

The `mylatexformat`* package

Use `mylatexformat.ltx` to make a format based on the preamble of any LaTeX file

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Abstract

`mylatexformat.ltx` can be used to make a format from any L^AT_EX file.

The use of formats helps to speed up compilations: packages which have been dumped in the format are loaded at very high speed.

The format is usually made from the preamble of a `.tex` file. But with `mylatexformat`, you may stop the format at any point in the preamble using the command `\endofdump` before `\begin{document}`.

As far as I am concerned, I'm using MikTeX and have not been able to test the file on other systems. However, the portability of T_EX documents is well known...

I've been using `mylatexformat.ltx` with L^AT_EX, pdfT_EX and XeT_EX and it worked fine...

`mylatexformat` was primarily written from `mylatex.ltx`¹, but is very different in many points.

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* `mylatexformat`: CTAN:macros/latex/contrib/mylatexformat

This documentation is produced with the `+DocStrip+` utility.

→ To get the documentation, run (thrice): `pdflatex mylatexformat.dtx`
To get the index, run: `makeindex -s gind.ist mylatexformat.idx`
→ To get the package, run: `etex mylatexformat.dtx`

The `.dtx` file is embedded into this pdf file thank to `embedfile` by H. Oberdiek.

1. `mylatex.ltx`: CTAN:macros/latex/contrib/carlisle from David Carlisle (1994/09/27)

1 Creating a format

1.1 Using MikTeX

1.1.1 With preloaded pdflatex format (pdf output)

Use the following command line:

```
etex -initialize [opts] "&pdflatex" mylatexformat.ltx ""abc.tex""
```

You need 3 quotes around your .tex file if its name contains space (only one quote if it does not contain any space, but 3 quotes is more general...)

Full example:

```
etex -initialize -interaction=nonstopmode
      -save-size=20000 -stack-size=20000
      -jobname="Mon Beau Format Perso"
      "&pdflatex" mylatexformat.ltx ""Mon Fichier TeX.tex""
```

1.1.2 With preloaded latex format (dvi output)

Use the following command line:

```
etex -initialize [opts] "&latex" mylatexformat.ltx ""abc.tex""
```

1.1.3 With preloaded format xelatex (pdf output)

Use the following command line:

```
xetex -initialize [opts] "&xelatex" mylatexformat.ltx ""abc.tex""
```

1.2 Using other distributions

As I pointed out in the abstract, I have not been able to test the file on other distributions.

2 Using a format

2.1 Using MikTeX

Add the format to the very first line of your LaTeX file :

```
%&"Mon Beau Format"
```

You may use the ε -TeX option : `-dont-parse-first-line` to avoid loading the format.

