

# Bitmapper

**COLLABORATORS**

	<i>TITLE :</i> Bitmapper		
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**REVISION HISTORY**

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# Chapter 1

## Bitmapper

### 1.1 Amiga Foundation Classes: bitmapper

\*\* BitMapper - Original By Fabio Rotondo \*\*

\* Part of the Amiga Foundation Classes \*

Introduction

History

Author's Info  
Amiga Foundation Classes

Requires: resourceTracker

Class Base: \$00040000

NEW COMMANDS

BRIEF DESCRIPTION

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bitmapper()	Initializes the class.
allocbitmap(w,h,d, lay=F, rp=F)	Creates a bitmap.
assign(bmp,w=-1,h=-1,lay=F,r=F)	Copies a bitmap.
bitmap()	Returns a pointer to bitmap.
clear()	Free all bitmap's resources.
clearrastport()	Frees bitmap's rastport.
clearlayers()	

---

Frees bitmap's layers.

clone()  
Clones the class.

cludge(mem)  
Converts a memory area into a bitmap.

createlayers(w=-1, h=-1)  
Creates bitmap layers.

createrastport()  
Creates bitmap rastport.

depth()  
Returns bitmap's depth.

dump(fname)  
Dumps a bitmap into a file.

empty()  
Checks if the class is empty.

freebitmap()  
Free the bitmap.

height()  
Returns bitmap's height.

image()  
Returns the Image structure of the bitmap.

loadraw()  
Loads up a raw data bitmap.

rastport()  
Scans a Directory.

version()  
Returns bitmapper version.

width()  
Returns bitmap's width.

Error Table

## 1.2 Introduction

BitMapper is an E object I have created to easily manage bitmaps.

Main features are:

- \* Different OS2.0 and OS3.0 allocbitmap() method.

\* Methods to handle bitmap's rastport and layers.

## 1.3 Author's Info

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## 1.4 BitMapper / Error Table

VALUE	CONSTANT NAME	DESCRIPTION
\$0000	BMERR_NOMEMORY	No Memory.
\$0001	BMERR_LAYERLIB	Could not open layer library
\$0002	BMERR_LAYERCREA	Could not create the layer
\$0003	BMERR_BEHINDLAY	Could not create behind layer
\$0004	BMERR_FILENOTFOUND	File not found
\$0005	BMERR_COULDNOTWRITEFILE	Could not create file

## 1.5 BitMapper / History

HISTORY

V1.00 - Inital Release

V1.10 - ENH: Now allocbitamp has an optional param LAYERS.

V1.20 - FIX: Corrected a small bug in OS2.0 bitmap creation code.

V2.00 - Now it is part of the Amiga Foundation Classes.

ENH: Great revision.

ADD: Layers and rastport manipulation.

V2.10 - ADD:

cludge()  
method.

V2.50 - ADD:

dump()  
dumps a bitmap in raw format

ADD:

loadraw()  
loads up a bitmap saved in raw format

ADD:

width()  
Bitmap width

ADD:

height()  
Bitmap height

ADD

depth()  
bitmap depth

FIX:

cludge()  
method.

V2.60 - ADD:

image()  
method.

FIX:

cludge()  
method (again!)

V2.70 - ENH:

assign()  
method.

V2.80 - ADD:

empty()  
method.

ENH: better docs

ENH:

Error Table

V2.90 - ADD: resourceTracker support.

ADD:

clone()  
method.

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## 1.6 Amiga Foundation Classes: bitmapper/bitmapper()

NAME: bitmapper(resTracker=NIL;PTR TO resourceTracker)

DESCRIPTION: Use this method to initialize the object.

INPUT: NONE.

RESULTS: NONE.

SEE ALSO:

## 1.7 Amiga Foundation Classes: bitmapper/clear()

NAME: clear()

DESCRIPTION: This method frees all memory allocated by the class.

INPUT: NONE.

RESULTS: NONE.

