

A L^AT_EX Tour, part 3: mfnfss, psnfss and babel

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1 Introduction

This third installment of my tour covers three more distributions that are supported via the standard L^AT_EX bug report mechanism described in Part 1.

The mfnfss distribution provides L^AT_EX support for some popular Metafont produced fonts, that do not otherwise have any L^AT_EX interface.

The psnfss distribution consists of L^AT_EX packages giving access to POSTSCRIPT fonts.

The third distribution in this part of the tour is babel, which provides L^AT_EX with multi-lingual capabilities.

2 The Mfnfss Distribution

The mfnfss distribution is something of a ‘collecting point’ for files in the distribution that have not got anywhere else to go.

2.1 Font Packages

These packages provide L^AT_EX interfaces to some publicly available fonts. They do *not* provide the fonts themselves, which are available from the `fonts` tree in the standard CTAN archives.

pandora The ‘Pandora’ family of fonts designed by Nazneen N. Billawala is an alternative to the standard ‘Computer Modern’ fonts of Knuth. The family consists of a full range of text fonts, including sans-serif and slanted.

oldgerm The old German fonts designed by Yannis Haralambous. There are three styles of text font, Schwabacher, Fraktur and Gothic. (The terms ‘Fraktur’ and ‘Gothic’ tend to be used interchangeably by English speaking mathematicians such as the present author, but the fonts in this collection have clearly distinguishable styles.)

There is also a font of ‘initials’, highly ornate uppercase letters, suitable for use as the first letter of a section. If you wish to use this in ‘drop caps’ style you may also want to use one of the contributed packages available on CTAN such as `drop`, or `dropping`, that automate the setting of a suitable paragraph shape and inserting the initial letter at the correct size.¹

2.2 T1 Encoded ‘Concrete’ Fonts

Note: The following two files require the old release 1.1 of the dc fonts. Walter Schmidt very recently (March 1997) released a test version of a set of ‘Concrete’ fonts based on the new ec font base. The L^AT_EX support for these new fonts is available from `macros/latex/contrib/supported/ccfonts`. Once this release is stable, the following files will probably be removed from the mfnfss distribution.

dccr.mf Metafont source file used by the output files from `dccrstd.tex` to generate Concrete Roman fonts in T1 encoding.

dccrstd.tex T_EX file used in the generation of Concrete Roman fonts in T1 encoding. It will produce a number of .mf files corresponding to Concrete Roman fonts in different sizes. By modifying the table inside this file further Metafont driver files can be generated. The .fd files for the Concrete Roman fonts can be produced with `cmextra.ins` which is part of the L^AT_EX base distribution.

3 The Psnfss Distribution

With the release of L^AT_EX 2_ε, L^AT_EX gained inbuilt support for the use of alternative font families in documents, and in particular for the use of scalable font formats such as Type 1 (POSTSCRIPT) or TrueType.

The collection of packages, coordinated by Sebastian Rahtz, known as psnfss offers convenient interfaces to most of the more common font sets.

Most of the files here relate to font files renamed to a consistent naming scheme, promoted and maintained by Karl Berry. This encodes the font vendor, and details of the font such as its weight, style and encoding into a compact name that usually fits in the eight letter filenames used by some common filesystems. More information about the font naming scheme can be found on CTAN in `info/fontname`. It should be noted however that the packages themselves, such as the `times` package, do *not* depend on any particular font naming convention. L^AT_EX isolates packages from the details of the external font files by the use of ‘fd’ (Font Descriptor) files which map the L^AT_EX ‘NFSS’ model of fonts to the external font metric files.

1. The fd files provided here load the original yinit font. The CTAN archives also contain ‘yinitas’, a modified version of this font.

In principle, there is no real need for packages to load text fonts into L^AT_EX. For example, once the font metrics and font descriptor files for Times Roman (which is ptm in the Karl Berry Naming Scheme) are installed, then one could in principle switch to Times Roman in a L^AT_EX document by simply specifying `\fontfamily{ptm}\selectfont`. Normally one would instead want to assign the new font to one of the ‘default’ L^AT_EX families, Roman, as used by `\rmfamily`, Sans Serif (`\sffamily`) and Typewriter or Monospace (`\ttfamily`).

