

Package ‘svDialogs’

January 2, 2012

Type Package

Title SciViews GUI API - Dialog boxes

Depends R (>= 2.6.0), tcltk

Imports svMisc

Description Rapidly construct dialog boxes for your GUI, including an automatic function assistant

Version 0.9-43

Date 2010-09-25

Author Philippe Grosjean

Maintainer Philippe Grosjean <phgrosjean@sciviews.org>

License GPL-2

LazyLoad yes

URL <http://www.sciviews.org/SciViews-R>

BugReports https://r-forge.r-project.org/tracker/?group_id=194

Repository CRAN

Date/Publication 2010-09-27 06:35:30

R topics documented:

svDialogs-package	2
display	3
guiDlg	3
guiDlgAssistant	4
guiDlgColor	5
guiDlgDir	6
guiDlgDoubleList	7
guiDlgFont	8

guiDlgFormula	8
guiDlgFunction	9
guiDlgGraphOptions	10
guiDlgGrid	11
guiDlgInput	12
guiDlgItemSel	13
guiDlgList	14
guiDlgMessage	15
guiDlgOpen	16
guiDlgOptions	17
guiDlgProgress	17
guiDlgSave	18
guiDlgText	19
guiDlgVarSel	20
guiDlgView	21
guiEval	22
guiPane.tcltk	22
guiSetStyle.tcltk	23

Index	25
--------------	-----------

svDialogs-package	<i>SciViews GUI API - Dialog boxes</i>
-------------------	--

Description

Rapidly construct dialog boxes for your GUI, including an automatic function assistant.

Details

Package: svDialogs
 Type: Package
 Version: 0.9-43
 Date: 2010-09-25
 License: GPL 2 or above, at your convenience

Author(s)

Philippe Grosjean

Maintainer: Ph. Grosjean <phgrosjean@sciviews.org>

display	<i>The display method (for flexible dialog boxes)</i>
---------	---

Description

Display a dialog box previously calculated. For instance, display a flexible dialog box.

Usage

```
display(x, ...)
```

Arguments

x	an object that accepts a display method.
...	further arguments passed to the display method.

Value

The R code constructed by this dialog box.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlg](#), [guiEval](#)

Examples

```
### TODO...
```

guiDlg	<i>Create a flexible dialog box</i>
--------	-------------------------------------

Description

This function creates a flexible dialog box, constituted by one or several 'panes'

Usage

```
guiDlg(title = "Input", message = NULL, help = NULL, sep = NULL, width = 50,  
        labelwidth = 0, panes = list(list(type = "entry", message = "Enter data:",  
        default = NULL)), GUI = getOption("guiWidgets"))  
  
## S3 method for class 'guiDlg'  
display(x, parent = 0, GUI = getOption("guiWidgets"),  
        debug = FALSE, ...)
```


Value

This function is invoked for its side effect: to display an assistant dialog box.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgFunction](#)

Examples

```
### TODO...
```

guiDlgColor	<i>A color selection dialog box</i>
-------------	-------------------------------------

Description

Allows to select a color graphically

Usage

```
guiDlgColor(...)
```

Arguments

... further arguments to the color dialog box.

Value

Returns selected colors.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgFont](#), [guiDlgGraphOptions](#)

Examples

```
### TODO...
```

guiDlgDir	<i>A select directory dialog box</i>
-----------	--------------------------------------

Description

Allows to easily select a directory.

Usage

```
guiDlgDir(title = "Select a directory", dir = getwd(), new = TRUE,  
          parent = 0, GUI = getOption("guiWidgets"))
```

Arguments

title	the title of the dialog box.
dir	the default directory.
new	is a new directory allowed?
parent	the parent of this dialog box (not implemented yet).
GUI	which GUI widgets do you want to use (tcltk, ...).