2.2 Using other distributions

As I pointed out in the abstract, I have not been able to test the file on other distributions.


```
74%% initex &latex mylatexformat.ltx abc      (Generic TeX)
75%% initex \&latex mylatexformat.ltx abc    (unix and other TeX's)
76%% tex /i &latex mylatexformat.ltx abc     (emtex)
77%%
78%% If you are on a Mac or using some shell that makes it inconvenient
79%% to use a command line such as the above examples then you may
80%% make a file 'mylatex.tex' with the single line
81%% \input mylatex.ltx abc
82%% and then pass the file mylatex.tex to your (ini)tex shell to produce
83%% the format, ie something equivalent to initex &latex mylatex.tex.
84%%
85%% If you are using OzTeX, see the separate instructions below.
86%%
87%% This should make a format file mylatex.fmt which you can then use
88%% as follows
89%%
90%% Using the new format
91%% ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
92%%
93%% tex &mylatex abc          (generic TeX)
94%% virtex \&mylatex abc     (Unix TeX)
95%%
96%% This will process your document, abc.tex, just as LaTeX does, but
97%% quicker as the contents of the preamble will be stored in the
98%% format file and will not need to be run each time.
99%%
100%% If (vir)tex fails to find your mylatex.fmt then it is not searching
101%% in the current directory, either modify your TEXFORMATS path (or
102%% equivalent) to search '.' or (on unix/dos) use './' as in:
103%% virtex \&./mylatex abc
104%%
105%% Making and using the format with OzTeX
106%% ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
107%%
108%% Given a LaTeX file 'abc.tex', do this: select 'TeX...' from OzTeX's
109%% TeX menu, and go to the folder containing the file 'abc.tex' as if you
110%% were selecting the file 'abc.tex'. Then hit the Cancel button - this
111%% procedure sets OzTeX's working folder to the one containing abc.tex.
112%% Next, select iniTeX from the TeX menu, and type:
113%%
114%% &latex mylatex.ltx abc
115%%
116%% This should make a format file mylatex.fmt which you can save in the
117%% same folder as the file you're working on.
118%%
119%% To use the new format, put this at the very start of the very first
120%% line of your document:
121%%
122%% %&mylatex
123%%
124%% Further Notes
125%%
126%% The file abc.tex must contain a line *just* with
127%% \begin{document}
128%% Everything up to (but not including) the \begin{document} will
129%% be saved in the format and not executed in subsequent runs.
130%%
131%% If you are modifying the document (or working on a similar document)
132%% you may wish to add new commands to your document preamble.
133%% The 'mylatex' format normally skips the whole preamble (believing
134%% it to be pre-loaded) and so such new commands do not take effect.
135%% You could re-make the format, preloading the new preamble, but that
```

```

136%% might be inconvenient to do every time, and so an alternative scheme
137%% has been introduced.
138%% If the preamble contains a comment mylatex (ie a line just
139%% containing a % white space and the word mylatex) then the mylatex
140%% format will start reading the preable at that point so any new
141%% commands can be placed after such a comment and they will be
142%% executed.
143%% -----
144%
145%
146%
147%%\RequirePackage{etex}% RequirePackage may be used before the class
148%\makeatletter
149%% In principle \openout stream= filename need not be space terminated,
150%% and need not be immediate, but this covers \makeindex \makeglossary
151%% and index package's \newindex which are all the cases of \openout
152%% that occur before \begin{document} that I could see.
153%% Thanks to Ross Moore for pointing out \AtBeginDocument is too late
154%% eg changebar package *closes* the stream in \AtBeginDocument, so need
155%% to make sure it is opened before that. Make a special purpose hook.
156%%
157%% Save the original definition.
158\makeatletter
159\let\etex@primitive@openout\openout
160\def\openout#1 {\g@addto@macro\MYLATEXopens{\immediate\etex@primitive@openout#1 }}
161\let\MYLATEXopens\@empty
162%% \begin is overloaded in order to stop \dump at begin document
163%% if the macro \endofdump is not given somewhere in the preamble.
164%% Rem: it is NOT POSSIBLE to redefine \document, for the macro
165%% \document is changed or patched by some classes or packages
166%% (auxhook, etoolbox etc.)
167\let\MYLATEX@latex@begin\begin
168\def\begin#1{%
169  \expandafter\ifx\csname#1\endcsname\document
170    \expandafter\expandafter\expandafter\endofdump\expandafter\@gobble
171  \else\expandafter\MYLATEX@latex@begin
172  \fi{#1}}
173%% The version of \document to use on the initex run.
174%% Just preloads some fonts, puts back \document and \openout,
175%% sets up the banner to display the file list of files preloaded,
176%% then sets up some special catcodes so the preamble will be
177%% skipped on normal runs with the new format.
178\def\endofdump{%
179%% Force some font preloading.
180 {\setbox\z@\hbox{%
181   $$% math (not bold, some setups don't have \boldmath)
182   \normalfont% normal
183   {\bfseries\itshape}{\itshape}\ttfamily\sffamily
184   \ifdefined\large\large\fi
185   \ifdefined\Large\Large\fi
186   \ifdefined\LARGE\LARGE\fi
187   \ifdefined\Huge\Huge\fi
188   \ifdefined\small\small\fi
189   \ifdefined\footnotesize\footnotesize\fi
190   \ifdefined\tiny\tiny\fi
191 }}%
192 \let\openout\etex@primitive@openout
193 \let\etex@primitive@openout\undefined
194 \let\begin\MYLATEX@latex@begin
195 \let\MYLATEX@latex@begin\undefined
196 \makeatother
197 \everyjob\expandafter{\the\everyjob