The support for POSTSCRIPT fonts is split into two. The CTAN `fonts/psfonts` area contains material that is mainly automatically generated from the Adobe font metric files that are distributed with all Type 1 fonts. This includes the font metrics themselves, the Font Descriptor files, the ‘map’ files used to make fonts known to the dvips driver, and some basic packages to declare single fonts to L^AT_EX. This is supplemented in `macros/latex/packages/psnffs` by the ‘hand written’ packages of the `psnffs` collection that load popular *combinations* of font families, or deal with mathematics.

This section refers at various points to POSTSCRIPT or Type 1 fonts, but in fact the T_EX support for these fonts applies equally well to True Type, or other scalable formats. As long as T_EX has access to the font metrics, the font format does not matter (to T_EX; it matters to the driver you use to print the DVI file).

3.1 Psfonts

The CTAN `psfonts` area primarily contains the font metric and L^AT_EX font descriptor files, organised by font vendor, as outlined below. The basic format of the file structure is the same for each font family, so only the top level directories are given here, except for the Adobe Times family, which is further expanded as an example.

Font Vendors The font subdirectories of `fonts/psfonts` are:

adobe Fonts sold by Adobe, or built into POSTSCRIPT devices.

bh Fonts designed by Bigelow and Holmes, these are mainly sold through Y&Y.

bitstrea Bitstream fonts.

monotype Monotype fonts.

textures Textures Fonts for the Blue Sky Research Macintosh T_EX implementation.

urw Fonts distributed by URW.

xadobe Adobe ‘expert’ font sets.

xmonotype Monotype ‘expert’ font sets.

Each of the vendor directories contains subdirectories corresponding to the font families supported by the `psfonts`

distribution. (Using the tools provided one can generate T_EX support files for most other text fonts, the selection here is really just a set of examples.)

The subdirectories of the `adobe` directory are:

agaramon Adobe’s rendition of a Garamond serif Roman family. (Commercial.)

avantgar Avant Garde sans serif (built into most POSTSCRIPT devices).

baskervi Baskerville, a commercially available serified Roman family. (If you are reading this in *Baskerville* then it is similar to the text you see, which is Monotype Baskerville).

bembo Bembo, a commercially available serified Roman family.

bookman Bookman (built into most POSTSCRIPT devices).

centaur Centaur, a commercially available serified Roman family.

courier Courier (built into all POSTSCRIPT devices).

garamond Garamond 3. Another Garamond serif Roman family. (Commercial.)

gillsans Gill Sans, a commercially available sans serif family.

helvetic Helvetica (built into all POSTSCRIPT devices).

nbaskerv ITC New Baskerville, another variant on the Baskerville theme. (Commercial.)

ncntrsbk New Century Schoolbook (built into most POSTSCRIPT devices).

optima Optima, a commercially available sans serif family.

palatino Palatino serified Roman family (built into most POSTSCRIPT devices).

symbol Symbol (built into all POSTSCRIPT devices).

times Times Roman (built into all POSTSCRIPT devices).

univers Univers, a commercially available sans serif family.

utopia Utopia, a commercially available serified Roman family.

zapfchan ITC Zapf Chancery. A script font built into most POSTSCRIPT devices.

zapfding ITC Zapf Dingbats. A symbol font built into most POSTSCRIPT devices.

All the directories corresponding to a font family look essentially the same, each with the following subdirectories.

dvips Contains the ‘map’ file for the dvips driver program. This file can be appended to `psfonts.map` or used via a configuration file to tell dvips where to find the specified fonts. A suitable configuration file is included in the directory.

Other drivers will need similar information, but perhaps in a different format.

tex This directory contains the font descriptor files which must be placed in the input path for L^AT_EX, so that L^AT_EX has available the information about the available fonts. For some font families this directory would also contain a L^AT_EX package that assigns the fonts to one of the standard L^AT_EX font families, such as `\sffamily`. Some packages, such as `times`, are not distributed here as they would clash with the packages distributed as part of `psnfss`, as described below.

tfm The font metrics, in ‘tfm’ format. These files contain all the information about letter sizes, ligatures, and kerning that T_EX needs to typeset text.

There are several files, as each font in the original family is made available in several encodings, the two main ones being the ‘Classic’ T_EX encoding used by Computer Modern. This is known as `OT1` in L^AT_EX, and as ‘7t’ in the Karl Berry font naming scheme used here. Similarly the files with names ending in ‘8t’ relate to fonts encoded to the eight bit ‘Cork’ encoding, known as `T1` in L^AT_EX.

vf The virtual fonts. Most (but not all) drivers handle the re-encoding of the original fonts to the encodings that T_EX expects by means of the virtual font mechanism. Some special fonts, such as Zapf Dingbats are not re-encoded, and so do not have a `vf` directory.