Value

The choosen directory, or an empty string if the cancel button was clicked.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgOpen](#), [guiDlgSave](#)

Examples

```
### TODO...
```

guiDlgDoubleList *A double list dialog box*

Description

Select items in two (un)related lists at once

Usage

```
guiDlgDoubleList(list1, list2, title = "Select", default1 = "", default2 = "",
  multi = c(TRUE, TRUE), new = c(FALSE, FALSE), sort = c(TRUE, TRUE),
  transfer = FALSE, parent = 0, GUI = getOption("guiWidgets"))
```

Arguments

list1	the first list items.
list2	the second list items.
title	a title for this dialog box.
default1	selected items by default for the first list.
default2	selected items by default for the second list.
multi	do we allow multiple selection for first and second list.
new	do we allow to create new items for first and second list.
sort	do we sort first and second list.
transfer	the transfer mode allows to transfer items form one list to the other.
parent	which window is the parent of this dialog box?
GUI	which GUI toolkit would we use?

Value

A list of two lists with selected items in both lists.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgList](#)

Examples

```
### TODO...
```

guiDlgFont

A font selection dialog box

Description

Select a font and some attributes.

Usage

```
guiDlgFont(...)
```

Arguments

... further arguments to the function.

Value

A string describing the selected font.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgOptions](#)

Examples

```
### TODO...
```

guiDlgFormula

A formula dialog box

Description

Eases the creation of formulas.

Usage

```
guiDlgFormula(...)
```

Arguments

... further arguments to the function.

Value

A formula build with this dialog box.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgFunction](#)

Examples

```
### TODO...
```

guiDlgFunction	<i>A dialog box prompting for function arguments</i>
----------------	--

Description

Given a function, this dialog box prompts for values for its arguments.

Usage

```
guiDlgFunction(fun, template = NULL, maxargs = 7, var = "res", width = 40,  
              labelwidth = 10, displayit = TRUE, execfun = getOption("guiExecFun"))
```

Arguments

fun	the name of the function to prompt for.
template	an optional template for the dialog box.
maxargs	the maximum number of arguments to include in the dialog box.
var	the default name of the variable where to assign result.
width	the width of the dialog box.
labelwidth	the width reserved for labels.
displayit	do we display it, or just construct it?
execfun	the function to use to execute resulting code.

Value

A line of R code generated by the dialog box.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgInput](#), [guiDlgVarSel](#)

Examples

```
### TODO...
```

`guiDlgGraphOptions` *A graph options dialog box*

Description

Change various graph options at once with this dialog box.

Usage

```
guiDlgGraphOptions(...)
```

Arguments

... further arguments to the function.

Value

This function is invoked for its side effect to change graph options with a GUI dialog box.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgOptions](#)

Examples

```
### TODO...
```

`guiDlgGrid`*A grid (data display/editor) window*

Description

Display or edit matrices or data frames with this grid window.

Usage

```
guiDlgGrid(table, title = deparse(substitute(table)), edit = TRUE,  
           edit.vars = TRUE, add.vars = TRUE, add.rows = TRUE, parent = -1,  
           GUI = getOption("guiWidgets"))
```

Arguments

<code>table</code>	The table to display or edit in the grid.
<code>title</code>	The title of the grid window.
<code>edit</code>	can we edit its content?
<code>edit.vars</code>	can we edit the name of its variables?
<code>add.vars</code>	can we add new variables?
<code>add.rows</code>	can we add rows?
<code>parent</code>	which window is the parent of the grid window?
<code>GUI</code>	which GUI toolkit do we use?

Value

A modified version of the table if `edit == TRUE`.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgText](#)

Examples

```
### TODO...
```

guiDlgInput	<i>A simple input box</i>
-------------	---------------------------

Description

Enter one (textual) value with this input box.

Usage

```
guiDlgInput(message = "Enter a value", title = "Input", default = "",  
            parent = 0, GUI = getOption("guiWidgets"))
```

Arguments

message	the message to display on top of the text box.
title	the title of the dialog box.
default	the default value in the text box.
parent	the parent of this dialog box (not implemented yet).
GUI	which GUI widgets do you want to use (tcltk, ...).

Value

The text entered by the user at the input box, or an empty string if cancelled.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgMessage](#), [guiDlgText](#)

Examples

```
### TODO...
```

guiDlgItemSel *A select item(s) dialog box*

Description

Select item(s) in a list or a data frame.

