor moves to end of line
Ctrl + ↑	Cursor moves to beginning of the current paragraph

Ctrl + ↓	Cursor moves to beginning of the next paragraph
Ctrl + ←	Cursor moves to beginning of next word to the left
Ctrl + →	Cursor moves to beginning of next word to the right
Ctrl + PgUp	Cursor moves to the first fully-visible character in the editor window
Ctrl + PgDn	Cursor moves to the last fully-visible character in the editor window
Ctrl + Home	Cursor moves to the first character of the text
Ctrl + End	Cursor moves to the last character of the text

Selecting Text

Keyboard command	Description
Ctrl + A Ctrl + Shift + A	Selects entire text
Shift + ↑	Selects the text from the current cursor position one whole line upwards
Shift + ↓	Selects the text from the current cursor position one whole line downwards
Shift + ←	Selects the text from the current cursor position one character to the left
Shift + →	Selects the text from the current cursor position one character to the right
Ctrl + PgUp	Selects one whole editor page upwards from the current cursor position
Ctrl + PgDn	Selects one whole editor page downwards from the current cursor position
Ctrl + Home	Selects the text from the current cursor position to the beginning of the line
Ctrl + End	Selects the text from the current cursor position to the end of the line
Shift + Ctrl + ↑	Selects the text from the current cursor position to the beginning of the current paragraph
Shift + Ctrl + ↓	Selects the text from the current cursor position to the end of the current paragraph
Shift + Ctrl + ←	Selects the text from the current cursor position to the beginning of the next word to the left
Shift + Ctrl + →	Selects the text from the current cursor position to the beginning of the next word to the right
Shift + Ctrl + PgUp	Selects the text from the current cursor position to the first fully visible line in the editor window

Shift + Ctrl + PgDn	Selects the text from the current cursor position to the last fully visible line in the editor window
Shift + Ctrl + Home	Selects the text from the current cursor position to the beginning of the text
Shift + Ctrl + End	Selects the text from the current cursor position to the end of the text
Press and hold left mouse button and drag mouse	Selects the text block
Single click the left-hand edge of a line with the left mouse button	Selects the entire line
Click the left-hand edge of a line with the left mouse button and drag up or down	Selects a successive set of lines
Ctrl + Single click on the left-hand edge of a line with the left mouse button	Selects entire text

Find and Replace

If text is selected, the actions affect the selected area. However, this only applies to actions triggered at the frontend. The selection does not affect find and replace functions started from the ABAP program.

Keyboard command	Description
Ctrl + F Shift + Ctrl + F Alt + Ctrl + F	Displays the find and replace dialog
Ctrl + G Shift + Ctrl + G Alt + Ctrl + G	Finds the next occurrence of the search string

Drag & Drop Control

Keyboard command	Description
Left mouse button on selected text	Drag and drop: move
Ctrl + Left mouse button on selected text	Drag and drop: Copy

Context Menu

Keyboard command	Description
Ctrl + F10	Context menu
Right mouse button	Context menu

Indentation

Keyboard command	Description
Tab	Indents the current line or selected text

Shift + Tab	removes the indent for current line or selected text

Deleting Text

Keyboard command	Description
Backspace	Deletes from right to left: Any selected text is deleted in a single operation
Ctrl + Backspace Shift + Ctrl + Backspace	Deletes a whole word at a time from right to left
Del	Deletes from left to right: Any selected text is deleted in a single operation
Ctrl + Del Shift + Ctrl + Del	Deletes a whole word at a time from left to right

Methods of Class CL_GUI_CFW

The class **`CL_GUI_CFW`** contains static methods that apply to all instantiated custom controls when you call them.

dispatch

Use this method to dispatch application events (**see** Event Handling [Ext.]) to the event handlers registered for the events. If you do not call the method within the PAI event of your application program, it is called automatically by the system after the PAI has been processed. The method returns a return code from which you can tell if the call was successful.

```
CALL METHOD cl_gui_cfw=>dispatch
     IMPORTING return_code = return_code.
```

Parameters	Description
return_code	**`cl_gui_cfw=>rc_found`**: The event was successfully directed to a handler method. **`cl_gui_cfw=>rc_unknown`**: The event was not registered in the event list. **`cl_gui_cfw=>rc_noevent`**: No event was triggered in a control. The function code was therefore a normal one (for example, from a menu entry). **`cl_gui_cfw=>rc_nodispatch`**: No handler method could be assigned to the event.