There is one very important thing to note about the above list. *There are no fonts!* Almost all of the `fonts/psfonts` area of CTAN is concerned with providing mechanisms for using fonts that you have obtained *elsewhere*. The fonts may be built in to your printer, or may be purchased separately. There are a few freely available Type 1 fonts. In such cases there will be an additional directory, `type1`, which contains the font files (normally in ‘pfb’ format).

Standard PostScript Fonts

In addition to the above directories, the `psfonts` area contains two zip files. If you need the files and have not got `unzip` (or `pkunzip` or `winzip` or...) then you can get a copy of `unzip` from the CTAN support area.

lw35nfss This zip archive expands to the subset of the `psfonts/adobe` tree that corresponds to the ‘Standard 35’ POSTSCRIPT fonts as used in Adobe Laserwriter printers. If you are only interested in using fonts built into your printer, and not in using downloaded fonts, then just get this file rather than the large collection of metrics in `psfonts/adobe`.

lw35pk This zip archive contains bitmap fonts for the ‘Standard POSTSCRIPT fonts’ in the usual PK format understood by most dvi drivers. This enables documents

using Type 1 fonts to be previewed with dvi previewers that can not use outline font formats. (For example `xdvi` or the `emtex` drivers).

Tools and Extra Packages There are a few remaining directories in `psfonts`.

ts1 The L^AT_EX `textcomp` package and related utilities for accessing fonts in the ‘text companion’ encoding known as `TS1` in L^AT_EX. These include the TC fonts that are distributed with the EC fonts, and suitably re-encoded fonts from the standard Type 1 font sets. This encoding contains many non alphabetic symbols that should match the current text font (rather than the math font). It includes currency symbols, superior digits, dagger signs, etc.

mathcomp A contributed package for using the text companion fonts in math mode.

tools The source for the scripts and utilities used for generating all these files.

3.2 Standard Psnfss Packages

By contrast to the packages and font descriptor files in the `psfonts` distribution, the `psnfss` distribution contains ‘hand written’ files. These are either used to set up popular *combinations* of the ‘standard’ fonts, or load alternative font sets for mathematics. Due to the nature of mathematics fonts, these latter packages are typically much more complicated internally than the one or two line packages that load text fonts. For the user, however, this complexity should not be apparent.

The first set of packages (all generated from the source file `psfonts.dtx`) load combinations of the Basic Adobe POSTSCRIPT font set into L^AT_EX.

times As one might guess, this declares Times Roman as `\rmfamily`. For mainly historical reasons, this package also declares Helvetica as `\sffamily` and Courier as `\ttfamily`, so effectively ensuring that all text (but not mathematics) is set in the basic POSTSCRIPT font set. This is a convenience for the user who wants to replace all the text fonts by references to the basic Adobe fonts. It is an advantage to do this if you want to produce device independent and small POSTSCRIPT documents for distribution. The disadvantage is that Times Roman, Helvetica and Courier, despite being the ‘standard POSTSCRIPT combination’ look particularly horrible if placed next to each other at the same nominal size, as done by this package. Helvetica has a much larger ‘x-height’ (the height of the lower case letters) than Times Roman, so if sans serif and Roman text are mixed

in-line, then the sans serif looks much too big. (This is not so much of a problem if the sans serif is only used for headings.) Courier is just too ‘wide’ when placed alongside Times Roman, which is a particularly compact font.

To partially compensate for these problems, the `pslatex` package (written by me, but currently distributed as a contributed package, not part of the core \LaTeX distribution) is an alternative to the `times` package. It loads Helvetica scaled by 90% and loads Courier by way of a virtual font that condenses it by scaling the horizontal direction (only) by 85%. `pslatex` also contains a copy of the `mathptm` package (see below) so installs a Times-Italic based font set for use in mathematics.

palatino Declares Palatino as `\rmfamily`, and Helvetica and Courier as `\sffamily` and `\ttfamily`.

helvet Declares Helvetica as `\sffamily`. (Does not change the other families.)

avant Declares Avant Garde as `\sffamily`. (Does not change the other families.)

newcent Declares New Century Schoolbook as `\rmfamily`, Avant Garde as `\sffamily` and Courier as `\ttfamily`.

bookman Declares Bookman Roman as `\rmfamily`, Avant Garde as `\sffamily` and Courier as `\ttfamily`.

chancery Declares Zapf Chancery as `\rmfamily`.

