

IMG.FMT

PSIONICS FILE - IMG.FMT

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Format of executable image files

Last modified 1997-09-20

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Executable image files hold programs to be executed; the same format is used for both IMG and APP files. The file contains control information, an executable (in DOS format), and up to 4 additional included files (for example, an icon or a resource file).

The format is:

Offset 0 (cstr): "ImageFileType**"

Offset 16 (word): image format version (\$200F) Offset 18 (word): offset of the start of the executable within the file

Offset 20 (word): size of the code segment, in units of 16 bytes Offset 22 (word): location in the code segment to start execution Offset 24 (word): stack size) each in units of 16 bytes;

Offset 26 (word): static data size) the initial data segment size is Offset 28 (word): initial heap size) the sum of these three Offset 30 (word): amount of initialized static data, in bytes

Offset 32 (word): checksum of the code Offset 34 (word): checksum of the initialized static data

Offset 36 (word): version number of the program Offset 38 (word): initial priority of the program, usually 128 Offset 40 (word): offset of the start, within the file, of included file 1

Offset 42 (word): length of included file 1, in bytes Offset 44 (word): offset of the start, within the file, of included file 2

Offset 46 (word): length of included file 2, in bytes Offset 48 (word): offset of the start, within the file, of included file 3

Offset 50 (word): length of included file 3, in bytes Offset 52 (word): offset of the start, within the file, of included file 4

Offset 54 (word): length of included file 4, in bytes Offset 56 (word): the number of DYLS within the file

Offset 58 (long): offset within the file of the DYL information table

Offset 62 (word): unused

The stack size includes the reserved statics and space for the floatingpoint emulator (see Psionics File PROCESS). The first part of the staticdata is initialized from the data in the IMG file (stored immediately after the executable), and the remainder is filled with zeros.

The version number of the program is for internal documentation; it doesnot affect the execution of the program. Most development tools set this to \$100F (meaning "1.00 final release").

The resource handling facilities in the system expect the second includedfile to be a resource (RSC or RZC) file. The system screen requires thethird included file to be a shell data (SHD) file. Any of the four included files can be a PIC file holding the icon.

If any of the included files has a zero offset, further entries might beignored. Thus if there is no second file but a third file, a zero-length second file should be provided.

An APP file must include a PIC file holding one of:

- a 24x24 bitmap (Series 3t icon);- two 48x48 bitmaps (Series 3a icon, black plane then grey plane);
- a 24x24 bitmap followed by two 48x48 bitmaps (both forms).

@@@ SHD files

I have no information about the format of DOS executables. @@@

Revision #1

Created Thu, Jan 24, 2019 10:26 AM by Alex

Updated Thu, Jan 24, 2019 10:26 AM by Alex