An event can only be dispatched once. After that, it is "spent". Consequently, attempting to dispatch the events a second time does not trigger the handler events again.

flush

Use this method to synchronize the automation queue [Ext.]. The buffered operations are sent to the frontend using GUI RFC. At the frontend, the automation queue is processed in the sequence in which you filled it.

If an error occurs, an exception is triggered. You must catch and handle this error. Since it is not possible to identify the cause of the error from the exception itself, there are tools available in the Debugger and the SAPgui to enable you to do so.

Debugger: Select the option *Automation Controller: Always process requests synchronously*. The system then automatically calls the method **`cl_gui_cfw=>flush`** after each method called by the Automation Controller.

SAPGUI: In the SAPgui settings, under *Trace*, select *Automation*. The communication between the application server and the Automation Controller is then logged in a trace file that you can analyze at a later date.

```
CALL METHOD cl_gui_cfw=>flush
          EXCEPTIONS CNTL_SYSTEM_ERROR = 1
                 CNTL_ERROR = 2.
```

Do not use any more synchronizations in your program than are really necessary. Each synchronization opens a new RFC connection to the SAPgui.

get_living_dynpro_controls

This method returns a list of reference variables to all active custom controls.

```
CALL METHOD cl_gui_cfw=>get_living_dynpro_controls
                  IMPORTING control_list = control_list.
```

Parameters	Description
`control_list`	List of reference variables of active custom controls. The list has the type **`CNTO_CONTROL_LIST`** (defined in class **`CL_GUI_CFW`**).

set_new_ok_code

You may only use this method in the handler method of a system event. It sets an **OK_CODE** that triggers PAI processing. This means that data is transferred from the screen to the program, and you can take control of the program in your PAI modules.

```
CALL METHOD cl_gui_cfw=>set_new_ok_code
        EXPORTING new_code = new_code
        IMPORTING     rc = rc.
```

Parameters	Description
new_code	Function code that you want to place in the **OK_CODE** field (**SY-UCOMM**).
return_code	**cl_gui_cfw=>rc_posted**: The OK_CODE was set successfully and the automatic field checks and PAI will be triggered after the event handler method has finished. **cl_gui_cfw=>rc_wrong_state**: The method was not called from the handler method of a system event. **cl_gui_cfw=>rc_invalid**: The **OK_CODE** that you set is invalid.

update_view

Calling the flush [Page 70] method only updates the automation queue if the queue contains return values.

If you have a queue with no return values, and want to ensure that it is synchronized, you can use the Control Framework method **CL_GUI_CFW=>UPDATE_VIEW**. You should only use this method if you absolutely need to update the GUI. For example, you might have a long-running application in which you want to provide the user with regular updates on the status of an action.

```
CALL METHOD cl_gui_cfw=>update_view
         EXCEPTIONS CNTL_SYSTEM_ERROR = 1
                CNTL_ERROR      = 2.
```

Methods of Class CL_GUI_OBJECT

The class **CL_GUI_OBJECT** contains important methods for custom control wrappers. The only one relevant for application programs is the is_valid [Page 71] method.

is_valid

This method informs you whether a custom control for an object reference still exists at the frontend.

```
CALL METHOD my_control->is_valid
        IMPORTING result = result.
```

Parameters	Description
result	0: Custom control is no longer active at the frontend 1: Custom control is still active

free

Use this method to destroy a custom control at the frontend. Once you have called this method, you should also initialize the object reference (**`FREE my_control`**).

```
CALL METHOD my_control->free
    EXCEPTIONS cntl_error        = 1
           cntl_system_error = 2.
```

Methods of Class CL_GUI_CONTROL

The class **`CL_GUI_CONTROL`** contains methods that you need to set control attributes (for example, displaying the control), register events, and destroy controls.

constructor

This method is called by the control wrapper when you instantiate a control.