The above packages only affect *text* fonts, not mathematics. `psfonts.dtx` contains one special package, written by Alan Jeffrey, which does affect the math setup.

mathptm This package uses a set of virtual files that use various built in or freely available fonts to make a set of fonts suitable for replacing the standard Computer Modern Math fonts. In the current release, bold fonts (and so the \LaTeX `\boldmath` command) are not supported. The `pslatex` package referred to above contains an essentially verbatim copy of `mathptm`. One may use `mathptm` as an example of the coding needed to make virtual fonts for mathematics based on other text italic fonts. How successful this will be depends to a certain extent how visually compatible are the symbols that are gathered from the various ‘real’ fonts that are used by the virtual math fonts. There are often good reasons for making such fonts (the main one being that documents using freely available fonts may be more easily placed on the Web in POSTSCRIPT form), however the result is never likely to be as good as using fonts that have symbols that are *designed* to be visually compatible. For mathematics use within \TeX , that currently restricts use to Computer Modern, or the commercial MathTime or Lucida Bright font sets described below.

The `psfonts.dtx` source file contains one other package:

pifont This declares the Zapf Dingbats font which contains an assorted mixture of symbols, and also defines new user level commands to access these symbols. See the package documentation, or *The \LaTeX Companion* for details.

3.3 Freely Available Type 1 Text Fonts

The next set of packages are contributed by Peter Dyballa. In fact these are just one-line packages loading the appropriate font. Most of the code is in the `fd` files which are generated from the same source file.

charter Defines `\rmfamily` to use Bitstream Charter.

nimbus Declares URW Nimbus Roman-Regular and URW Nimbus Sans-Regular as `\rmfamily` and `\sffamily`. These are essentially free clones of Times Roman and Helvetica.

utopia Defines `\rmfamily` to use Adobe Utopia-Regular.

3.4 Commercial Text Fonts

The following packages are generated from the source file `adobe.dtx`. They are a rather random selection from the large catalogue of fonts sold by Adobe.

garamond Garamond as `\rmfamily`, Optima as `\sffamily` and Courier as `\ttfamily`.

basker Baskerville as `\rmfamily`.

mtimes Monotype² Times as `\rmfamily`.

bembo Bembo as `\rmfamily`, Optima as `\sffamily` and the ever popular Courier as `\ttfamily`.

3.5 Adobe Lucida

The following two packages relate to the original Lucida font set, designed by Bigelow and Holmes and sold by Adobe. They are generated from the `alucida.dtx` source file.

lucid Declares Lucida Roman and Lucida Sans as the Roman and sans serif families, and Adobe Courier again as the monospaced font.

lucmath Lucida has a matching set of mathematics fonts suitable for \TeX use. This package makes the required definitions to make these known to \LaTeX .

2. Not sure why this is generated from *adobe* source file.

3.6 Lucida Bright

A newer and more extensive Lucida family, also designed by Bigelow and Holmes but in this case sold by Y&Y, is known as ‘Lucida Bright’ and ‘Lucida New Math’. The L^AT_EX support described here was written by Sebastian Rahtz and myself.

lucidabr.dtx This package (replacing the earlier lucidbrb and lucidbry packages) changes the L^AT_EX defaults for both text and mathematics to use the Lucida Bright and Lucida New Math font collections. It has numerous options to control different aspects of the package and to control which of the fonts to use. (Lucida Bright contains several font families, including ‘fax’ and ‘casual’ etc, as well as variant forms of the math italic alphabet.)

The L^AT_EX package and the font descriptor files for the math fonts are generated from this source file. The font descriptor files for the Lucida text fonts in the standard L^AT_EX encodings are available from the psfonts area (in the bh) directory, after Bigelow and Holmes, the creators of these fonts.

The T_EX support and font metrics are freely available, but the fonts themselves must be purchased separately.

lucidabr.ins L^AT_EX installation file for Lucida Bright using the standardised ‘Karl Berry’ font names.

lucidabr.yy Alternative installation file. Use this instead of lucidabr.ins if you plan to install the fonts with their original font names, as sold by Y&Y. (In this case you do *not* need the fd files from the psfonts area.)

lucidabr.txt Introduction and installation guide for this package.

