

FileID

BLOODROCK/SDC

COLLABORATORS

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|---------------|--------------------------|-----------------|------------------|
| | <i>TITLE :</i> FileID | | |
| <i>ACTION</i> | <i>NAME</i> | <i>DATE</i> | <i>SIGNATURE</i> |
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REVISION HISTORY

| NUMBER | DATE | DESCRIPTION | NAME |
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Chapter 1

FileID

1.1 FileID.Guide: Contents

FileID.library V 7.0 function reference

written by BLOODROCK of SYNDICATE

Developer note:

Last changes in the autodoc section were made in V6.0.

[FIAllocFileInfo\(\)](#)

[FIFreeFileInfo\(\)](#)

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[FIGetIDString\(\)](#)

[Notes](#)

1.2 FileID.library/FIAllocFileInfo

NAME

FIAllocFileInfo - Create a FI_FileInfo structure.

SYNOPSIS

Result = FIAllocFileInfo()

D0

LONG FIAllocFileInfo()

FUNCTION

Creates a valid FI_FileInfo structure. This function must be called first if you want to use FIIdentify() or FIIdentifyFromName().

Note that every FI_FileInfo structure must be removed using

FI_FreeFileInfo() before you may finish your program.

RESULT

FI_FileInfo - Address of the requested FI_FileInfo structure or NULL if any error occurred (out of memory).

SEE ALSO

FIFreeFileInfo()

1.3 FileID.library/FIFreeFileInfo

NAME

FIFreeFileInfo - Free a FI_FileInfo structure.

SYNOPSIS

Result = FIFreeFileInfo(FI_FileInfo)

D0 A1

LONG FIFreeFileInfo(STRUCT FI_FileInfo)

FUNCTION

Removes a FI_FileInfo structure from the system. Do not call this function more than once for the same FI_FileInfo structure. This would be the same as trying to Exec/FreeMem() the same memory area twice.

INPUT

FIFileInfo - A FIFileInfo structure allocated with FIAllocFileInfo()

RESULT

NONE - no errors possible.

SEE ALSO

FI_FileInfo structure

1.4 FileID.library/FIIdentify

NAME

FIIdentify - Identify a file type

SYNOPSIS

Result = FIIdentify(Address, FI_FileInfo)

D0 A0 A1

LONG FIIdentify(APTR, STRUCT FI_FileInfo)

FUNCTION

Examines a file in memory. Only the first 1200 bytes are

used therefor.

Assembler writers should note that A1 is preserved after each FIIdentify() call. You may directly examine FI_FileInfo using A1 after calling this function.

INPUTS

Address - The start address of a file already read.

This address **MUST** be even.

For a complete file analysis, you need to read at least 1200 bytes of the file (from Start, of course).

Note that if the file is smaller than 1200 bytes, you should fill up your file buffer with zero bytes. Otherwise, FIIdentify() may return **wrong** file IDs.

The file buffer must always be at least 1200 bytes ! Never pass smaller buffers!

FI_FileInfo - A valid FI_FileInfo structure.

Use FIAllocFileInfo() to create it.

RESULT

NONE - The passed FI_FileInfo structure will be filled.

SEE ALSO

FIAllocFileInfo()

include/libraries/FileID.i

include/libraries/FileID_IDDefs.i

1.5 FileID.library/FIIdentifyFromName

NAME

FIIdentifyFromName - Identify a file type

SYNOPSIS

Result = FIIdentifyFromName(FI_FileInfo, Name)

D0 A1 D1

LONG FIIdentifyFromName(STRUCT FI_FileInfo, APTR)

FUNCTION

Loads the first 1200 bytes (the whole file, if smaller) of the file you passed the name of, and tries to identify it.

Assembler writers should note that A1 is preserved after

each FIIdentify() call. You may directly examine FI_FileInfo using A1 after calling this function.

INPUTS

FI_FileInfo - A valid FI_FileInfo structure.

Use FIAllocFileInfo() to create it.

Name - A null-terminated standard DOS string.

RESULT

ERR - ERROR or NULL if everything went ok.

The passed FI_FileInfo structure will be filled. If an error occurred, FI_Description points to an error message instead of a file description.

SEE ALSO

FIAllocFileInfo()

include/libraries/FileID.i

include/libraries/FileID_IDDefs.i

1.6 FileID.library/FIGetHighID

NAME

FIGetHighID - Get the highest FileID number.

SYNOPSIS

Result = FIGetHighID()

D0

LONG FIGetHighID()

FUNCTION

Returns the highest file ID number supported by the currently installed library version.

All CPU registers are preserved by this function.

Only D0 is used for the result.

RESULT

HighID (LONG)

SEE ALSO

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1.7 FileID.library/FIGetString

NAME

FIGetString - Get the FileID string belonging to a specific ID number.

SYNOPSIS

```
Result = FIGetString(IDNumber)
```

D0 D0

```
APTR FIGetString(LONG)
```

FUNCTION

Returns the FI_Description belonging to the given ID number.

RESULT

An APTR to a FI_Description string or NULL if the given Number was out of range.

SEE ALSO

-

1.8 FileID.Guide: Notes

Please don't open FileID.library with VERSION_ANY or VERSION == 1, because V 1.0 has got a hard bug ! You should always use VERSION == 2 or higher.

For better performance on 680x0 Amigas, the start address passed to FIIdentify() should be longword-aligned.

FIIdentify() doesn't check if the passed start address is valid.

If you pass e.g. a pointer to write-only hardware registers your program will crash.

The maximum length of a file description string equals 35 bytes. Note this if you want to write these strings e.g. into an own window.

When using FIIdentify(), you don't always need to read 1200 bytes of the file to examine. If you want to save some time, you may read only 1024 bytes of the file into the (cleared!) buffer. This prevents the heads of the Floppy/HD moving to the next data block.

But in this case, Pro/NoiseTracker-Modules and StarTrekker modules can't be identified, because this would take too much time.

The speedup for reading 1024 instead of 1200 bytes is very small. Checking a complete directory containing 400 files on a Quantum LPS 240 harddisk took only one second longer than the same test with reading only 1024 bytes of every file.

This speed gain would be lost, if the library had to identify e.g. a Pro-

Tracker module from a buffer containing only the first 1024 data bytes.

The buffer you pass must be at least 1200 bytes in size, no matter how many bytes you have read. The remaining buffer space must be filled with NULL bytes to avoid wrong file identifications.

Note that FIIdentifyFromName() was made for easy single file analysis.

If you wish to examine lots of files, you should manage file I/O yourself and then use FIIdentify(), because FIIdentifyFromName() has to allocate and deallocate the needed memory for every single file.

Re-using the same file buffer for several files will save much time.

You may re-use an FI_FileInfo structure as often as you want. If you want to examine lots of files, you don't have to FIAllocFileInfo() for every single file.

Please do not write any data into the FI_FileInfo structure. Also, do not try to create or free it yourself, because it's size may change in future library versions.

Use FIAllocFileInfo() and FIFreeFileInfo() instead. It's also easier.

Do not misunderstand "FIIdentifyFromName". Currently, this function checks only the file contents. The filename itself is not examined for any extensions, making assumptions about what file might be. This is much too unsure.

FIIdentify() doesn't change the passed file (-part) anyway.

By the way: opening FileID.library will fail if the library couldn't open dos.library (any version). Rare, of course, but if you wonder about what's the matter... :^)
