

**in**

**COLLABORATORS**

|               |                      |                 |                  |
|---------------|----------------------|-----------------|------------------|
|               | <i>TITLE :</i><br>in |                 |                  |
| <i>ACTION</i> | <i>NAME</i>          | <i>DATE</i>     | <i>SIGNATURE</i> |
| WRITTEN BY    |                      | August 24, 2022 |                  |

**REVISION HISTORY**

| NUMBER | DATE | DESCRIPTION | NAME |
|--------|------|-------------|------|
|        |      |             |      |

# Contents

|          |  |          |
|----------|--|----------|
| <b>1</b> | <b>in</b>  | <b>1</b> |
| 1.1      | frameclass.guide . . . . .                           | 1        |
| 1.2      | frameclass/--background-- . . . . .                  | 2        |
| 1.3      | frameclass/FRM_BackFill . . . . .                    | 2        |
| 1.4      | frameclass/FRM_CenterTitle . . . . .                 | 3        |
| 1.5      | frameclass/FRM_CustomHook:FRM_BackFillHook . . . . . | 3        |
| 1.6      | frameclass/FRM_EdgesOnly . . . . .                   | 5        |
| 1.7      | frameclass/FRM_Flags . . . . .                       | 5        |
| 1.8      | frameclass/FRM_FrameHeight . . . . .                 | 6        |
| 1.9      | frameclass/FRM_FrameWidth . . . . .                  | 6        |
| 1.10     | frameclass/FRM_HighlightTitle . . . . .              | 6        |
| 1.11     | frameclass/FRM_Recessed . . . . .                    | 7        |
| 1.12     | frameclass/FRM_Template . . . . .                    | 7        |
| 1.13     | frameclass/FRM_TextAttr . . . . .                    | 7        |
| 1.14     | frameclass/FRM_ThinFrame . . . . .                   | 8        |
| 1.15     | frameclass/FRM_Title . . . . .                       | 8        |
| 1.16     | frameclass/FRM_TitleID . . . . .                     | 8        |
| 1.17     | frameclass/FRM_TitleLeft . . . . .                   | 9        |
| 1.18     | frameclass/FRM_TitleRight . . . . .                  | 9        |
| 1.19     | frameclass/FRM_Type . . . . .                        | 9        |
| 1.20     | frameclass/FRM_[#?]Pen . . . . .                     | 10       |

# Chapter 1

## in

### 1.1 frameclass.guide

Search  
TABLE OF CONTENTS

frameclass/--background--  
frameclass/FRM\_BackFill  
frameclass/FRM\_CenterTitle  
frameclass/FRM\_CustomHook:FRM\_BackFillHook  
frameclass/FRM\_EdgesOnly  
frameclass/FRM\_Flags  
frameclass/FRM\_FrameHeight  
frameclass/FRM\_FrameWidth  
frameclass/FRM\_HighlightTitle  
frameclass/FRM\_Recessed  
frameclass/FRM\_Template  
frameclass/FRM\_TextAttr  
frameclass/FRM\_ThinFrame  
frameclass/FRM\_Title  
frameclass/FRM\_TitleID  
frameclass/FRM\_TitleLeft  
frameclass/FRM\_TitleRight

---

```

frameclass/FRM_Type
frameclass/FRM_[#?]Pen

```

## 1.2 frameclass/--background--

### NAME

```

Class:    frameclass
Superclass: IMAGECLASS
Include File: <libraries/bgui.h>

```

### FUNCTION

To provide a general framing image. It has a set of built-in framing and background types and the possibility to add hooks for custom frames and backgrounds.

## 1.3 frameclass/FRM\_BackFill

### NAME

```

FRM_BackFill -- ( ULONG )

```

### FUNCTION

Set or get the built-in background type to use. You can select any of the following types:

STANDARD\_FILL -- Normal fill as you would expect from the selected frame type.

SHINE\_RASTER -- A raster with the SHINEPEN and BACKGROUNDPEN.

SHADOW\_RASTER -- A raster with the SHADOWPEN and BACKGROUNDPEN.

SHINE\_SHADOW\_RASTER -- A raster with the SHINEPEN and SHADOWPEN.

