

functions

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	TITLE : functions		
ACTION	NAME	DATE	SIGNATURE
WRITTEN BY		July 22, 2024	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

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Chapter 1

functions

1.1 GUIEnvironment - Functions Reference

GUIEnvironment

Functions Reference Guide

```
=====

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=====
```

```
=====

ChangeGUI
CloseGUIFont
CloseGUIScreen
CloseGUIWindow
CreateGUIGadget
CreateGUIInfo
CreateGUIMenuEntry
DrawGUI
FreeGUIInfo
GetCatStr
GetGUIGadget
GetGUIMsg
GetLocStr
GUIGadgetAction
GUIRequest
OpenGUIFont
OpenGUIScreen
OpenGUIWindow
SetGUIGadget
ShowGuideNode
WaitGUIMsg

=====
```

1.2 guienv.library/ChangeGUI

NAME

ChangeGUIA -- Change the GUI appearance.
ChangeGUI -- Varargs stub for ChangeGUIA.

SYNOPSIS

```
error = ChangeGUIA( gui, tagList )
D0                      A0    A1

WORD ChangeGUIA( struct GUIInfo *, struct TagItem * );

error = ChangeGUI( gui, Tag1, ... )

WORD ChangeGUI( struct GUIInfo *, ULONG, ... );
```

FUNCTION

This is the general method of changing the GUI appearance. It includes the displaying of the GUI as well as some important entries in the GUIInfo stucture.

INPUTS

gui = pointer to the GUIInfo structure
tagList = pointer to array of TagItems

RESULT

If everything went fine, you will get GE_Done, otherwise some of the error codes defined in guienv.h.

NOTES

The gui pointer is not tested for NULL.

SEE ALSO

The GUI tags
The error codes

1.3 guienv.library/CloseGUIFont

NAME

CloseGUIFont -- Close a font opened with OpenGUIFont

SYNOPSIS

```
CloseGUIFont( font )
              A0

VOID CloseGUIFont( struct TextFont * );
```

FUNCTION

This function closes a font, previously opened with OpenGUIFont.

INPUTS

font = pointer to the font

SEE ALSO
 OpenGUIFont

1.4 guienv.library/CloseGUIScreen

NAME
 CloseGUIScreen -- Safe closing of a screen

SYNOPSIS
 CloseGUIScreen(screen)
 A0

 VOID CloseGUIScreen(struct Screen *);

FUNCTION
 Before the screen is closed, all not yet closed windows on this screen using CloseGUIWindow are closed.

INPUTS
 screen = pointer to a screen open with OpenGUIScreen.

NOTES
 Use this function only for screens opened with OpenGUIScreen.
 It is not necessary for own screens, to close the windows by hand, as well as it is not necessary to free the GUIInfo structures by hand.

SEE ALSO
 OpenGUIScreen
 CloseGUIWindow

1.5 guienv.library/CloseGUIWindow

NAME
 CloseGUIWindow -- Safe closing of a window

SYNOPSIS
 CloseGUIWindow(window)
 A0

 VOID CloseGUIWindow(struct Window *);

FUNCTION
 All outstanding messages will be replied before the window is closed and all GUIInfo structures which are in use for this window are automatically removed using FreeGUIInfo.

INPUTS
 window = pointer to a window opened with OpenGUIWindow.

NOTES
 Use this function only for windows opened with OpenGUIWindow.

It is not necessary to free the GUIInfo structures by hand.

SEE ALSO

FreeGUIInfo
OpenGUIWindow

1.6 guienv.library/CreateGadget

NAME

CreateGadgetA -- Add a gadget to the GUI
CreateGadget -- Varargs stub for CreateGadgetA

SYNOPSIS

```
CreateGadgetA( gui, left, top, width, height, kind, tagList)
               A0  D0   D1   D2     D3       D4   A1
```

```
VOID CreateGadgetA( struct GUIInfo *, WORD, WORD, WORD, WORD, LONG,
                   struct TagItem * );
```

```
CreateGadget( gui, left, top, width, height, kind, Tag1, ... )
```

```
VOID CreateGadget( struct GUIInfo *, WORD, WORD, WORD, WORD, LONG,
                  ULONG, ... );
```

FUNCTION

This functions combines the GadTools CreateGadget and the Intuition NewObject functions together with an own gadget creation function. The gadget is linked into an internal list and will be displayed if DrawGUI is called.

INPUTS

gui = pointer to a GUIInfo structure
left = gadget left edge
top = gadget top edge
width = gadget width
height = gadget height
kind = gadget kind (GadTools or GUIEnv)
tagList = pointer to array of TagItems

NOTES

Even if the gadget can't be created, there will be no error code, because this function has no return value. An error will occur when the DrawGUI function is called.
The gui pointer is not tested for NULL.
You are limited to 256 gadgets for each GUIInfo !