To instantiate a SAP control, always call the constructor of its class.

```
CREATE OBJECT my_control
  EXPORTING   clsid          = clsid
         lifetime        = lifetime
         shellstyle       = shellstyle
         parent          = parent
         autoalign        = autoalign
  EXCEPTIONS cntl_error        = 1
         cntl_system_error = 2
         create_error      = 3
         lifetime_error    = 4.
```

Parameters	Description
clsid	ID of the class

lifetime	Lifetime management parameter. The following values are permitted: **my_control->lifetime_imode**: The control remains alive for the duration of the internal session (that is, until the session is ended by one of the following statements: **leave program. leave to transaction. set screen 0, leave screen.**). After this, the finalize [Page 73] method is called. **my_control->lifetime_dynpro**: The control remains alive for the lifetime of the screen instance, that is, for as long as the screen remains in the stack. After this, the free [Page 72] method is called. Using this mode automatically regulates the visibility of the control. Controls are only displayed when the screen on which they were created is active. When other screens are active, the controls are hidden. **my_control->lifetime_default**: If you create the control in a container, it inherits the lifetime of the container. If you do not create the control in a container (for example, because it is a container itself), the lifetime is set to **my_control->lifetime_imode**.
Shellstyle	Controls the appearance and behavior of the control You can pass any constants from the ABAP include <**CTLDEF**> that begin with WS. You can combine styles by adding the constants together. The default value sets a suitable combination of style constants internally.
parent	Container in which the SAP Picture Control can be displayed (**see also** SAP Container [Ext.]).
autoalign	' ': Control is not automatically aligned 'X': Control is automatically aligned. This uses the maximum available space within a container.

finalize

This method is redefined by the relevant control wrapper. It contains specific functions for destroying the corresponding control. This method is called automatically by the free [Page 72] method, before the control is destroyed at the frontend.

```
CALL METHOD my_control->finalize.
```

set_registered_events

Use this method to register the events of the control. **See also:** Event Handling [Ext.]

```
CALL METHOD my_control->set_registered_events
    EXPORTING  events           = events
    EXCEPTIONS cntl_error       = 1
            cntl_system_error = 2
      illegal_event_combination = 3.
```

Parameters	Description
events	Table of events that you want to register for the custom control **`my_control`**.

The table **`events`** is a list of the events that you want to register. It is defined with reference to table type **`CNTL_SIMPLE_EVENTS`**. The table type is based on the structure **`CNTL_SIMPLE_EVENT`**, which consists of the following fields:

Field	Description
EVENTID	Event name
APPL_EVENT	Indicates whether the event is a system event (initial) or an application event (X).

The values that you assign to the field **`EVENTID`** are control-specific and therefore described in the documentation of the individual controls.

get_registered_events

This method returns a list of all events registered for custom control **`my_control`**.

```
CALL METHOD my_control->get_registered_events
     IMPORTING  events      = events
     EXCEPTIONS cntl_error = 1.
```

Parameters	Description
events	Table of events that you want to register for the custom control **`my_control`**.

The table **`events`** is a list of the events that you want to register. It is defined with reference to table type **`CNTL_SIMPLE_EVENTS`**. The table type is based on the structure **`CNTL_SIMPLE_EVENT`**, which consists of the following fields:

Field	Description
EVENTID	Event name
APPL_EVENT	Indicates whether the event is a system event (initial) or an application event (X).

The values that you assign to the field **`EVENTID`** are control-specific and therefore described in the documentation of the individual controls.

For general information about event handling, refer to the Event Handling [Ext.] section of the SAP Control Framework documentation.

is_alive

This method informs you whether a custom control for an object reference still exists at the frontend.

```
CALL METHOD my_control->is_alive
    RETURNING state = state.
```

Parameters	Description
state	**`my_control->state_dead`**: Custom control is no longer active at the frontend **`my_control->state_alive`**: Custom control is active on the current screen. **`my_control->state_alive_on_other_dynpro`**: Custom control is not active on the current screen, but is still active (but invisible) at the frontend.

set_alignment

Use this method to align the custom control within its container:

```
CALL METHOD my_control->set_alignment
    EXPORTING  alignment        = alignment
    EXCEPTIONS cntl_error       = 1
            cntl_system_error = 2.
```

Parameters	Description
alignment	Control alignment

The **`alignment`** parameter may consist of combinations of the following alignments:

Name	Description
my_control->align_at_left	Alignment with left-hand edge
my_control->align_at_right	Alignment with right-hand edge
my_control->align_at_top	Alignment with top edge
my_control->align_at_bottom	Alignment with bottom edge

You can combine these parameters by adding the components:

alignment = my_control->align_at_left + my_control->align_at_top.

set_position

Use this method to place the control at a particular position on the screen.