FILL\_RASTER -- A raster with the FILLPEN and BACKGROUNDPEN.

SHINE\_FILL\_RASTER -- A raster with the SHINEPEN and FILLPEN.

SHADOW\_FILL\_RASTER -- A raster with the SHADOWPEN and FILLPEN.

SHINE\_BLOCK -- A SHINEPEN fill.

SHADOWBLOCK -- A SHADOWPEN fill.

Please note that setting any of the above backfill types except for STANDARD\_FILL will override the FRM\_BackFillHook.

### DEFAULT

```

STANDARD_FILL.

```

### APPLICABILITY

```

(ISG).

```

---

SEE ALSO  
 <intuition/screens.h>, FRM\_BackFillHook

## 1.4 frameclass/FRM\_CenterTitle

NAME  
 FRM\_CenterTitle - ( BOOL )

FUNCTION  
 Set or clear the FRF\_CENTER\_TITLE flag.

DEFAULT  
 FALSE.

APPLICABILITY  
 (ISG).

SEE ALSO  
 FRM\_Flags

## 1.5 frameclass/FRM\_CustomHook:FRM\_BackFillHook

NAME  
 FRM\_CustomHook, FRM\_BackFillHook -- ( struct Hook \* )

FUNCTION  
 Set or get custom framing and/or backfilling hooks. These hooks are called as follows:

```
rc = hookFunc( hook, object, message );
D0          A0      A2      A1
```

The message packet can be a pointer to any of the following structures:

```
struct FrameDrawMsg {
    ULONG      fdm_MethodID; /* FRM_RENDER */
    struct RastPort *fdm_RPort;
    struct DrawInfo *fdm_DrawInfo;
    struct Rectangle *fdm_Bounds;
    UWORD      fdm_State;
    UBYTE      fdm_Horizontal; /* V41 */
    UBYTE      fdm_Vertical; /* V41 */
    ULONG      fdm_Flags; /* V41 */
};
```

fdm\_RPort -- This points to the RastPort in which the frame/background must be rendered.

fdm\_DrawInfo -- This points to a DrawInfo structure as defined in

---

<intuition/screens.h>

`fdm_Bounds` -- This points to a `Rectangle` structure in which the bounds of the frame/background are stored.

`fdm_State` -- This holds the state in which you should render the frame or background. Please refer to <intuition/imageclass.h> for more information about rendering styles.

`fdm_Horizontal`, `fdm_Vertical` -- The vertical or horizontal thickness of the frame. If zero, use default for that value. If you do not wish to support custom frame thickness, ignore these.

`fdm_Flags` -- A copy of the flags for this frame; you may use this to know if `FRF_THIN_FRAME` is set for the frame.

The `FrameDrawMsg` is sent to both the custom and backfill hooks when they must render.

```
struct ThicknessMsg {
    ULONG      tm_MethodID; /* FRM_THICKNESS */
    struct {
        UBYTE  *Horizontal;
        UBYTE  *Vertical;
    }          tm_Thickness;
    BOOL       tm_Thin;
};
```

`tm_Thickness` -- In this field you must store the thickness of the frame lines. The thickness requested is the width in pixels of the left OR right border (Horizontal) and the height in pixels of the top OR bottom border (Vertical).

`tm_Thin` -- This field is added in V38 of the library. Do not attempt to read it with lower versions of the library! When set to `TRUE` you must give the thickness of the frame when it is in thin (`FRM_ThinFrame`) mode.

The `ThicknessMsg` is only sent to the custom frame hook.

The hook routines must return any of the following return codes:

`FRC_OK` -- OK. Message understood and executed.

`FRC_UNKNOWN` -- Message not understood. The class will default in this case.

DEFAULTS  
NULL.

APPLICABILITY  
(ISG)

SEE ALSO  
<intuition/screens.h>, <intuition/imageclass.h>

## 1.6 frameclass/FRM\_EdgesOnly

NAME  
FRM\_EdgesOnly -- ( BOOL )

FUNCTION  
Set or clear the FRF\_EDGES\_ONLY flags.

DEFAULT  
FALSE.

APPLICABILITY  
(ISG).