SEE ALSO

DrawGUI
The gadget tags

1.7 guienv.library/CreateGUIInfo

NAME

CreateGUIInfoA -- Create the import GUIInfo structure
 CreateGUIInfo -- Varargs stub for CreateGUIInfoA

SYNOPSIS

```
gui = CreateGUIInfoA( window, tagList )
D0          A0      A1

struct GUIInfo *CreateGUIInfoA( struct Window *, struct TagItem * );

gui = CreateGUIInfo( window, Tag1, ... )

struct GUIInfo *CreateGUIInfo( struct Window *, ULONG, ... );
```

FUNCTION

This function allocates memory for the important GUIInfo structure. This structure contains some very important and usefull information about the GUI.
 The GUIInfo structure is bound to an previously opened window.

INPUTS

window = pointer to an opened window
 tagList = pointer to array of TagItems

RESULT

A pointer to a full initialized GUIInfo structure.

SEE ALSO

FreeGUIInfo
 The GUI Tags

1.8 guienv.library/CreateGUIMenuEntry

NAME

CreateGUIMenuEntryA -- Add a new menu item to the menu
 CreateGUIMenuEntry -- Varargs stub for CreateGUIMenuEntry

SYNOPSIS

```
CreateGUIMenuEntryA( gui, type, text, tagList )
                    A0  D0   A1   A2

VOID CreateGUIMenuEntryA( struct GUIInfo *, BYTE, STRPTR,
                          struct TagItem * );

CreateGUIMenuEntry( gui, type, text, Tag1, ... )

VOID CreateGUIMenuEntry( struct GUIInfo *, BYTE, STRPTR, ULONG, ... );
```

FUNCTION

This function creates a new menu item, which is linked to the last created one.

INPUTS

gui = pointer to a GUIInfo structure

type = the menu item type (menu title, menu item or menu sub item)
text = the menu item text
tagList = pointer to array of TagItems

NOTES

Even if the menu item can't be created, there will be no error code, because this function has no return value. An error will occur when the DrawGUI function is called.
The gui pointer is not tested for NULL.
You are limited to 256 menu items for each GUIInfo !

SEE ALSO

The menu tags

1.9 guienv.library/DrawGUI

NAME

DrawGUIA -- Draw all gadgets and set the menu
DrawGUI -- Varargs stub for DrawGUIA

SYNOPSIS

```
error = DrawGUIA( gui, tagList )  
D0          A0    A1
```

```
WORD DrawGUIA( struct GUIInfo *, struct TagItem * );
```

```
error = DrawGUI( gui, Tag1, ... )
```

```
WORD DrawGUI( struct GUIInfo *, ULONG, ... );
```

FUNCTION

Draw all gadgets and set the menu. It is possible to change some attributes of the GUI and then let it draw using this function.

INPUTS

gui = pointer to a GUIInfo structure
tagList = pointer to array of TagItems.

RESULT

GE_Done if everything went fine, or any error code.

NOTES

The gui pointer is not tested for NULL.
The tagList parameter is currently not used, set it to NULL !
This function does not first clear the window contents.

SEE ALSO

The GUITags
The error codes

1.10 guienv.library/FreeGUIInfo

NAME

FreeGUIInfo -- Free all structures for the GUI

SYNOPSIS

```
FreeGUIInfo( gui )
            A0
```

```
VOID FreeGUIInfo( struct GUIInfo * );
```

FUNCTION

This function frees all resources allocated with CreateGUIInfo.

INPUTS

gui = pointer to a GUIInfo structure

SEE ALSO

CreateGUIInfo

1.11 guienv.library/GetCatStr

NAME

GetCatStr -- Get the catalog string

SYNOPSIS

```
string = GetCatStr( gui, stringNbr, default )
D0                A0    D0                A1
```

```
STRPTR GetCatStr( struct GUIInfo *, LONG, STRPTR );
```

FUNCTION

This function tries to get a localized string out of the catalog defined in the catalogInfo entry of the GUIInfo structure.

INPUTS

gui = pointer to a GUIInfo structure
stringNbr = the number of the string in the catalog
default = the default string

RESULT

If the number and the catalog are available a pointer to the localized string is returned, otherwise the default string is returned.

NOTES

The gui pointer is not tested for NULL.

SEE ALSO

Localization

1.12 guienv.library/GetGadget

NAME

GetGUIGadget -- Get gadget attribute

SYNOPSIS

```
data = GetGUIGadget( gui, number, attribute )
```

```
D0                                A0    D0    D1
```

```
LONG GetGUIGadget( struct GUIInfo *, WORD, Tag );
```

FUNCTION

Try to get a gadget attribute value.