Usage

```
guiDlgItemSel(list, classes = NULL, title = "Select items", default = "",
  default.items = "", all.names = FALSE, multi = FALSE, sort = TRUE,
  sort.items = FALSE, subset = FALSE, save.restore = FALSE, parent = 0,
  GUI = getOption("guiWidgets"))
```

Arguments

list	the list to display in the dialog box.
classes	classes to use.
title	the title of the dialog box.
default	the default value.
default.items	the default items selected.
all.names	do we use all.names?
multi	is a multiple selection allowed?
sort	do we sort the list?
sort.items	do we sort items in the list?
subset	do we allow subsetting the list?
save.restore	do we save restore information?
parent	which window is the parent of this dialog box?
GUI	which GUI toolkit do we use?

Value

A list containing selected items.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgVarSel](#)

Examples

```
### TODO...
```

`guiDlgList`*A list selection dialog box*

Description

Select an item in a list.

Usage

```
guiDlgList(items, multi = FALSE, message = if (multi) "Select item(s):" else
  "Select one item:", title = "Selection", default = 1, nsel = NULL,
  new = FALSE, sort = FALSE, width = 50, parent = 0,
  GUI = getOption("guiWidgets"))
```

Arguments

<code>items</code>	the list of items.
<code>multi</code>	is it a multiple selection dialog box?
<code>message</code>	the message to display on top of the list.
<code>title</code>	the title of the dialog box.
<code>default</code>	the default selected item.
<code>nsel</code>	maximum number of selected items allowed.
<code>new</code>	do we allow to create new items?
<code>sort</code>	do we sort the list?
<code>width</code>	the width of the dialog box.
<code>parent</code>	which window is the parent of this dialog box?
<code>GUI</code>	which GUI toolkit do we use for this dialog box?

Value

A list with selected items.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgDoubleList](#)

Examples

```
### TODO...
```

guiDlgMessage	<i>Display a message box</i>
---------------	------------------------------

Description

A classical message box with icon, text, and one to three buttons.

Usage

```
guiDlgMessage(message, title = "Message",
              type = c("ok", "okcancel", "yesno", "yesnocancel"),
              default = 1, icon = c("info", "question", "error", "warning"), parent = 0,
              GUI = getOption("guiWidgets"))
```

Arguments

message	the message to display in the dialog box.
title	the title of the dialog box.
type	the type of dialog box: 'ok', 'okcancel', 'yesno' or 'yesnocancel'.
default	the default button (if more than one).
icon	the icon: info, question, error or warning.
parent	the parent of this dialog box (not implemented yet).
GUI	which GUI widgets do you want to use (tcltk ...).

Value

A string with the caption of the button that the user pressed.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgInput](#)

Examples

```
### TODO...
```

`guiDlgOpen`*An open file(s) dialog box*

Description

Allows to select one or more existing files to be opened.

Usage

```
guiDlgOpen(title = "Select file", defaultFile = "", defaultDir = "",
           multi = FALSE, filters = c("All files (*.*)", "*.*"), parent = 0,
           GUI = getOption("guiWidgets"))
```

Arguments

<code>title</code>	the title of the dialog box.
<code>defaultFile</code>	the file name to display by default.
<code>defaultDir</code>	the default dir where to open the dialog box.
<code>multi</code>	is it allowed to select several files at once?
<code>filters</code>	the filters to use. It is a n*2 matrix of characters, with first column being the label and the second being the mask. For instance: <code>"Text files\","*.txt"</code> .
<code>parent</code>	the parent of this dialog box (not implemented yet).
<code>GUI</code>	which GUI widgets do you want to use (tcltk, ...).

Value

A list with the path to the selected files.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgSave](#), [guiDlgDir](#)

Examples

```
### TODO...
```

guiDlgOptions	<i>A general options dialog box</i>
---------------	-------------------------------------

Description

Display and allow to change various options.

Usage

```
guiDlgOptions(...)
```

Arguments

... further arguments to the function.

Value

This function is invoked for its side effect to change options through a dialog box.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgGraphOptions](#)

Examples

```
### TODO...
```

guiDlgProgress	<i>A progress window</i>
----------------	--------------------------

Description

Display the progression of a long task.