SEE ALSO  
FRM\_Flags

## 1.7 frameclass/FRM\_Flags

NAME  
FRM\_Flags -- ( ULONG )

FUNCTION  
To initialize any of the following flags:

FRF\_EDGES\_ONLY -- Only the frame border is rendered when this flag is set. The background isn't touched.

FRF\_RECESSED -- Normally the frame is raised. With this flag set the frame is recessed by default.

FRF\_CENTER\_TITLE -- Normally the frame title is rendered with the text baseline on the top border of the frame. When this flag is set the title is centered on the top border of the frame.

FRF\_HIGHLIGHT\_TITLE -- Normally the frame title is rendered with the TEXTPEN. When this flag is set the title is rendered using the HIGHLIGHTTEXTPEN.

FRF\_THIN\_FRAME -- This flag, when set, will halve the size of the vertical borders of the frame. This looks a lot better on screens with a 1:1 aspect ratio.

FRF\_TITLE\_LEFT \*\* V40 \*\* -- This flag, when set, will make the frame title stick to the left side of the frame.

FRF\_TITLE\_RIGHT \*\* V40 \*\* -- This flag, when set, will make the frame title stick to the right side of the frame.

DEFAULT  
0.

APPLICABILITY  
(ISG).

---



SEE ALSO  
<intuition/screens.h>, FRM\_Title, FRM\_EdgesOnly, FRM\_Recessed,  
FRM\_CenterTitle, FRM\_HighlightTitle, FRM\_ThinFrame

## 1.8 frameclass/FRM\_FrameHeight

NAME  
FRM\_FrameHeight -- ( UBYTE )

FUNCTION  
Set or get the height in pixels of the top or bottom frame border.  
Not all frame types support variable frame thickness.

APPLICABILITY  
(ISG).

SEE ALSO  
FRM\_FrameWidth

## 1.9 frameclass/FRM\_FrameWidth

NAME  
FRM\_FrameWidth -- ( UBYTE )

FUNCTION  
Set or get the width in pixels of the left or right frame border.  
Not all frame types support variable frame thickness.

APPLICABILITY  
(ISG).

SEE ALSO  
FRM\_FrameHeight

## 1.10 frameclass/FRM\_HighlightTitle

NAME  
FRM\_HighlightTitle -- ( BOOL )

FUNCTION  
Set or clear the FRF\_HIGHLIGHT\_TITLE flag.

DEFAULT  
FALSE.

APPLICABILITY  
(ISG).

SEE ALSO

---

FRM\_Flags

## 1.11 frameclass/FRM\_Recessed

NAME  
FRM\_Recessed -- ( BOOL )

FUNCTION  
Set or clear the FRF\_RECESSED flag.

DEFAULT  
FALSE.

APPLICABILITY  
(ISG).

SEE ALSO  
FRM\_Flags

## 1.12 frameclass/FRM\_Template

NAME  
FRM\_Template -- ( Object \* )

FUNCTION  
Copy all of the attributes of one frameclass object to another frameclass object. This allows for fast duplication of many frame attributes at one time. You may free the template object afterwards.

DEFAULT  
NULL.

APPLICABILITY  
(IS)

SEE ALSO

## 1.13 frameclass/FRM\_TextAttr

NAME  
FRM\_TextAttr -- ( struct TextAttr \* )

FUNCTION  
Set or get the font that is used to render the frame title. Please note that this font is opened with `OpenFont()` and must be available in memory.

DEFAULT  
NULL.

---

APPLICABILITY  
(ISG)

SEE ALSO  
FRM\_Title

## 1.14 frameclass/FRM\_ThinFrame

NAME  
FRM\_ThinFrame -- ( BOOL )

FUNCTION  
Set or clear the FRF\_THIN\_FRAME flag.

DEFAULT  
FALSE.

APPLICABILITY  
(ISG).

SEE ALSO  
FRM\_Flags

## 1.15 frameclass/FRM\_Title

NAME  
FRM\_Title -- ( STRPTR )

FUNCTION  
Set or get the frame title. Each frame can have a title in its top border. This title can contain infoclass command sequences.

DEFAULT  
NULL.

APPLICABILITY  
(ISG).