INPUTS

gui = pointer to a GUIInfo structure

number = gadget number / gadget ID

attribute = the gadget attribute

RESULT

The data of the attribute or -1 if the attribute wasn't available.

NOTES

The gui pointer is not tested for NULL.

If the gadtools.library version is lower than 39, you can't get attributes of gadtools gadgets which are managed by gadtools !

BUGS

If you are running under pre 39 versions of gadtools, GetGUIGadget calls nevertheless the 39 function to get gadtools gadget attributes, so probably your task will crash !

SEE ALSO

The gadget tags

1.13 guienv.library/GetGUIMsg

NAME

GetGUIMsg -- Look at the message port for a new message

SYNOPSIS

```
success = GetGUIMsg( gui )
```

```
D0                                A0
```

```
BOOL GetGUIMsg( struct GUIInfo * );
```

FUNCTION

Tries to get a message and then this message is handled by GUIEnv.

INPUTS

gui = pointer to a GUIInfo structure

RESULTS

TRUE if there was any message or FALSE if not.

NOTES

The gui pointer is not tested for NULL.

SEE ALSO

Message handling
WaitGUIMsg

1.14 guienv.library/GetLocStr

NAME

GetLocStr -- Get a string of the locale environment

SYNOPSIS

```
string = GetLocStr( gui, stringNbr, default )  
D0                      A0    D0          A1
```

```
STRPTR GetLocStr( struct GUIInfo *, LONG, STRPTR );
```

FUNCTION

This function tries to get a localized string out of the locale environment defined in the localeInfo entry of the GUIInfo structure.

INPUTS

gui = pointer to a GUIInfo structure
stringNbr = the number of the string in the locale environment
default = the default string

RESULT

If the number and the locale environment are available a pointer to the localized string is returned, otherwise the default string is returned.

NOTES

The gui pointer is not tested for NULL.

SEE ALSO

Localization

1.15 guienv.library/GUIGadgetAction

NAME

GUIGadgetActionA -- Do a gadget action
GUIGadgetAction -- Varargs stub for GUIGadgetActionA

SYNOPSIS

```
GUIGadgetActionA( gui, tagList )  
A0    A1
```

```
VOID GUIGadgetActionA( struct GUIInfo *, struct TagItem * );
```

```
GUIGadgetAction( gui, Tag1, ... )
```

```
VOID GUIGadgetAction( struct GUIInfo *, ULONG, ... );
```

FUNCTION

Perform some actions on some gadgets, e.g disable/enable, getting and setting...

INPUTS

gui = pointer to a GUIInfo structure
tagList = pointer to array of TagItems

NOTES

The gui pointer is not tested for NULL.

SEE ALSO

The Gadget Action

1.16 guienv.library/GUIRequest

NAME

GUIRequestA -- Show a requester
GUIRequest -- Varargs stub for GUIRequestA

SYNOPSIS

```
success = GUIRequestA( gui, text, kind, tagList )
D0                      A0  A1    D0    A2

LONG GUIRequestA( struct GUIInfo *, STRPTR, LONG, struct TagItem * );

success = GUIRequest( gui, text, kind, Tag1, ... )

LONG GUIRequest( struct GUIInfo *, STRPTR, LONG, ULONG, ... );
```

FUNCTION

This function provides an easy interface to the intuition requesters, the asl file requesters and some of the ReqTools requesters.

INPUTS

gui = pointer to a GUIInfo structure
text = pointer to the requester text
kind = the requester kind
tagList = pointer to array of TagItems

RESULT

See RKRMs for EasyReq and Asl functions resp the ReqTools docs.

NOTES

It is possible to pass NULL as gui pointer for warning the user. When doing so, all extra functions (like localization etc) are not available. This should only be used for error messages when it is not possible to open the GUI !

SEE ALSO

The Requester guide

1.17 guienv.library/OpenUIFont

NAME

OpenUIFont -- Open a font

SYNOPSIS

```
font = OpenUIFont( name, size, fontAttr )
D0                      A0      D0      A1
```

```
struct TextFont *OpenUIFont( STRPTR, WORD, struct TextAttr * );
```

FUNCTION

Open the font and fill the TextAttr structure with the data of this font.
This function makes no difference if the font is a rom or a disk font.

INPUTS

name = the font name (e.g. "topaz.font")
size = font height
fontAttr = pointer to a TextAttr structure or NULL. If you specify this, the structure will be filled with the data about the opened font.

RESULT

Pointer to the font or NULL if it failed.

