

iffpack

COLLABORATORS

	<i>TITLE :</i> iffpack		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
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REVISION HISTORY

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Chapter 1

iffpack

1.1 contents

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1.2 iffcleanup

IFFCleanup

IFFCleanup

NAME

IFFCleanup -- Clean up all allocated memory

SYNOPSIS

```
void IFFCleanup(void);
```

FUNCTION

Frees all memory that was allocated by ReadBody, ReadPicSize or WriteWindow

1.3 readbody

ReadBody ↔

ReadBody

↔

NAME

ReadBody -- Read the bitmap data (i.e. the BODY-Chunk)

SYNOPSIS

```
error = ReadBody(rp, fp);
```

```
int ReadBody(struct RastPort *, FILE *);
```

FUNCTION

This function reads the bitmap data, after the size of the picture has been read with ReadPicSize.

INPUTS

rp - pointer to the RastPort structure, where the picture will be loaded to

fp - standard C filepointer

RESULT

errorcode:	NO_ERROR	0
	NO_MEMORY	1
	BAD_IFF	2
	READ_ERROR	3
	UNKNOWN_COMPRESSION	5

SEE ALSO

ReadPicSize()
,
SetColors()

1.4 readpicsize

ReadPicSize

ReadPicSize

↔

NAME

ReadPicSize -- Read the size of the picture

SYNOPSIS

```
error = ReadPicSize(fp, win_width, win_height,  
                   scr_width, scr_height, depth, viewmode);
```

```
int ReadPicSize(FILE *, SHORT *, SHORT *,  
               SHORT *, SHORT *, SHORT *, USHORT *);
```

FUNCTION

This function reads the size of the picture and stores the values in the variables the pointers point to. Furthermore it reads the colortable of the picture.

INPUTS

fp - standard C filepointer
 win_width, win_height - pointers to the variables for width and height of the window
 scr_width, scr_height - pointers to the variables for width and height of the screen
 depth - pointer to the variable for the depth of the screen
 viewmode - pointer to the variable for the viewmode
 (<-> CAMG-Chunk)

RESULT

errorcode:	NO_ERROR	0
	NO_MEMORY	1
	BAD_IFF	2
	READ_ERROR	3
	UNKNOWN_COMPRESSION	5

SEE ALSO

ReadBody()
 ,
 SetColors()

1.5 setcolors

SetColors ↔

SetColors

↔

NAME

SetColors -- Set the colors, that has been read by ReadPicSize

SYNOPSIS

```

SetColors(vp);

void SetColors(struct ViewPort *);

```

FUNCTION

This function sets the colors, that has been read by ReadPicSize() in the specified ViewPort.

INPUTS

vp - pointer to the ViewPort structure of the screen, where the colors will be set.

SEE ALSO

ReadPicSize()
 ,
 ReadBody()

1.6 writewindow

WriteWindow
WriteWindow

↔

NAME

WriteWindow -- Write the contents of a window as an ILBM-Picture

SYNOPSIS

```
error = WriteWindow(fp,window,mode,read_colors);

int WriteWindow(FILE *,struct Window *,int,int);
```

FUNCTION

This functions writes the contents of a window as an ILBM-Picture. It supports three different compression modes:

mode:

- 0 - no compression
- 1 - normal horizontal byte compare run compression
- 2 - new vertical byte compare run compression

INPUTS

fp - standard C filepointer
 window - pointer to the Window structure of the Window that has to be written as an ILBM-Picture
 mode - compression mode
 read_colors - specifies if the colors that have been read by the last ReadPicSize will be used for saving.

FALSE: Read the colors from the colortable of the screen

TRUE: use the old color-values

This enables to keep the full 24-bit palette when modifying pictures on non-AGA machines.

RESULT

```
errorcode: NO_ERROR          0
           NO_MEMORY        1
           BAD_IFF          2
           WRITE_ERROR      4
           UNKNOWN_COMPRESSION 5
```

SEE ALSO

ReadPicSize()
,
New compression format

1.7 newcomp

New compression format

New compression format

The new compression method does not compress row by row but column by column. Each column has a width of 1 byte (8 pixel). First the 1st column of the 1st bitplane is compressed, then the 1st column of the 2nd bitplane and so on.

The new compression format is marked with 2 in the compression field of BMHD. The new format is very similar to the old compression format. It is as follows:

The first byte v is a control byte. The values have the following meaning:

- $v \geq 0$: $v+1$ uncompressed bytes are following
- $v < 0$: the next byte is repeated $-v+1$ times
- $v = -128$: The next unsigned (!) byte is the number of bytes that has to be copied from the column left of this column of the same bitplane.

NOTE: never compress across the borders of the columns, like it was not allowed in the old format to compress across the rows.