IFF Master

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This document was created using TEX3.14, 'texinfo.tex', and 'makeinfo'.

1 General

IFF MASTER is a program that allows you to have a view inside the structure of IFF files. It is *not* yet another picture viewer or sound sample player, but it displays the internal entities (*chunks*) of a file. For example, the headers of pictures (`ILBM`) or sound samples (`8SVX`) are displayed in clear, so you can directly read the size and depth of the image or the sampling rate.

From time to time you will find an unknown file on your hard disk, let's say a preference file. Since preference files are often stored in IFFormat, there is a chance you can directy examine the contens. There are some programs which write incorrect IFF files (e.g. the `ILBM.CAMG` chunk is a likely candidate), or which write additional information (e.g. copyright or author chunks). With IFF MASTER you can easily verify such cases.

In future versions (see Chapter 6 [History], page 7) there will be options to manipulate files, e.g. delete/edit/add texts inside `ANNO` chunks, or add new chunks like a `DPI` chunk for images.

Current features include:

- MUI application
- localized GUI (with AmigaOS 2.1 or later)
- Extensive chunk type library (currently 37 form types, 234 known chunks, 60 of these with comprehensive structure description)
- Chunk contents are presented alternatively as structure, text or hex dump
- Bit fields and enumeration types are displayed in clear
- Fixed point values are printed in decimal (e.g. `8SVX.VHDR.Volume`)
- Callback hooks for special attributes, e.g. the Mode-ID inside the `CAMG` chunk is de-referenced (e.g. '`PAL: Hires`').

IFF MASTER is distributed under the concept of *freeware*. Standard disclaimer applies to this program.

2 Installation

Nothing to it: just leave all files and the catalogs directory as they are in one directory, or alternatively copy the appropriate 'iffmaster.catalog' to into the system's locale directory (i.e. 'LOCALE:Catalogs/yourlanguage/'). By the way: if you mixed up catalog files for different languages, just use IFF MASTER to discover the catalog's language... :)

System requirements are:

- AmigaOS 2.0, or AmigaOS 2.1 for localized GUI
- MUI version 2.1 ('muimaster.library' v8), See Section 5.1 [MUI], page 6.

If you wish to start IFF MASTER inside the user-startup, you should do this with 'runback iffmaster iconified'. This will cause IFF MASTER to start as an *AppIcon*, so that Icons may be dragged onto this Icon.

3 Usage

The main window consists of 3 groups. The topmost one is the *file specification* group, the middle part ist the *chunk list* and below there are the *action buttons*.

The current version has limited capabilities to manipulate files, some concerning action buttons (e.g. 'Add', 'Edit') are inactive. However, moving ('Up', 'Down') and deleting ('Del') chunks is possible. Be warned that files may become unreadable to some applications if you delete mandatory chunks, i.e. if you delete the ILBM/BMHD chunk of a picture it will become undecodeable. To activate the manipulation buttons select 'Prefs/Editable file' from menu. If that menu item is inactive (it can be locked if you are still unsure about the program's functions) you can activate it by opening the preferences window and setting the 'File editable switch' to be 'off for new files' or to be 'left unchanged'.

3.1 File Specification

There are different ways to open a file. The most common one is by selecting 'Project/Open...' from the menu, or by clicking on the popup gadget beside the string gadget for getting a file requester. Alternatively, you can simply drag an icon on IFF MASTER's main window (*AppWindow*). Furthermore, you can open the file which is currently in the clipboard by using the menu item 'Project/Open Clip'.

3.2 The Chunk List

The chunk list can show several types of information: the left column shows the *chunk ID* (e.g. BMHD), then there is the *chunk type* (e.g. ILBM), and at the right side there is the size of the chunk. Below the action buttons there is a cycle gadget labeled 'Show' that specifies the format of the chunk list. If it states 'Description' you will get a description of the chunk's purpose (e.g. 'Bitmap Header'), and 'Contents' will display a *short* summary of the chunk's contents. You can advance the cycle gadget by pressing the SPACE key.

Because it is impossible to display the entire contents of a chunk in a single line you can get a comprehensive list by first selecting a chunk in the chunk list and then pressing 'Info' (you can as well double-click on the chunk). A new window containing the chunk's contents will appear. You can display the contents either as structure, plain text or as a hex dump. Change the presentation by using the register above the contents list, or by pressing CURSOR LEFT and CURSOR RIGHT.

You need not close the contents window to display the contents of another chunk. Just click on that chunk in the chunk list or press `CURSOR UP` or `CURSOR DOWN` after having activated the chunk list via the `TAB` key. The new contents are displayed using the appropriate data type.

4 Problems?

Building hex dumps of very large chunks (e.g. `ILBM.BODY`) can take a long time. Therefore the number of bytes in a hex dump can be limited to a certain ammount. The default limit is 512 bytes, it can be adjusted or turned off in the *Preferences* (select '`Settings/Set Prefs...`' from menu).

Some chunks (e.g. `FORM`) are container chunks with no contents, and therefore there is no presentation. Some other chunks (e.g. `BODY`) contain raw data, presentation of these chunks is limited to hex dump.

5 Credits

I like to thank:

Stefan Stuntz	for MUI, See Section 5.1 [MUI], page 6.
Eric Totel	for MUI-Builder
Kai Iske	for Support and Betatesting
Thomas Reinhardt	for his IFF files
H. Phil Duby	
Klaus Seistrup	for bug reports and comments

5.1 MUI

```
                    This application uses


                 MUI - MagicUserInterface

            (c) Copyright 1993/94 by Stefan Stuntz
```

MUI is a system to generate and maintain graphical user interfaces. With
the aid of a preferences program, the user of an application has the
ability to customize the outfit according to his personal taste.