SEE ALSO

CloseUIFont

1.18 guienv.library/OpenUIScreen

NAME

OpenUIScreenA -- Open a new screen
OpenUIScreen -- Varargs stub for OpenUIScreenA

SYNOPSIS

```
screen = OpenUIScreenA( id, depth, name, tagList )
D0                      D0  D1      A0      A1
```

```
struct Screen *OpenUIScreenA( ULONG, WORD, STRPTR, struct TagItem * );
```

```
screen = OpenUIScreen( id, depth, name, Tag1, ... )
```

```
struct Screen *OpenUIScreen( ULONG, WORD, STRPTR, ULONG, ... );
```

FUNCTION

Open the screen.

INPUTS

id = the screen ID
depth = number of bitplanes for this screen
name = pointer to the screen's title text
tagList = pointer to array of TagItems (See intuition's screen

tags)

RESULT

Pointer to the opened screen or NULL if it failed.

SEE ALSO

CloseGUIScreen

1.19 guienv.library/OpenGUIWindow

NAME

OpenGUIWindowA -- Open a new window

OpenGUIWindow -- Varargs stub for OpenGUIWindowA

SYNOPSIS

```
window = OpenGUIWindowA( left, top, width, height, name, idcmpFlags,
D0                      D0      D1   D2      D3      A0      D4
```

```
                        windowFlags, screen, tagList )
D5                      A1      A2
```

```
struct Window *OpenGUIWindowA( WORD, WORD, WORD, WORD, STRPTR, ULONG,
                                ULONG, struct Screen *, struct TagItem * );
```

```
window = OpenGUIWindow( left, top, width, height, name, idcmpFlags,
                        windowFlags, screen, Tag1, ... )
```

```
struct Window *OpenGUIWindow( WORD, WORD, WORD, WORD, STRPTR, ULONG,
                                ULONG, struct Screen *, ULONG, ... );
```

FUNCTION

This function opens a new window.

INPUTS

left, top, width, height = the dimensions of the window, where the width and height define the inner size of the window.

Use the GEW_OuterSize tag to define the "usual" size of a window (with any value) !

name = pointer to window's title text

idcmpFlags = IDCMP flags for this window

windowFlags = the flags for this window

screen = The screen the window is opened on or NULL for the current public screen

tagList = pointer to array of TagItems (See also intuition's window tags)

RESULT

Pointer to the opened window or NULL if it failed.

NOTES

Don't use GimmeZeroZero windows within GUIEnvironment !

SEE ALSO

CloseGUIWindow

1.20 guienv.library/SetGadget

NAME

SetGadgetA -- Set gadget attributes
SetGadget -- Varargs stub for SetGadgetA

SYNOPSIS

SetGadgetA(gui, number, tagList)
 A0 D0 A1

VOID SetGadgetA(struct GUIInfo *, WORD, struct TagItem *);

SetGadget(gui, number, Tag1, ...)

VOID SetGadget(struct GUIInfo *, WORD, ULONG, ...);

FUNCTION

Set gadget attributes regardless if it is a gadtools, a BOOPSI or any other gadget.

INPUTS

gui = pointer to a GUIInfo structure
number = the gadget number / ID
taglist = pointer to a taglist of attributes

NOTES

The gui pointer is not tested for NULL.

SEE ALSO

Getting and setting gadget attributes

1.21 guienv.library/ShowGuideNode

NAME

ShowGuideNodeA -- Show a AmigaGuide text node
ShowGuideNode -- Varargs stub for ShowGuideNodeA

SYNOPSIS

error = ShowGuideNodeA(gui, guide, node, tagList)
D0 A0 A1 A2 A3

WORD ShowGuideNodeA(struct GUIInfo *, STRPTR, STRPTR, struct TagItem *);

error = ShowGuideNode(gui, guide, node, Tag1, ...)

WORD ShowGuideNode(struct GUIInfo *, STRPTR, STRPTR, ULONG, ...);

FUNCTION

Show a AmigaGuide node in synchron mode.

INPUTS

gui = pointer to a GUIInfo structure
guide = pointer to the AmigaGuide filename
node = pointer to the node name
tagList = pointer to array of TagItems

RESULT

If the node could be displayed, GE_Done is returned, otherwise GE_GuideErr. But notice, that this error could have many different reasons: no AmigaGuide, no Guide, wrong node name etc.

NOTES

The gui pointer is not tested for NULL.

1.22 guienv.library/WaitGUIMsg

NAME

WaitGUIMsg -- Wait for a message and handle it

SYNOPSIS

WaitGUIMsg(gui)
 A0

VOID WaitGUIMsg(struct GUIInfo *);

FUNCTION

Wait for a message and then handle it.

INPUTS

gui = pointer to a GUIInfo structure

NOTES

The gui pointer is not tested for NULL.

SEE ALSO

Message handling
GetGUIMsg

1.23 rcs

\$RCSfile: Functions.guide \$

\$Revision: 1.7 \$

\$Date: 1994/12/16 21:21:29 \$

GUIEnvironment Function Reference

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