```

```

198     \begingroup
199     \listfiles
200     \expandafter\MYLATEXcustomised\@dofilelist
201     \endgroup}%
202 \catcode'\=13\relax%
203 \let\endofdump\relax
204 \dump
205 }
206% Banner for \everyjob.
207\edef\MYLATEXcustomised#1#2#3\typeout#4{%
208 \noexpand\typeout{=====
209 \noexpand\typeout{JOB NAME\noexpand\@spaces\noexpand\@spaces\noexpand\space\noexpand\space:%
210 \string\noexpand\jobname\string}%
211 \noexpand\typeout{CUSTOMISED FORMAT : \string\noexpand\jobname\string}%
212 \noexpand\typeout{PRELOADED FILES:}%
213 #3%
214 \noexpand\typeout{=====
215 \noexpand\typeout{(mylatexformat)Info: starting reading document%
216 \string\noexpand\jobname\string}%
217 }
218%% While the preamble is being skipped (inside a group)
219%% the EOL is active and defined to grab each line and
220%% inspect it looking for :
221%% \endofdump
222%% or \csname endofdump\endcsname
223%% or \begin{document}.
224%%
225%% The special catcodes required are not enabled until after the
226%% first TeX command in the file, so as to avoid problems with
227%% the special processing that TeX does on the first line, choosing
228%% the format, or the file name etc.
229{% Entering simple groupe (level 1) => skip the preamble
230\catcode'\^^M=\active%
231 \catcode'\/=0 %
232 /catcode'\=13 %
233 /catcode'& 8 %
234 /gdef{/catcode'\/=0 /catcode'\^^M=13 ^^M}% /catcode'/%=9 ^^M}%
235%%
236 /long/gdef^^M{/begingroup%
237 /long/def/MYLATEX@endofdump##1/endofdump##2##3&##4##5##6/MYLATEX{##5}%
238 /long/def/MYLATEX@endofdump@cs##1/csname endofdump/endcsname##2##3&##4##5##6/MYLATEX{##5}%
239 /long/def/MYLATEX@document ##1document##2##3&##4##5##6/MYLATEX{##5}%
240 /long/def/MYLATEX@begindocument##1/begin##2##3/MYLATEX##4{%
241 /MYLATEX@document ##2document&&{/MYLATEX@start1{##4}}{^^M}/MYLATEX}%
242 /long/def/MYLATEX@start##1##2{%
243 /typeout{(mylatexformat)/@spaces/space/on@line./space(%
244 /ifcase##1 /string/endofdump/else/string/begin{document}/fi)}%
245 /typeout{=====}%
246 /endgroup%
247 /catcode'\^^M=5/relax%
248 /let^^M/par%
249 /MYLATEXopens##2}%
250 /long/gdef^^M##1^^M{%
251 /MYLATEX@endofdump##1/endofdump&&
252 {/MYLATEX@start0{##1}}%
253 {/MYLATEX@endofdump@cs##1/csname endofdump/endcsname&&
254 {/MYLATEX@start0{##1}}%
255 {/MYLATEX@begindocument##1/begin/relax/MYLATEX{##1}}%
256 /MYLATEX}%
257 /MYLATEX}%
258 ^^M}%
259}% Leaving simple groupe (level 1) => start reading document

```

```
260% Trick lookahead to allow mylatex.ltx and the document filename to be
261% given on the same command line. (initex &latex mylatex.ltx {abc.tex})
262 \expandafter\input\endinput%
263 \</package>
```

5 History

[2010/04/30 v1.0]

- First version.

6 Index

Numbers written in *italics* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in *roman* refer to the code lines where the entry is used.

	Symbols		J		
\&	<i>75, 94, 103</i>	\jobname	<i>210, 211, 216</i>
\{	<i>234</i>			
\^	<i>230</i>		L	
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