Pictures

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COLLABORATORS			
	TITLE : Pictures		
ACTION	*NAME*	*DATE*	*SIGNATURE*
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REVISION HISTORY			
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Contents

Chapter 1

Pictures

1.1 Object: Picture

```
OBJECT DOCUMENTATION
Name:      PICTURE
Version:   0.9 Beta.
Date:      December 1997
Author:    Paul Manias
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CHANGES VERSION 0.9B
Added:    Picture->Bitmap

Removed:  Picture->AmtColours
          Picture->ByteWidth
          Picture->Data
          Picture->Height
          Picture->Planes
          Picture->Width
          Picture->ScrType
          Picture->Options: IMG_BLITMEM, IMG_VIDEOMEM

Edited: Description
        Picture->Palette
        Picture->Options
```

1.2 Object: Picture

```
OBJECT
Name:     Picture
Module:   Picture
Version:  1
Type:     Complex
Children: Bitmap

DESCRIPTION
The  purpose  of the Picture object is to provide a standard interface that
any  program  can  use  to  load a picture file.  The advantage is that the
```

source picture can be in any file format currently recognised by the system, so effectively the program in question will be able to support file formats that it does not understand.

The Picture object will clip any loaded picture so that it fits the size given in Bitmap->Width and Bitmap->Height. If you specify the RESIZE flag, the picture will be shrunk or enlarged to fit the given dimensions. If you leave the Width and Height at NULL, then the picture will be loaded at its default dimensions.

ACTIONS
The Picture object supports the following actions:

```
     CopyStructure()
     Free()
     Get()
   * Init()
   * Load()
     OpenFile()
   * Query()
```

STRUCTURE
The Picture object consists of the following public fields, plus all fields inherited from the Bitmap object:

```
   + Bitmap     Bitmap child object.
     Options    Special flags.
     Palette    Pointer to Palette.
     ScrHeight  Screen Height (pixels)
     ScrMode    Intended screen mode for picture.
     ScrWidth   Screen Width (pixels)
     Source     Where this picture comes from.
```

1.3 Object: Picture

FIELD
Name: Options
Type: LONG
On Change: Cannot change after initialisation.
Status: Read/IWrite

DESCRIPTION
You can specify certain flags here that will affect the way the Picture is initialised. Valid flags are:

IMG_REMAP
Remaps the Picture data to fit the palette, as pointed to in the Picture->Palette field. If the Picture is stored as a true colour type, this flag will be ignored.

IMG_RESIZEX
Resizes the Picture so that it fits the given Bitmap->Width. If this flag is not set then the picture will be clipped.

```
  IMG_RESIZEY
  Resizes  the  Picture  so that it fits the given Bitmap->Height.  If this
  flag is not set then the picture will be clipped.

  IMG_RESIZE
  Short way of setting the RESIZEX and RESIZEY flags, above.
```

1.4 Object: Picture

```
FIELD
Name:        Palette
Type:        LONG *
Inheritance: Source picture.
On Change:   Dynamic.
Status:      Read/IWrite

DESCRIPTION
Points  to  a  palette  if  it  is  relevant for the picture's screen type.
Palettes  are  generally  only allocated when the amount of colours used in
the picture is from 2 - 256.
```

1.5 Object: Picture

```
FIELD
Name:        ScrHeight
Type:        WORD
Inheritance: Source picture (if possible) or estimate based on resolution.
On Change:   Dynamic
Status:      Read/Write

DESCRIPTION
Specifies  the  height  of the screen/viewport when displaying the picture.
Some  picture file formats may not contain a suitable value to be placed in
this  field.   In this case, the field will be initialised to a value based
on the pictures resolution.

SEE ALSO
Field: ScrWidth
```

1.6 Object: Picture

```
FIELD
Name:        ScrMode
Type:        WORD
Inheritance: Source picture.
On Change:   Dynamic
Status:      Read/Write

DESCRIPTION
The  screen  mode that this picture is being loaded into.  Applicable flags
```

are outlined in Screen->ScrMode (LORES, HIRES, SHIRES, LACED etc).

SEE ALSO
Screen: ScrMode

1.7 Object: Picture

FIELD
Name: ScrWidth
Type: WORD
Inheritance: Source picture (if possible) or estimate based on resolution.
On Change: Dynamic
Status: Read/Write

DESCRIPTION
Specifies the width of the screen/viewport when displaying the picture. Some picture file formats may not contain a suitable value to be placed in this field. In this case, the field will be initialised to a value based on the pictures resolution.

SEE ALSO
Field: ScrHeight

1.8 Object: Picture

FIELD
Name: Source
Type: APTR
On Change: Dynamic
Status: Read/IWrite

DESCRIPTION
Pointer to a source object - either FileName, MemPtr or a standard object recognised by the system.

1.9 Picture: Init()

ACTION
Name: Init()
Object: Picture
Short: Initialise a picture object so that it is ready for active use.

DESCRIPTION
If Picture->Source is specified, then this action will first attempt to initialise the Picture by loading the Source data. If the data is recognised, it will be unpacked to the buffer specified in Picture->Data. If you do not supply Picture->Data, then a buffer will be allocated for you and placed in Picture->Data on initialisation.

The Picture object has all of the standard features of system objects,

including auto-initialisation of NULL fields. Note that by setting certain fields you are placing restrictions on the picture that is to be loaded. For example, if the picture is wider then a specified width, the picture will have its right edge clipped. To get around this simply leave the Width field unspecified, and Init() will initialise this field, loading the picture without clipping it. Alternatively you could specify the RESIZE flag, depending on the circumstances.

NOTE
If this action cannot identify the source data, then the call will fail. The native data format for the Picture class is IFF, but other formats such as JPEG and PNG can be added via child classes.

SEE ALSO
Picture: Load()
Include: graphics/pictures.i

1.10 Picture: Load()

ACTION
Name: Load()
Object: Picture
Short: Loads in a file that has been successfully identified as belonging to the picture class.

DESCRIPTION
This action is provided as a quick and simple way of loading in a Picture object. Note that all Pictures loaded using this method will be given space in Video RAM as a preference.

If you require more versatile loading, use the Init() function instead of Load().

SEE ALSO
Picture: Init()

1.11 Picture: Query()

ACTION
Name: Query()
Object: Picture
Short: Get the information on a recognised picture type.

DESCRIPTION
Calling this action will fill out all of the information on a Picture, according to what is found from the Picture->Source or Picture->Header.

Fields that are not set to NULL will be ignored by this action. For this reason, calling Query() after a call to Init() may be a fairly useless exercise.

If the Palette field is empty and the amount of colours is 256 or less,

this function will automatically allocate a memory area for the palette and write out a list of colours.

By using this function you can find information on any picture format currently supported by GMS. If the picture format cannot be assessed, then an error code of ERR_DATA will be returned.

SEE ALSO
Kernel: Init()