The position of the control is usually determined by its container.

```
CALL METHOD my_control->set_position
    EXPORTING  height        = height
            left         = left
            top          = top
            width        = width
```

```
      EXCEPTIONS cntl_error       = 1
                 cntl_system_error = 2.
```

Parameters	Description
height	Height of the control
left	Left-hand edge of the control
top	Top edge of the control
width	Width of the control

set_visible

Use this method to change the visibility of a custom control.

```
CALL METHOD my_control->set_visible
      EXPORTING  visible          = visible
      EXCEPTIONS cntl_error       = 1
                 cntl_system_error = 2.
```

Parameters	Description
visible	**X**: Custom control is visible ' ': Custom control is not visible

get_focus

This static method returns the object reference of the control that has the focus.

```
CALL METHOD cl_gui_control=>get_focus
     IMPORTING  control          = control
     EXCEPTIONS cntl_error       = 1
                cntl_system_error = 2.
```

Parameters	Description
control	Object reference (**TYPE REF TO cl_gui_control**) to the control that has the focus.

set_focus

Use this static method to set the focus to a custom control.

```
CALL METHOD cl_gui_control=>set_focus
    EXPORTING  control          = control
    EXCEPTIONS cntl_error       = 1
           cntl_system_error = 2.
```

Parameters	Description
control	Object reference (**`TYPE REF TO cl_gui_control`**) to the control on which you want to set the focus.

get_height

This method returns the height of the control.

```
CALL METHOD control->get_height
    IMPORTING  height          = height
    EXCEPTIONS cntl_error       = 1.
```

Parameters	Description
height	Current height of the control

get_width

This method returns the width of the control.

```
CALL METHOD control->get_width
    IMPORTING  width           = width
    EXCEPTIONS cntl_error       = 1.
```

Parameters	Description
width	Current width of the control

Methods of the Class CL_DRAGDROP

The class **`CL_DRAGDROP`** contains methods that describe the drag and drop [Ext.] behavior of a custom control.

constructor

The constructor creates an instance for the description of the drag and drop behavior of a control.

CREATE OBJECT dragdrop.

add

This method adds a new description to the drag and drop behavior. You can store any number of descriptions, but you may not add the same description more than once.

```
CALL METHOD dragdrop->add
    EXPORTING flavor        = flavor
            dragsrc       = dragsrc
            droptarget    = droptarget
            effect        = effect
            effect_in_ctrl = effect_in_ctrl
    EXCEPTIONS already_defined  = 1
             obj_invalid      = 2.
```

Parameters	Description
flavor	Description of the new flavor
dragsrc	'**X**': The description is a drag source
droptarget	'**X**': The description is a drop target
effect	Drop effect of the description between different custom controls. The following effects are supported: **dragdrop->copy**: Appearance of the mouse when using drag and drop to copy. **dragdrop->move**: Appearance of the mouse when using drag and drop to move. **dragdrop->none**: Drag and drop is not possible.
effect_in_ctrl	Drop effect of the description in the same custom control. The following effects are supported: **dragdrop->copy**: Appearance of the mouse when using drag and drop to copy. **dragdrop->move**: Appearance of the mouse when using drag and drop to move. **dragdrop->none**: Drag and drop is not possible. **dragdrop->use_default_effect**: Uses the same effect specified in the **effect** parameter.

Exceptions	Description
already_defined	The specified flavor has already been defined.
obj_invalid	The object has already been destroyed using the method destroy [Page 79].

If you use the **copy** and **move** effects when you define the flavor, the system uses the **move** effect when the user drags an object normally, and the **copy** effect when the user presses and holds the CTRL key while dragging.

clear

Deletes the contents of the instance. Once you have called this method, you cannot perform any more drag and drop operations on the corresponding custom control.

```
CALL METHOD dragdrop->clear
    EXCEPTIONS obj_invalid = 1.
```

Exceptions	Description
obj_invalid	The object has already been destroyed using the method destroy [Page 79].

destroy

Deletes the contents of the instance. The instance itself is also destroyed. Once you have called this method, you cannot perform any more drag and drop operations on the corresponding custom control.

```
CALL METHOD dragdrop->destroy.
```

get

Returns the complete description of a flavor.

```
CALL METHOD dragdrop->get

    EXPORTING  flavor        = flavor
    IMPORTING  isdragsrc      = isdragsrc
               isdroptarget   = isdroptarget
               effect         = effect
               effect_in_ctrl = effect_in_ctrl
    EXCEPTIONS not_found   = 1
               obj_invalid = 2.
```