RAISE:

SEE ALSO: allocbitmap()

freebitmap()

## 1.8 Amiga Foundation Classes: bitmapper/allocbitmap()

NAME: allocbitmap(width, height, depth, layers=FALSE, ←  
rastport=FALSE)

DESCRIPTION: This method allocates a bitmap and a rastport for it.  
It also frees all datas previously allocated on the same  
object.

INPUT: width	- Bitmap width (in pixels)
height	- Bitmap height (in pixels)
depth	- Bitmap depth (1...8)
layers	- (Optional) if TRUE, a layer structure will be created. Default is FALSE.
rastport	- (Optional) if TRUE, a rastport will be created. Default is FALSE.

RESULTS:

SEE ALSO:



```
freebitmap()  
createlayers()  
createrastport()
```

## 1.9 Amiga Foundation Classes: bitmapper/createlayers()

NAME: createlayers(w=-1, h=-1)

DESCRIPTION: This method creates a layers structure for the bitmap.

INPUT: w, h - (Optional) Layer's width and height. If these  
params are omitted, layers' size will be the same  
of the bitmap.

RESULTS: TRUE - creation successfull.  
FALSE - creation failed. (Maybe no bitmap allocated)

SEE ALSO:

```
clearlayers()  
createrastport()
```

## 1.10 Amiga Foundation Classes: bitmapper/createrastport()

NAME: createrastport()

DESCRIPTION: This method creates a rastport for the bitmap present in the  
class.

INPUT: NONE

RESULTS: TRUE - creation successfull.  
FALSE - creation failed. (Maybe no bitmap allocated)

SEE ALSO:

```
clearrastport()  
createlayers()
```

## 1.11 Amiga Foundation Classes: bitmapper/clearrastport()

NAME: clearrastport()

DESCRIPTION: This method will free bitmap's rastport.

INPUT: NONE.

RESULTS: rastport is freed from the memory.

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SEE ALSO:  
     createrastport()

## 1.12 Amiga Foundation Classes: bitmapper/clearlayers()

NAME: clearlayers()

DESCRIPTION: This method frees bitmap's layers.

INPUT: NONE.

RESULTS: Layer's memory is freed.

NOTE: By freeing the layers you'll free also the rastport!!!

SEE ALSO:  
     createlayers()  
     createrastport()

## 1.13 Amiga Foundation Classes: bitmapper/freebitmap

NAME: freebitmap()

DESCRIPTION: This method frees the bitmap and, eventually, also the rastport and layers.

INPUT: NONE.

RESULTS: NONE.

SEE ALSO: allocbitmap()  
           freelayers()  
           freerastport()

## 1.14 Amiga Foundation Classes: bitmapper/assign

NAME: assign(bitmap:PTR TO bitmap, w=-1, h=-1, d=-1, ↵  
           layers=FALSE, rport=FALSE)

DESCRIPTION: Use this method to "change" on the fly the bitmap with a new one. Note that all datas of the previous bitmap will be lost.

INPUT: bitmap - (PTR TO bitmap) a new bitmap to handle.  
       w,h - (Optional) Bitmap's width and height to copy. You can set width and height to a different (usally minor) size of the original

bitmap, to copy just a part of it.

- d - (Optional) Bitmap's depth. You can pass this value IF you want TO change bitmap depth.
- layers - (Optional) if TRUE a layer structure will be created.
- rastport - (Optional) if TRUE a rastport structure will be created.

RESULTS: NONE.

NOTES: this method calls  
allocbitmap()

.

this method may use the blitter.

SEE ALSO:

allocbitmap()

.

## 1.15 Amiga Foundation Classes: bitmapper/rastport

NAME: rastport()

DESCRIPTION: This method returns the 8Bit bitmap's rastport.

INPUT: NONE.

RESULTS: a ptr to a rastport. It may be NIL.