MUI is distributed as shareware. To obtain a complete package containing
lots of examples and more information about registration please look for
a file called "muiXXusr.lha" (XX means the latest version number) on
your local bulletin boards or on public domain disks.

```
          If you want to register directly, feel free to send


                      DM 30.-  or  US$ 20.-

                              to

                         Stefan Stuntz
                    Eduard-Spranger-Straße 7
                       80935 München
                          GERMANY
```

6 History

Version 1.0

      First release

Version 1.1

      FIX   version 1.0 was compiled with option `68030` - sorry!

      NEW   many new chunk types

      NEW   menu (moved 'about' and 'prefs' into the menu, gaining some space)

      NEW   specifying file names at command line

      NEW   loading files directly from clipboard

      NEW   improved keyboard handling

Version 1.2

      NEW   fully localized GUI

      NEW   chunk contents can be saved

      NEW   AppWindow and AppIcon, command line option `iconified`

      NEW   improved formatting capabilities for structure entries

      NEW   sophisticated IFF parser, even brain-dead formats like `EMOD.EMIC` are handeled appropriately

      NEW   chunks now have nominal length, a message is displayed if a chunk is too short or too long

      BUG   Beta testers reported problems with de-iconify function when an icon was dropped onto the AppIcon. I removed the said call, so you have to double-click the AppIcon after dropping an icon.

Version 1.3

      BUG   prefs window: close gadget now functioning

      BUG   Cycle chain (`TAB`) now works in all windows

      NEW   new chunk types: `IAND,IANM,DR2D,RGB8,RGBN,SPLT`

      NEW   hex numbers get a user-chosen indicator, construction of hex dumps is now more than 3 times faster

      NEW   IFFs can be saved, even nested FORMs, e.g. images inside animations

      NEW   Implemented some editing capabilities (delete chunks)

      NEW   Preferences can be saved

I would greatly appreciate new ideas and enhancement requests. If you discover any chunk unknown to IFF MASTER, please let me know (i.e. try to send me that (short) file or even a description of the chunk's structure, if known). If you dare to translate the catalog to your language, please contact me, I will send you the ct file and the instructions.

7 Chunks

Following chunks are currently known to IFF MASTER:

`[anywhere]`
CSET, FVER, ANNO, AUTH, CHRS, HLID, NAME, TEXT, (c)

`3DDD`
OBJE

`8SVX`
ATAK, BODY, CHAN, FADE, PAN , RLSE, SEQN, VHDR

`ANIM`
ANSQ

`AVCF`
AVFH, GDAT

`AVCO`
CDAT, FLAG, IMAG

`AVEV`
ACTS, CDAT, FLAG, IMAG, PARS, REFL

`COPR`
COPI, WAIT, MOVE

`CTLG`
LANG, STRS

`DEEP`
DBOD, DGBL, DLOC, DPEL

`DR2D`
ATTR, CMAP, CPLY, DASH, DRHD, FONS, OPLY

`DTYP`
DTHD, DTCD

`EMOD`
8SMP, EMIC, PATT

`ENVL`
LFOI, COEN, VOEN, PIEN, NOEN, REEN, PHEN

`FAX3`
FXHD, GPHD, PAGE

`FAXX`
FXHD, GPHD, PAGE

FTXT
> FONS

IAND
> BPCT, **CMAP**, BODY

IANM
> **BMHD**, **CAMG**, BODY

ILBM
> **ANHD**, ASDG, BHCP, BHSI, **BMHD**, BODY, **CAMG**, **CCRT**, **CLUT**, **CMAP**, **CRNG**, **DEST**, DLTA, DMMY, **DPAN**, **DPI** , DPPS, **DPPV**, DRNG, **FFEX**, FITR, FXD2, FXPL, **GRAB**, JUNK, MAND, **SPRT**

ISTG
> MAXF, SOBJ

KCXM
> **VERS**, PREF

LWOB
> PNTS, POLS, **SRFS**, SURF

MTRX
> ARRY, BODY, DTYP, STRU

PREF
> ALRT, CONF, CTRY, EVNT, ETXT, FLOP, FONT, ICTL, INPT, KEYS, LCLE, MENU, MIDI, OPER, OSCN, PALT, PATH, PDAT, PNTR, PRHD, PGFX, PSPD, PTRN, PTXT, PUNT, SCRM, SERL, SHMN, SOND, TMAC, TMDO, TMEX, TMIC, TMIM, TMMO, TMSO, **VERS**, WBCF, WBPC, XDOS

PTCH
> INPF, OUTF, PSEQ, VERS

REAL
> RANI, RATT, RMTR, ROBJ, RSCR, RSET, RVRS, RWIN

RGB8
> **BMHD**, BODY, **CAMG**, **CMAP**, IMRT

RGBN
> **BMHD**, BODY, **CAMG**, **CMAP**, IMRT

SC3D
> EDGE, FACE, HIER, LAMP, LNAM, OBSV, PATH, VERT, VNAM, WRLD

SMUS
> **SHDR**, **INS1**, INST, SNX1, **TRAK**

SPLT
> **INFO**, BODY

TACF
> TPAR, TPBR, TPCA, TPCM, TPMA, TPP1, **TPPA**, TPPX, TPSC, TPSE, **VERS**

```
TAKE
```
TFRM, THDR
```
TDDD
```
INFO, OBJ
```
TERM
```
CLIP, **COMD**, CPTR, DATE, DIAL, EMLN, FAST, **FILE**, MISC, **MODM**, **PATH**, **PHON**, RECV, **SCRN**, SEND, **SERL**, **SOUN**, SPEK, TRML, TRNS, **VERS**, WINF, WIND, **XFER**
```
TVP2
```
TVRX
```
VILL
```
CRC , MODE, MONI, **VER**

I am still looking for descriptions for the chunks in smaller print.

8 Author

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