

FESTIVAL_VISU_GUI OBJECT

1/ DESCRIPTION

The FESTIVAL_VISU_GUI object allows to visualize images (i.e. FESTIVAL_VISU_ELEMENT objects). There is one FESTIVAL_VISU_GUI per probe.

The main functionalities of the FESTIVAL_VISU_GUI are :

- Visualizing images with zoom and padding possibility
- displaying mouse position
- requesting next or previous set of image to the FESTIVAL_DATA_ENGINE
- allowing the user to choose on which instrument the next/previous set is requested
- entering or leaving the “compact” mode
- entering or leaving the “linked” mode
- displaying information about each visualized image in a retractable table
- requesting the difference of an image by clicking a dedicated table cell
- requesting the non-visualization of an image by clicking in a dedicated table cell

2/ SUPERCLASSES

3/ PROPERTIES

- **Probe** : index of the associated probe.
- **VISU_is_open** : flag (TRUE/FALSE) defining if the FESTIVAL_VISU_GUI widget is realized.
- **Viewplane_Rect** : [position, dimension] = [X,Y, DX, DY] expressed in the UV coordinate system for FESTIVAL_VISU_ELEMENTS.
- **compact_mode_is_ON** : flag (TRUE/FLASE). Contains the information : is the “compact mode” set ON ?
- **linked_mode_is_ON** : flag (TRUE/FLASE). Contains the information : is the “linked mode” set ON ?
- **instrument_can_be_selected**[NbMax_of_instrument] : array of flag TRUE/FALSE specifying if an instrument can be selected for the NEXT/PREVIOUS actions. Instruments that can not be

selected are grayed (and disabled) and no line of information is allocated for these instruments in the information area.

- **instrument_is_selected**[NbMax_of_instrument] : array of flag TRUE/FALSE specifying if an instrument is selected for the NEXT/PREVIOUS actions.
- **info_area_is_visible** : flag TRUE/FALSE specifying if the information area (which is a retractable area) is visible or retracted.
- **diff_is_requested**[NbMax_of_instrument] : flag TRUE/FALSE specifying if the difference data is required for each instrument.
- **instrument_is_visible**[NbMax_of_instrument] : flag TRUE/FALSE specifying if the data is required to be visible (or hidden if flag=FALSE) for each instrument.
- **model_containing_elements** : IDLgrModel object containing the model with all visu_elements added to the VISU_GUI
- **model_containing_text** : IDLgrModel object containing the model with all text information
- **information_font** : IDLgrFont used for text information
- **View_for_elements** : IDLgrView object containing the model_containing_element IDLgrModel
- **View_for_info_text** : IdlgrView object containing the model_containing_text IDLgrModel
- **Window_dimension** : [Xsize (width), Ysize (height)] of the window / buffer where the view is drawn (i.e. pixel dimension of the drawing widget, not of the whole visu_gui widget which is bigger).
- **Window_position** : [X_position, Y_position] of the window on the screen (not used when destination is a buffer)
- **Destination_is_a_buffer** : flag TRUE/FALSE indicating if the destination is a buffer (flag=TRUE) or a window (flag=FALSE)
- **Destination_ref** : reference to the IDLgrBuffer or IDLgrWindow where the views will be drawn.
- **Visu_gui_mode** : the possible modes are : ZOOM_IN_MODE, ZOOM_OUT_MODE, DISPLACEMENT_AND_ZOOM_MODE, HIDE_MODE, IDENTIFICATION_AND_COORDINATES_MODE, PROFILE_MODE
- **Grid_is_ON** : Flag indicating if the grid associated to the current coordinate system is visible or not.

4/ METHODS

4.1/ *FESTIVAL_VISU_GUI::INIT*

Syntax :

Result = Obj->[FESTIVAL_VISU_GUI::]Init ([BUFFER=buffer])

Description :

The FESTIVAL_VISU_GUI::INIT function method constructs a FESTIVAL_VISU_GUI object. The IDLgrModels, IDLgrViews, IDLgrText and IDLgrFont objects are created.

Return Value :

The FESTIVAL_VISU_GUI::INIT function method returns 1 if initialization was successful or 0 otherwise.

Arguments :

Keywords :

BUFFER :

If the keyword is set, a IDLgrBuffer is created (otherwise, a IDLgrWindow will be created when the widget is realized)

4.2/ *FESTIVAL_VISU_GUI::CHANGE_INSTRUMENT_LIST*

Syntax :

Result = Obj->[FESTIVAL_VISU_GUI::]Change_Instrument_List (New_instrument_list)

Description :

The FESTIVAL_VISU_GUI::Change_Instrument_List method updates the property instrument_can_be_selected[] and the widget content if necessary (in particular, the information area can have a different number of line). This method is not called in the VISU_GUI::UPDATE method.

Return Value :

The FESTIVAL_VISU_GUI::Change_Instrument_List function method returns 1 if successful or 0 otherwise.

Arguments :

New_instrument_list :

An array of flags TRUE/FALSE that indicates which instrument can be selected for the NEXT/PREVIOUS actions and which instrument will have a reserved information line at the bottom of the widget.