Parameters	Description
flavor	Name of the flavor
dragsrc	'**X**': The description is a drag source
droptarget	'**X**': The description is a drop target

effect	Drop effect of the description between different custom controls. The following effects are supported: **`dragdrop->copy`**: Appearance of the mouse when using drag and drop to copy. **`dragdrop->move`**: Appearance of the mouse when using drag and drop to move. **`dragdrop->none`**: Drag and drop is not possible.
effect_in_ctrl	Drop effect of the description in the same custom control. The following effects are supported: **`dragdrop->copy`**: Appearance of the mouse when using drag and drop to copy. **`dragdrop->move`**: Appearance of the mouse when using drag and drop to move. **`dragdrop->none`**: Drag and drop is not possible. **`dragdrop->use_default_effect`**: Uses the same effect specified in the **`effect`** parameter.

Exceptions	Description
already_defined	The specified flavor has already been defined.

If you use the **`copy`** and **`move`** effects when you define the flavor, the system uses the **`move`** effect when the user drags an object normally, and the **`copy`** effect when the user presses and holds the CTRL key while dragging.

get_handle

This method returns the handle of the drag and drop position. In most cases, you will not need to use this method. However, for tabular mass data interfaces (such as the SAP Tree), you must copy this handle into the interface table.

```
CALL METHOD dragdrop->get_handle
   IMPORTING  handle = handle
   EXCEPTIONS obj_invalid = 1.
```

Parameters	Description
handle	Handle of the drag and drop description

Exceptions	Description
obj_invalid	The object has already been destroyed using the method destroy [Page 79].

modify

Use this method to change an existing flavor.

```
CALL METHOD dragdrop->modify
    EXPORTING  flavor        = flavor
               dragsrc       = dragsrc
               droptarget    = droptarget
               effect        = effect
               effect_in_ctrl = effect_in_ctrl
    EXCEPTIONS not_found   = 1
               obj_invalid = 2.
```

Parameters	Description
flavor	Name of the flavor
dragsrc	'**X**': The description is a drag source
droptarget	'**X**': The description is a drop target
effect	Drop effect of the description between different custom controls. The following effects are supported: **`dragdrop->copy`**: Appearance of the mouse when using drag and drop to copy. **`dragdrop->move`**: Appearance of the mouse when using drag and drop to move. **`dragdrop->none`**: Drag and drop is not possible.
effect_in_ctrl	Drop effect of the description in the same custom control. The following effects are supported: **`dragdrop->copy`**: Appearance of the mouse when using drag and drop to copy. **`dragdrop->move`**: Appearance of the mouse when using drag and drop to move. **`dragdrop->none`**: Drag and drop is not possible. **`dragdrop->use_default_effect`**: Uses the same effect specified in the **`effect`** parameter.

Exceptions	Description
not_found	The specified flavor does not exist
obj_invalid	The object has already been destroyed using the method destroy [Page 79].

If you use the **copy** and **move** effects when you define the flavor, the system uses the **move** effect when the user drags an object normally, and the **copy** effect when the user presses and holds the CTRL key while dragging.

remove

Use this method to delete a flavor.

```
CALL METHOD dragdrop->remove
    EXPORTING  flavor = flavor
    EXCEPTIONS not_found   = 1
            obj_invalid = 2.
```

Parameters	Description
flavor	Name of the flavor

Exceptions	Description
not_found	The specified flavor does not exist
obj_invalid	The object has already been destroyed using the method destroy [Page 79].

Methods of the Class CL_DRAGDROPOBJECT

The class CL_DRAGDROPOBJECT describes the context of a drag and drop operation [Ext.]. It contains information about the source object, the flavor of the drag and drop operation, and information about the source and target.

set_flavor

You can only use this method within event handling for the ONGETFLAVOR event. Use the **newflavor** parameter to determine the flavor that you want to use in the drag and drop operation. You receive a list of available flavors as an event parameter.

```
CALL METHOD dragdropobject->set_flavor
    EXPORTING newflavor = newflavor
    EXCEPTIONS illegal_state  = 1
            illegal_flavor = 2.
```

Parameters	Description
newflavor	Name of the flavor

Exceptions	Description
invalid_state	You did not call the method from within event handling for **`ONGETFLAVOR`**.
obj_invalid	You used a flavor that is not supported by the current drag and drop situation.

abort

Terminates the drag and drop operation immediately. No further events are triggered.

CALL METHOD dragdropobject->abort.