Usage

```
guiDlgProgress(value, range = c(0, 100), message = "Please wait...",  
  title = "Progression", percent = TRUE, cancel = TRUE, icon = "none",  
  parent = -1, GUI = getOption("guiWidgets"))
```

Arguments

value	the current value of the progression.
range	the range for the progression.
message	the message to display on top of the progression bar.
title	the title of the dialog box.
percent	is it a progression in percent?
cancel	is the cancel button enabled?
icon	an icon to display on the top left part of the dialog box.
parent	which window is the parent of this dialog box?
GUI	which GUI toolkit to use to display this dialog box?

Value

Returns nothing.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgMessage](#)

Examples

```
### TODO...
```

guiDlgSave	<i>a save to file dialog box</i>
------------	----------------------------------

Description

Use this dialog box to ask a name for saving a file.

Usage

```
guiDlgSave(title = "Save As", defaultFile = "", defaultDir = "",  
            defaultExt = "", filters = c("All files (*.*)", "*..*"), parent = 0,  
            GUI = getOption("guiWidgets"))
```

Arguments

title	the title of the dialog box.
defaultFile	the default file name.
defaultDir	the default directory where to open this dialog box.
defaultExt	the default extension for the file.
filters	the filters to use. It is a n*2 matrix of characters, with first column being the label and the second being the mask. For instance: <code>\"Text files\", \"*.txt\"</code> .
parent	the parent of this dialog box (not implemented yet).
GUI	which GUI widgets do you want to use (tcltk, ...).

Value

The path to the file where to save data.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgOpen](#)

Examples

```
### TODO...
```

guiDlgText

A simple text display/editor window

Description

Display or edit the content of ASCII files.

Usage

```
guiDlgText(text, file = NULL, title = deparse(substitute(text)), edit = TRUE,
           submit = TRUE, parent = -1, GUI = getOption("guiWidgets"))
```

Arguments

text	the text to display.
file	the name of a file, if the text is contained in a file.
title	the title of the window.
edit	do we allow to edit this text?
submit	if this text is R code, allow to submit it to R.
parent	which window is the parent of this text window?
GUI	which GUI toolkit to use to display this window?

Value

The modified text, or the path to the file containing the modified text.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgGrid](#)

Examples

```
### TODO...
```

guiDlgVarSel

A select variable dialog box

Description

Present a list of variables of a given class and allow to choose one or several of them.

Usage

```
guiDlgVarSel(list, classes = NULL, title = "Select a variable", default = "",
  all.names = FALSE, multi = FALSE, new = FALSE, sort = TRUE, parent = 0,
  GUI = getOption("guiWidgets"))
```

Arguments

<code>list</code>	a list of variables.
<code>classes</code>	classes for the variables to search for.
<code>title</code>	a title of the dialog box.
<code>default</code>	the default selected item.
<code>all.names</code>	do we search for all names (including variables starting with '.')
<code>multi</code>	do we allow multiple selection?
<code>new</code>	do we allow to create new variables?
<code>sort</code>	do we sort the list?
<code>parent</code>	which window is the parent of this dialog box?
<code>GUI</code>	which GUI toolkit do we use?

Value

A list with selected variables names.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgItemSel](#)

Examples

```
### TODO...
```

guiDlgView	<i>A view window</i>
------------	----------------------

Description

Display a view window. A view is an HTML presentation of an R object).

Usage

```
guiDlgView(file, CSSfile, title = "View", report = TRUE, parent = -1,  
           GUI = getOption("guiWidgets"))
```

Arguments

file	the path of the file that contains the view.
CSSfile	the CSS file (Cascaded Style Sheet) to use.
title	the title of the view window.
report	do we allow to report this view?
parent	which window is the parent of this view window?
GUI	which GUI toolkit to use for this view window?

Value

Returns nothing.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlgText](#)

Examples

```
### TODO...
```

guiEval	<i>Evaluate R code constructed using a flexible dialog box</i>
---------	--

Description

This function is usually called by a flexible dialog box to execute R code that was build with it.