Keywords :

4.3/ FESTIVAL_VISU_GUI::BUILD_IHM

Syntax :

Result = Obj->[FESTIVAL_VISU_GUI::]BUILD_IHM ()

Description :

The FESTIVAL_VISU_GUI::Build_IHM method builds the widget associated to the object.

Return Value :

The FESTIVAL_VISU_GUI::Build_IHM function method returns 1 if successful or 0 otherwise.

Arguments :

Keywords :

4.4/ FESTIVAL_VISU_GUI::REALIZE

Syntax :

Result = Obj->[FESTIVAL_VISU_GUI::]REALIZE ()

Description :

The FESTIVAL_VISU_GUI::Realize method realizes the widget associated to the object.

The flag VISU_is_open is updated.

Once the widget has been realized, the IDLgrWindow reference can be retrieved and put in the property destination_ref.

Return Value :

The FESTIVAL_VISU_GUI::Realize function method returns 1 if successful or 0 otherwise.

Arguments :

Keywords :

4.5/ FESTIVAL_VISU_GUI::UPDATE

Syntax :

Result = Obj->[FESTIVAL_VISU_GUI::]UPDATE ()

Description :

The FESTIVAL_VISU_GUI::Update method updates the widget aspect according to its properties value.

The default is to update everything but not the information area dimension (i.e. the number of lines is not updated : this can be done by calling the FESTIVAL_VISU_GUI::Change_Instrument_List

method). However, the content of the information area table is updated.

This function does not redraw the visualization area (use the FESTIVAL_VISU_GUI::REDRAW for this)

Return Value :

The FESTIVAL_VISU_GUI::Update method returns 1 if successful or 0 otherwise.

Arguments :

Keywords :

4.6/ FESTIVAL_VISU_GUI::REDRAW

Syntax :

Result = Obj->[FESTIVAL_VISU_GUI::]REDRAW ()

Description :

The FESTIVAL_VISU_GUI::Redraw method redraws the data visualization area.

Return Value :

The FESTIVAL_VISU_GUI::Redraw method returns 1 if successful or 0 otherwise.

Arguments :

Keywords :

4.7/ FESTIVAL_VISU_GUI::ADD

Syntax :

Result = Obj->[FESTIVAL_VISU_GUI::]ADD (FESTIVAL_VISU_ELEMENT)

Description :

The FESTIVAL_VISU_GUI::ADD procedure adds FESTIVAL_VISU_ELEMENTS to the FESTIVAL_VISU_GUI object.

The property model_containing_elements is updated (with the method IDLgrModel::ADD).

The order used to add the successive elements defines the order of appearance of the images and polygons.

In the case of the addition of an image associated to an instrument, the information table is not updated automatically : the method VISU_GUI::UPDATE can be called to do this.

Arguments :

FESTIVAL_VISU_ELEMENT

Keywords :

4.8/ FESTIVAL_VISU_GUI::REMOVE_ALL_ELEMENTS

Syntax :

Result = Obj->[FESTIVAL_VISU_GUI::]REMOVE_ALL_ELEMENTS()

Description :

The FESTIVAL_VISU_GUI:: REMOVE_ALL_ELEMENTS procedure destroys all the FESTIVAL_VISU_ELEMENTS objects added to the property model_containing_elements. This procedure is called in order to clear the destination area before adding a new set of elements.

Arguments :

Keywords :

4.9/ FESTIVAL_VISU_GUI::GETPROPERTY

Syntax :

Result = Obj->[FESTIVAL_VISU_GUI::]GetProperty([,POSITION = position][,DIMENSIONS = dimensions])

Description :

The FESTIVAL_VISU_GUI::GETPROPERTY procedure method retrieves the value of a property for the FESTIVAL_VISU_GUI object.

Arguments :

None

Keywords :

4.10/ FESTIVAL_VISU_GUI::SETPROPERTY

Syntax :

Result = Obj->[FESTIVAL_VISU_GUI::]SetProperty([,POSITION = position][,DIMENSIONS = dimensions])

Description :

The FESTIVAL_VISU_GUI::SETPROPERTY procedure method sets the value of a property for the FESTIVAL_VISU_GUI object.

Arguments :

None

Keywords :

LINK_MODE:

TRUE/FALSE value to set the “linked mode” state

COMPACT_MODE:
TRUE/FALSE value to set the “compact mode” state

4.11/ FESTIVAL_VISU_GUI::READ

Syntax :

Result = Obj->[FESTIVAL_VISU_GUI::]Read()

Description :

The FESTIVAL_VISU_GUI::READ function method reads an image from a buffer. The returned value is an instance of the IDLgrImage object class.

This function is to be used when the destination_reference is a buffer.

Arguments :

None

Keywords :

4.12/ FESTIVAL_VISU_GUI::CLEANUP

Syntax :

OBJ_DESTROY, Obj

or

Obj->[FESTIVAL_VISU_GUI::]Cleanup (In a lifecycle method only.)

Description :

The FESTIVAL_VISU_GUI::CLEANUP procedure method performs all cleanup on the object.

Arguments :

None

Keywords :

None