SEE ALSO  
FRM\_TitleID, FRM\_TextAttr, infoclass.doc/INFO\_TextFormat

## 1.16 frameclass/FRM\_TitleID

NAME  
FRM\_TitleID -- ( ULONG ) \*\* V41 \*\*

FUNCTION  
Set or get the ID for FRM\_Title. BASE\_LOCALIZE uses this to set FRM\_Title.

DEFAULT

---

0.

APPLICABILITY  
(ISG).

SEE ALSO  
FRM\_Title, baseclass.doc/BASE\_LOCALIZE

## 1.17 frameclass/FRM\_TitleLeft

NAME  
FRM\_TitleLeft -- ( BOOL ) \*\* V40 \*\*

FUNCTION  
To make the frame title appear and remain on the left side of the frame instead of centering it.

DEFAULT  
FALSE.

APPLICABILITY  
(ISG).

SEE ALSO  
FRM\_TitleRight

## 1.18 frameclass/FRM\_TitleRight

NAME  
FRM\_TitleRight -- ( BOOL ) \*\* V40 \*\*

FUNCTION  
To make the frame title appear and remain on the right side of the frame instead of centering it.

DEFAULT  
FALSE.

APPLICABILITY  
(ISG).

SEE ALSO  
FRM\_TitleLeft

## 1.19 frameclass/FRM\_Type

NAME  
FRM\_Type - ( ULONG )

FUNCTION

---

Set or get the type of the used framing. You can select any of the following types:

FRTYPE\_CUSTOM -- This is a custom framing type which is automatically set when you supply a framing hook.

FRTYPE\_BUTTON -- Standard button gadget frame. Normal bevel.

FRTYPE\_RIDGE -- Standard string gadget frame. Outer 1/2 normal bevel, inner 1/2 reverse bevel.

FRTYPE\_DROPBOX -- Standard icon-dropbox frame. Outer 1/3 normal bevel, middle 1/3 background, inner 1/3 reverse bevel.

FRTYPE\_NEXT -- Standard NeXT frame. Outer 1/2 reverse bevel, inner 1/2 normal bevel (basically a recessed string gadget frame).

FRTYPE\_RADIOBUTTON -- Standard MX gadget frame.

FRTYPE\_XEN\_BUTTON -- XEN style button frame.

FRTYPE\_TAB\_ABOVE, FRTYPE\_TAB\_BELOW -- \*\* V40 \*\* Two frame types which are a normal button frame without the top or bottom. Usually this is only used with pages and a tabs object.

FRTYPE\_BORDER -- \*\* V40 \*\* A frame type which is best suited for objects inside window borders. It is a button style frame which always has thin lines.

FRTYPE\_NONE -- \*\* V40 \*\* No frame is rendered but all features like backfill hooks, titles etc. are available.

FRTYPE\_FUZZ\_BUTTON -- \*\* V41 \*\* Outer 1/4 normal bevel, inner 3/4 normal bevel rastered 50% with frame.

DEFAULT  
FRTYPE\_BUTTON.

APPLICABILITY  
(ISG).

SEE ALSO  
FRM\_CustomHook

## 1.20 frameclass/FRM\_[#?]Pen

NAME  
FRM\_BackPen : FRM\_BackDriPen, \*\* V39 \*\*  
FRM\_BackRasterPen : FRM\_BackRasterDriPen, \*\* V41 \*\*  
FRM\_SelectedBackPen : FRM\_SelectedBackDriPen, \*\* V39 \*\*  
FRM\_SelectedBackRasterPen : FRM\_SelectedBackRasterDriPen \*\* V41 \*\*  
-- ( UWORD )

### FUNCTION

To specify the background colors of a frame. Each pen may be specified

as a Pen or DrawInfo pen, these are mutually exclusive.

The frame may be one color, FRM\_#?Back(Dri)Pen, or two colors, with the second pen specified as FRM\_#?BackRaster(Dri)Pen.

Finally, you can specify two states: the backfill of the frame in a normal unselected state and the background fill of the frame in a selected state.

Specifying ~0 (-1) for the pens will deactivate the backfill and the class will fall back to the default coloring scheme.

#### DEFAULTS

~0.

#### APPLICABILITY

(ISG).

---