3.7 MathTime

The MathTime fonts are produced by Michael Spivak ‘T_EXplorators’. They are sold by Y&Y. The L^AT_EX support was written by Frank Mittelbach and myself.

mathtime.dtx The mathtime package is mainly concerned with mathematics setup, although it selects Times, Helvetica and Courier as the text fonts if they have not already been set by another package. The MathTime mathematics fonts are specially designed to match Times Roman, but blend quite well with other text fonts that are of a similar weight. Computer Modern mathematics tends to look very ‘light’ if used with font families other than Computer Modern. The package has several options to control the font choices made.

mtfonts.fdd The source for the font descriptor files for MathTime mathematics fonts.

mathtime.ins Installation file. Note that this file may be edited in a couple of places depending on whether

or not you have the extended ‘MathTime Plus’ font set which includes bold math support.

mathtime.txt Introduction and installation guide for this package.

3.8 Documentation and Other Files

readme.txt General introduction.

psnfss2e.tex User level documentation on the use of these packages.

test0.tex Testing accents and other encoding specific commands are working correctly using POSTSCRIPT fonts.

test1.tex Test document that uses most of the ‘Standard 35’ fonts.

pitest.tex Test of the pifont package.

mathtest.tex Test of the mathptm package.

makefile Unix ‘make’ utility to automate installation of the packages.

allpspk Unix script that makes a test document using a specified font family and then uses dvips and its associated scripts to generate ‘pk’ versions of the fonts.

makepk Unix script that calls allpspk on some common fonts.

3.9 Psnfssx

Recently the psnfss collection has acquired a close cousin, psnfssx, distributed as a contributed package from macros/latex/contrib/supported/psnfssx. This contains some lesser used or nonstandard packages, related to POSTSCRIPT support. Of particular interest might be the ly1 files (contributed by myself) in that directory which provide the L^AT_EX support for the ‘texnansi’ encoding promoted by Y&Y by way of an LY1 option to the fontinst package.

This psnfssx collection also contains some obsolete versions of packages formerly in psnfss; this material is provided for historical interest only. Use at own risk!

4 The Babel Distribution

The babel package is distributed from latex/packages/babel and is supported via the L^AT_EX bug reporting address, but has origins predating the current L^AT_EX release. As well as supporting L^AT_EX it contains support for plain T_EX (and formats such as AMST_EX or eplain that are based on plain). Primarily babel is the work of Johannes Braams, with contributions for specific language files by numerous people.

Babel consists of a ‘kernel’ that extends L^AT_EX with a mechanism for switching between specified languages. Part of this kernel (related to hyphenation) must be loaded when the L^AT_EX format is made to get the full benefit of hy-

phenation tables for multiple languages. For each language, or related group of languages, supported by babel there exists a language-specific code file. This will offer translations of the fixed text strings used in the standard L^AT_EX classes, such as ‘Table of Contents’, ‘Figure’, etc., and may also offer language-specific ‘shorthands’ that make typing common constructs easier (for example the german option provides the construct ‘‘ff’ to produce ‘ff’ that would hyphenate to ‘ff-f’ if it fell at the end of a line). The language file may also modify the typesetting to support the normal conventions of that language. For example the french option modifies the spacing around punctuation marks in text.

4.1 Babel Kernel

babel.sty The main interface to babel. The user specifies all languages to be used in a document as options to this package, the last option specified is the default language for the document. So for example

```
\usepackage[french,german]{babel}
```

would enable the use of French and German conventions within the document, with the default language being German.

hyphen.cfg The standard L^AT_EX interface to hyphenation. When the L^AT_EX format is being made, this file is input if it exists, to setup the required hyphenation patterns. In the base L^AT_EX distribution there is no such file, and so a default action is taken which loads the original T_EX patterns for American English. The babel distribution provides this configuration file (generated from babel.dtx) which defines some core functionality, and then reads language.dat to specify which hyphenation files to load.

language.dat This file must be edited to specify which language hyphenation files to load, and the name of the external file which contains the hyphenation table for each such language (and optionally a second external file, typically containing hyphenation exceptions). Note that hyphenation files *must* be specified here, and so loaded when the format is made. This is a restriction of the underlying T_EX system. Documents using other languages not specified here may still be processed, and babel will translate any fixed text strings, but it will not be able to correctly hyphenate that language. A default hyphenation will be used (most likely English) which may or may not be suitable depending how far the language differs from English.

switch.def This file is also generated from the same babel.dtx source. If babel is used as a package but was not used when the format was made, then the core functionality normally provided by hyphen.cfg will not be present. The package will detect this, and so input

this file to provide the necessary definitions.

