

# **FC\_Render**

Olivier LAVIALE 2004

**COLLABORATORS**

	<i>TITLE :</i> FC_Render		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY	Olivier LAVIALE 2004	January 13, 2023	

**REVISION HISTORY**

NUMBER	DATE	DESCRIPTION	NAME

# Contents

<b>1</b>	<b>FC_Render</b>	<b>1</b>
1.1	Feelin : FC_Render . . . . .	1
1.2	FC_Render / FM_Render_AddClip . . . . .	1
1.3	FC_Render / FM_Render_AddClipRegion . . . . .	2
1.4	FC_Render / FM_Render_RemClip . . . . .	2
1.5	FC_Render / FRender . . . . .	3

---

# Chapter 1

## FC\_Render

### 1.1 Feelin : FC\_Render

FC\_Render

IDs: Static Super: NONE Include: <libraries/feelin.h>

FC\_Render objects hold precious information about the graphic context (display context, rastport, color scheme...) and the system context (application, window...). An instance of this class is used by FC\_Window objects and shared with their children.

This class is also very useful to install transparent Clip regions.

METHODS

[FM\\_Render\\_AddClip](#) [FM\\_Render\\_AddClipRegion](#)

[FM\\_Render\\_RemClip](#)

ATTRIBUTES

[FA\\_Render\\_Application](#) [FA\\_Render\\_Display](#)

[FA\\_Render\\_Window](#) [FA\\_Render\\_RPort](#)

[FA\\_Render\\_Palette](#) [FA\\_Render\\_Friend](#)

[FA\\_Render\\_Forbid](#)

TYPES

[FRender](#)

### 1.2 FC\_Render / FM\_Render\_AddClip

NAME

[FM\\_Render\\_AddClip](#) -- (01.00)

SYNOPSIS

[F\\_Do](#)(Obj,[FM\\_Render\\_AddClip](#),FRect \*Rect);

FUNCTION

Installs a transparent Clip region in the layer of the current rastport. All subsequent graphics calls will be clipped to this region. You MUST remember to invoke the [FM\\_Render\\_RemClip](#) method for each [FM\\_Render\\_AddClip](#).

INPUTS

---

Rect (FRect \*)

A pointer to a FRect defining the region to clip.

RESULTS

A pointer to an opaque structure. Use this pointer with the [FM\\_Render\\_RemClip](#) method to remove the Clip region.

SEE ALSO

[FM\\_Render\\_AddClipRegion](#)

### 1.3 FC\_Render / FM\_Render\_AddClipRegion

NAME

FM\_Render\_AddClipRegion -- (01.00)

SYNOPSIS

```
F_Do(Obj,FM_Render_AddClipRegion,struct Region *Region);
```

FUNCTION

Installs a transparent Clip region in the layer of the current rastport. All subsequent graphics calls will be clipped to this region. You **MUST** remember to invoke the [FM\\_Render\\_RemClip](#) method for each [FM\\_Render\\_AddClipRegion](#).

The Clip region is installed on the current rastport. Complex mechanisms are used to trace and overlap clippings, you don't need to worry about anything.

INPUTS

Region (struct Region \*)

A pointer to a region to clip.

RESULTS

A pointer to an opaque structure. Use this pointer with the [FM\\_Render\\_RemClip](#) method to remove the Clip region.

SEE ALSO

[FM\\_Render\\_AddClip](#)

### 1.4 FC\_Render / FM\_Render\_RemClip

NAME

FM\_Render\_RemClip -- (01.00)

SYNOPSIS

```
F_Do(Obj,FM_Render_RemClip,APTR Handle);
```

FUNCTION

Removes a Clip region from the current rastport.

INPUTS

Handle (APTR)

A pointer to an opaque structure returned by [FM\\_Render\\_AddClip](#) or [FM\\_Render\\_AddClipRegion](#) .

---

## 1.5 FC\_Render / FRender

### NAME

FRender -- (02.00)

### STRUCT

```
struct FeelinRender { FObject Application; FObject Display; FObject Window; struct RastPort *RPort; FPalette *Palette;
ULONG Flags; };
```

### FUNCTION

This structure holds precious information such as the application, the display and the window an object may belongs to. This structure is involved in many graphic related function such as drawing or image remapping. It's the only way to know everything from the context environnement: display, application, window and rastport.

This structure is the public part of the **FC\_Render** object.

### FIELDS

#### Application (FObject)

This is the FC\_Application object. For FC\_Area objects, this field is only valid between FM\_Setup and FM\_Cleanup methods.

#### Display (FObject)

This is the FC\_Display object. For FC\_Area objects, this field is only valid between FM\_Setup and FM\_Cleanup methods.

#### Window (FObject)

This is the FC\_Window object. For FC\_Area objects, this field is only valid between FM\_Setup and FM\_Cleanup methods.

#### RPort (struct RastPort)

This is the RastPort where rendering must take place. For FC\_Area objects, this field is only valid between FM\_Setup and FM\_Cleanup methods.

#### Palette (FPalette \*)

This field is only used by support classes such as FC\_TextDisplay or FC\_FrameDisplay to know which pens should be used for rendering. Palette should be set before calling any rendering method. FC\_Area Subclasses must use the macro `_pens` to obtain appropriate pens.

#### Flags (ULONG)

`FF_Render_Refreshing` - This flag is set by FC\_Window while the window is refreshing (redrawing objects).

`FF_Render_Complex` - This flag is set when the user have requested a complex (or no clear) redraw. Then, each object is responsible of clearing it's very own region. You shouldn't care about this flag as everything is handled by the system.

`FF_Render_TrueColors` - This flag is set when the display environnement have more than 256 colours (16, 24 or 32 bits).

---