Usage

```
guiEval(code, ident = "GUI ")
```

Arguments

code	a string wuth some R code.
ident	do we identify this execution (change the prompt)?

Value

The result of the evaluated R code.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlg.display](#)

Examples

```
### TODO...
```

guiPane.tcltk	<i>Construct a 'pane', that is a zone in a flexible dialog box</i>
---------------	--

Description

This function constructs a 'pane'. Panes are then assembled to form a flexible dialog box. It is normally not called directly by the user.

Usage

```
guiPane.tcltk(dlg, item, ...)  
guiPane.entry.tcltk(paneFrame, butArg, onArgEdit, varUseIt, dlg, item, ...)  
guiPane.list.tcltk(paneFrame, butArg, onArgEdit, varUseIt, dlg, item, ...)
```

Arguments

<code>dlg</code>	a flexible dialog box.
<code>paneFrame</code>	the frame where this pane should be incrustated.
<code>butArg</code>	arguments for buttons.
<code>onArgEdit</code>	edit it on arg?
<code>varUseIt</code>	var uses it?
<code>item</code>	an item in this dialog box.
<code>...</code>	further arguments passed to the function.

Value

Build a pane in a flexible dialog box.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlg](#)

Examples

```
### TODO...
```

`guiSetStyle.tcltk` *Change the style of compatible tcltk dialog boxes*

Description

This functions switches to a different style for compatible tcltk dialog boxes (only flexible dialog boxes defined in this package, currently).

Usage

```
guiSetStyle.tcltk(style = c("classic", "SciViews", "Rcmdr", "large"), ask = FALSE)
```

Arguments

<code>style</code>	the style to use.
<code>ask</code>	do we ask the user to choose a style (not implemented yet)?

Value

This function is invoked for its side effect to change the default style of tcltk dialog boxes.

Author(s)

Philippe Grosjean (<phgrosjean@sciviews.org>)

See Also

[guiDlg](#)

Examples

```
### TODO...
```

Index

*Topic **misc**

- display, 3
- guiDlg, 3
- guiDlgAssistant, 4
- guiDlgColor, 5
- guiDlgDir, 6
- guiDlgDoubleList, 7
- guiDlgFont, 8
- guiDlgFormula, 8
- guiDlgFunction, 9
- guiDlgGraphOptions, 10
- guiDlgGrid, 11
- guiDlgInput, 12
- guiDlgItemSel, 13
- guiDlgList, 14
- guiDlgMessage, 15
- guiDlgOpen, 16
- guiDlgOptions, 17
- guiDlgProgress, 17
- guiDlgSave, 18
- guiDlgText, 19
- guiDlgVarSel, 20
- guiDlgView, 21
- guiEval, 22
- guiPane.tcltk, 22
- guiSetStyle.tcltk, 23

*Topic **package**

- svDialogs-package, 2

*Topic **utilities**

- svDialogs-package, 2

display, 3, 4, 22

display.guiDlg (guiDlg), 3

guiDlg, 3, 3, 22–24

guiDlgAssistant, 4

guiDlgColor, 5

guiDlgDir, 6, 16

guiDlgDoubleList, 7, 14

guiDlgFont, 5, 8

guiDlgFormula, 8

guiDlgFunction, 5, 9, 9

guiDlgGraphOptions, 5, 10, 17

guiDlgGrid, 11, 20

guiDlgInput, 10, 12, 15

guiDlgItemSel, 13, 21

guiDlgList, 7, 14

guiDlgMessage, 12, 15, 18

guiDlgOpen, 6, 16, 19

guiDlgOptions, 8, 10, 17

guiDlgProgress, 17

guiDlgSave, 6, 16, 18

guiDlgText, 11, 12, 19, 21

guiDlgVarSel, 10, 13, 20

guiDlgView, 21

guiEval, 3, 4, 22

guiPane.entry.tcltk (guiPane.tcltk), 22

guiPane.list.tcltk (guiPane.tcltk), 22

guiPane.tcltk, 4, 22

guiSetStyle.tcltk, 23

svDialogs (svDialogs-package), 2

svDialogs-package, 2