4.2 Language-Specific Files

The implementation of the language-specific code for each language within babel is contained in files with extension ‘.ldf’ (language definition files). These are not directly input by the user, but specified as options to the babel package. Normally the option name is the same as the file name, except where noted below. Some similar languages or dialects are supported by the same external file, and some options are available in more than one name; such aliases are noted in parentheses in the list below.

Most languages also have a file with extension .sty; however this is just offered for compatibility with older versions of Babel and of L^AT_EX, or for use with plain T_EX based formats. In normal L^AT_EX usage only the .ldf file is used.

bahasa Support for the Bahasa language.

basque Support for the Basque language.³

breton Support for the Breton language.

catalan Support for the Catalan language.

croatian Support for the Croatian language.

czech Support for the Czech language.

danish Support for the Danish language.

dutch The dutch and afrikaans options.

english The american (USenglish) and british (UKenglish) options. The option english refers to either British or American English, depending on the local installation.

esperant The esperanto option.

estonian Support for the Estonian language.

finnish Support for the Finnish language.

frenchb Support for the French language (the corresponding options are french (frenchb) or francais. If the french option is used then french.ldf will be used (from the GUTenbug french package) if it is available.

galician Support for the Galician language.

germanb The austrian and german (germanb) options.

kannada Support for the Indian language, Kannada.³

irish Support for the Irish Gaelic language.

italian Support for the Italian language.

lsorbian The lowersorbian option.

magyar The magyar (hungarian) options.

norsk Support for the Norwegian languages with options norsk, nynorsk.

polish Support for the Polish language.

portuges The brazil (brazilian) and portuges (portuguese) options.

romanian Support for the Romanian language.

3. Not in the current release, planned for babel 3.7.

sanskrit Support for the Sanskrit language, transliterated to latin script.³

scottish Support for the Scottish Gaelic language.

slovak Support for the Slovakian language.

slovene Support for the Slovenian language.

spanish Support for the Spanish language.

swedish Support for the Swedish language.

turkish Support for the Turkish language.

usorbian The uppsorbian option.

welsh Support for the Welsh language

Babel version 3.6 sees the welcome (re)introduction of support for non-latin scripts. It is probably fair to say that this support is still more experimental than the support for latin scripts. One problem, not directly under babel ‘control’, is that the T_EX encodings for Greek and Cyrillic (corresponding to T_I for European Latin scripts) have not yet been finalised or agreed. Currently babel uses two ‘locally defined’ encodings, LWN and LGR.

greek The greek option, which utilises the ‘kd’ Greek fonts.

russianb The russian option, which utilises the ‘LH’ fonts.

ukranian Support for the Ukranian language.³

Two separate packages are currently in preparation which will be distributed, together with suitable fonts and hypenation tables, from CTAN. These will extend babel with options for the Ethiopian and Ukrainian languages.

4.3 Compatibility Files

The distribution contains the following two source files which generate files which enable the use of babel with formats based on plain T_EX (and also the old L^AT_EX 2.09 release).

bbcompat The source for compatibility mode files. Most languages are provided with a ‘package’ with extension `.sty`. This just inputs the corresponding language definition file and should never be needed using the normal L^AT_EX interface.

bbplain The source for the `plain.def` file allowing the use of babel with plain T_EX.

4.4 Installation Script and Font Descriptor Files

babel.ins Unpacks the babel distribution from the documented source files

cyrillic.fdd Font descriptor files for Cyrillic fonts in ‘LCY’ encoding.

greek.fdd Font descriptor files for Greek fonts in ‘LGR’ encoding.

4.5 Documentation

ASCII Text Files

00readme.txt The distribution guide.

install.txt How to install Babel.

install.mac How to install Babel with OZT_EX.

CyrillicFonts.txt Further notes on the Cyrillic installation.

GreekFonts.txt Further notes on the Greek installation.

T_EX Documents

tb1202 The source of the original article that appeared in *TUGboat*, Volume 12 (1991), No. 2.

tb1401 The source of an update article that appeared in *TUGboat*, Volume 14 (1993), No. 1.

tb1604 The source of an update article that never appeared in *TUGboat*, but was presented at EuroT_EX 1995, Arnhem.

4.6 Example File

language.skeleton An example file that can be used to build new language definition files from scratch.

5 Coming Soon

Part 4 of this tour will describe the files of the `amsfonts` and `amslatex` distributions of packages produced by the American Mathematical society.