

**functions**

**COLLABORATORS**

	<i>TITLE :</i> functions		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY		July 22, 2024	

**REVISION HISTORY**

NUMBER	DATE	DESCRIPTION	NAME

# Contents

<b>1</b>	<b>functions</b>	<b>1</b>
1.1	GUIEnvironment - Functions Reference	1
1.2	guienv.library/ChangeGUI	2
1.3	guienv.library/CloseGUIFont	2
1.4	guienv.library/CloseGUIScreen	3
1.5	guienv.library/CloseGUIWindow	3
1.6	guienv.library/CreateGUIGadget	4
1.7	guienv.library/CreateGUIInfo	4
1.8	guienv.library/CreateGUIMenuEntry	5
1.9	guienv.library/DrawGUI	6
1.10	guienv.library/FreeGUIInfo	6
1.11	guienv.library/GetCatStr	7
1.12	guienv.library/GetGUIGadget	7
1.13	guienv.library/GetGUIMsg	8
1.14	guienv.library/GetLocStr	9
1.15	guienv.library/GUIGadgetAction	9
1.16	guienv.library/GUIRequest	10
1.17	guienv.library/OpenGUIFont	11
1.18	guienv.library/OpenGUIScreen	11
1.19	guienv.library/OpenGUIWindow	12
1.20	guienv.library/SetGUIGadget	13
1.21	guienv.library/ShowGuideNode	13
1.22	guienv.library/WaitGUIMsg	14
1.23	rcs	14

# Chapter 1

## functions

### 1.1 GUIEnvironment - Functions Reference

GUIEnvironment

Functions Reference Guide

```
=====
© 1994   Carsten Ziegeler
         Augustin-Wibbelt-Str.7
         D-33106 Paderborn
         Germany
=====
```

```
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 structure.

### 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/CreateGUIGadget

NAME

CreateGUIGadgetA -- Add a gadget to the GUI  
CreateGUIGadget -- Varargs stub for CreateGUIGadget

SYNOPSIS

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

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

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

```
VOID CreateGUIGadget( 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 functions 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/SetGUIGadget

### NAME

SetGUIGadgetA -- Set gadget attributes  
SetGUIGadget -- Varargs stub for SetGUIGadgetA

### SYNOPSIS

```
SetGUIGadgetA( gui, number, tagList )
                A0   D0       A1
```

```
VOID SetGUIGadgetA( struct GUIInfo *, WORD, struct TagItem * );
```

```
SetGUIGadget( gui, number, Tag1, ... )
```

```
VOID SetGUIGadget( 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

Copyright © 1994, Carsten Ziegeler

Augustin-Wibbelt-Str.7, 33106 Paderborn, Germany

---