SEE ALSO:

createrastport()

allocbitmap()

## 1.16 Amiga Foundation Classes: bitmapper/bitmap()

NAME: bitmap()

DESCRIPTION: This method returns a PTR TO bitmap

INPUT: NONE.

RESULTS: a PTR TO bitmap. It may be NIL.

SEE ALSO:

allocbitmap()

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## 1.17 Amiga Foundation Classes: bitmapper/version()

NAME: version()

DESCRIPTION: This method returns class version and revision.

INPUT: NONE.

RESULTS: This method returns TWO values, Version and Revision.

SEE ALSO:

## 1.18 Amiga Foundation Classes: bitmapper/cludge()

NAME: cludge(mem:PTR TO LONG)

DESCRIPTION: This method converts a memory area into a bitmap

INPUT: mem - Memory address.

RESULTS: This method returns THREE values: width, height and depth of the cludged bitmap.

NOTE: The bitmap MUST be created using  
dump()  
method!

SEE ALSO:

dump()

loadraw()

## 1.19 Amiga Foundation Classes: bitmapper/loadraw()

NAME: loadraw(fname:PTR TO CHAR)

DESCRIPTION: This method loads up a file containing a previously dump()ed bitmap.

INPUT: fname - File name to load.

RESULTS: This method returns THREE values: width, height and depth of the loaded raw data.

NOTE: The bitmap MUST be created using  
dump()  
method!

SEE ALSO:

dump()

cludge()

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## 1.20 Amiga Foundation Classes: bitmapper/dump()

NAME: dump(fname:PTR TO CHAR)

DESCRIPTION: This method dumps a bitmap inbt a raw data format file.

INPUT: fname - File name where to dump the bitmap.

RESULTS: NONE

SEE ALSO:

loadraw()

## 1.21 Amiga Foundation Classes: bitmapper/width()

NAME: width()

DESCRIPTION: This method returns bitmap's width.

INPUT: NONE.

RESULTS: Bitmap's width.

SEE ALSO:

height()

depth()

## 1.22 Amiga Foundation Classes: bitmapper/height()

NAME: height()

DESCRIPTION: This method returns bitmap's height.

INPUT: NONE.

RESULTS: Bitmap's height.

SEE ALSO:

width()

depth()

## 1.23 Amiga Foundation Classes: bitmapper/depth()

NAME: depth()

DESCRIPTION: This method returns bitmap's depth.

---

INPUT: NONE.

RESULTS: Bitmap's depth.

SEE ALSO:

height()

width()

## 1.24 Amiga Foundation Classes: Bitmapper/image()

NAME: image()

DESCRIPTION: Sometimes, it is useful to obtain picture Image structure, the ←  
one

used by Intuition gadgets. Using this method, you can obtain this Image structure.

INPUT: NONE

RESULTS: a pointer to a valid Image structure.

NOTE: This method is *\*slow\** the first time you call it, because it has to create the Image structure and picture. Then, it will be fastlighting, until you don't load another picture in the class.

SEE ALSO:

## 1.25 Amiga Foundation Classes: Bitmapper/empty()

NAME: empty()

DESCRIPTION: This method will check if current class contains some data or not.

INPUT: NONE

RESULTS: TRUE           - The class is empty.

FALSE           - The class contains something.

SEE ALSO:

## 1.26 Amiga Foundation Classes: Bitmapper/clone()

NAME: clone()

SYNOPSIS: Bitmapper \* clone(VOID)

DESCRIPTION: This method clones the current Bitmapper and its contents

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and returns a new (cloned) Bitmapper object.

INPUT: NONE.

RESULTS: a PTR to a valid Bitmapper class. May be NIL.

NOTE: - The cloned class resulting from this method should be considered a Bitmapper class in all of its parts. So, you are supposed to END (delete) the class by yourself, when you have finished with it.

- The Resource Tracker used by the "original" class is provided to the cloned one during creation.

SEE ALSO: resourceTracker

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