

Mif2lyx: Convert FrameMaker MIF files to LyX

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1 Introduction

I decided to migrate from FrameMaker to LyX. The Linux FrameMaker demo is expiring on December 31, 2000 and their versions for other platforms are so expensive, it is time to move on.

I hacked this Perl converter from MIF files to LyX — originally to L^AT_EX also but at some point I dropped the L^AT_EX version and just kept the LyX one.

It works by translating your FrameMaker styles into their equivalent LyX styles. That's the whole idea. It does not convert math formulas (wherever you had a formula, it will appear as $a = a$ on the LyX document): Sorry.

Mif2lyx does a good attempt to convert tables, and figures. To convert pixmap formats it calls “convert”, the excellent command that's part of the ImageMagick package. All figures and tables are put into floats.

Mif2lyx is just a hack — but it gets the job done for me. Please notify me if you make any cool improvements.

2 Pre-Requisites

Mif2lyx is Perl, so you need Perl. Also you need the module mif2lyx by Earl Hood, ehoo@pobox.com. Available from CPAN, <http://www.cpan.org>.

To convert images, mif2lyx calls ImageMagick's convert. <http://www.imagemagick.org>.

3 Invocation

```
mif2lyx [-d] [-2] file[.mif] (file...)
```

Switches:

- d Debug mode. Mif2lyx prints lots of info telling you all it's doing.
- 2 Two-pass mode. Sometimes you need to make two passes to load all text boxes that are referenced on the MIF source before being defined. The two pass mode will find the reference on the first pass, then insert it on the second pass.

4 The .m2l file

Mif2lyx doesn't know about the definition of styles in a FrameMaker document. It will just ignore them. Instead, you must supply a table of equivalences. Table 1 lists the defaults.

Mif2lyx expects to find a companion .m2l file to every .mif file. Otherwise, it will attempt to create a default .m2l file (fig. 1). You usually have to modify this .m2l file to suit your FrameMaker document. All FrameMaker styles used on your MIF document but not defined on the .m2l file will be treated as **none** and print an error message.

4.1 Editing the .m2l file

The .m2l file consists of lines with a FrameMaker paragraph style name followed by an equal sign, or a FrameMaker character style name preceded by "f." and followed by the equal sign. The right side of the equal sign tells mif2lyx what to do, and it's either a mif2lyx style name or a MIF font style definition.

Most Mif2lyx styles are just LyX styles, only with lowercase names. But some of them are special. The following mif2lyx styles translate directly into LyX styles:

```
section, subsection, subsubsection, section*, subsection*, subsubsec-  
tion*, caption, author, title, abstract, standard, quote, comment, date,  
bibliography, itemize, lyx-code, enumerate
```

FrameMaker style	LyX layout
Body	Standard
Bulleted	Itemize
CellBody	none
CellHeading	none
Footnote	Standard
Heading1	Section
Heading2	Subsection
HeadingRunIn	SubSubsection
Indented	Quote
Numbered	Enumerate
Numbered1	Enumerate
TableFootnote	none
TableTitle	none
Title	Title
Emphasis (fontstyle)	emph

Table 1: Default Styles

```

Body=standard
Bulleted=bulleted
CellBody=invisible
CellHeading=invisible
Footnote=standard
Heading1=section
Heading2=subsection
HeadingRunIn=subsubsection
Indented=quote
Numbered=enumerate
Numbered1=enumerate
TableFootnote=invisible
TableTitle=invisible
Title=title
f.emphasis=FAngle.Italic

```

Figure 1: Default .m2l file

4.2 “Special” styles

tt Use this style to introduce a typewriter font

none Also called **invisible**, this style copies the text without introducing a new style

noprint Ignore all text in this style

centering Centered paragraph

bibtex Inserts a Bib \TeX reference.

4.3 Font styles

Unfortunately, we are defining this with MIF notation. Here’s a list of supported MIF styles.

Fposition.FSuperscript Superscript. LyX doesn’t really support superscript. It works sometimes by introducing a little math formula. Same for **Fposition.FSubscript**.

FWeight.Bold Bold

FAngle.Italic Italic

FFamily.Symbol Symbol font

5 Bibframe Support

I use **Bibframe** to introduce references on FrameMaker. Bibframe introduces Bib \TeX citations by means of variables called “cite-referencename”. Mif2lyx will translate this into the corresponding citation reference.

6 Graphics and Figures

Anchored frames in FrameMaker become floats in LyX . But sometimes you might want to have just figures without the floats. This is easy to change in the code but I haven’t introduced it as an option.

Figures embedded in a FrameMaker document are not understood by Mif2lyx, of course. Only those *referenced* within FrameMaker will be converted. You should never embed figures in a document, FrameMaker or otherwise. Always introduce as references.

Anyways, referenced figures are copied into a “graph” subdirectory created for the purpose.

Files with extensions: **ps, eps, epsi, PS, EPS** and **EPSI** are not copied, only referenced by symbolic links on the graph subdirectory. Windows users will need to modify this code, probably, for Windows doesn't have symbolic links, does it?

A conversion is attempted for all others. The command “convert <original/directory/filename.ext> <graph/filename.eps>” is executed which converts jpegs, gifs, tiffs, etc. to encapsulated postscript if you have ImageMagick's **convert** program in your path!

7 Conclusions

Mif2lyx was useful, for me. Good Luck!

Oct 26, 2000