An overview of TEX, its children and their friends …

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In the world of TEX, there are many developments and ambiguous names. This paper tries to give an overview of the development of TEX and related programs. Contributions are very welcome![1]

Link for the impatient.

Introduction

This document is for people that have stumbled upon different software names icluding something related to TEX and are confused by the many different terms – at least I was, so mabye others are, too …

The base frame and main idea for this overview was taken from the article *A brief history of TEX, volume II* by Arthur Reutenauer in the proceedings of EuroBachoTEX 2007 and his talk there (see references on page 68). Additional information is taken from original documentation of the software and some review articles. For information of very old stuff, the historic archive maintained by Ulrik Vieth and hosted on `ftp.tug.org` (see refs) was very useful, especially in the reconstruction of LATEX versions. Many thanks for that great archive!

All information is up to the date of this generated PDF and up to the information I found. Everything here is without guarantee – this is just to get an overview. Consult the references for further (and/or correct) information!

In the tree views, every node has a tooltip that shows up when you hover the mouse over it. For the case that your PDF viewer does not support this, there is a list of all the descriptions on page 25.

[1] The current source code of this document is availble at `http://github.com/alt/tex-overview`. Please feel free to patch there or mail me any suggestions and comments. I'll be happy to extend and correct this document!

Contents

1. The Difference Between Engine, Format and Distribution

There are three kinds of terms that are often confused especially by new users. This will try to explain them very shortly:

engine This is the program that does all the actual work. The original program is TEX, a famous development is pdfTEX, while LuaTEX is the latest successor.

format A format is a (large) collection of abbreviations (macros) that make the life easy when working with TEX. The most commonly used formats are LATEX, ConTEXt and plainTEX. The latter one is a minimal set of macros provided by Don Knuth. Formats can be combined with different engines, exploiting the special abilities of these engines. A format is in the beginning a collection of text files, but can be compiled into a binary format that can be read much faster by the engine.

distribution In addition to formats, a large set of supplementary files can be used to work with TEX, called *packages* for LATEX, *modules* for ConTEXt, and many external programs have proven useful for the work with TEX. Distributions such as TEX Live and MiKTEX strive to provide a full set of such programs and macros by using a package manager to take care of package dependencies and updating. Many Linux distributions, as well as cygwin for Windows, repackage a TEX distribution (mostly TEX Live) using the Linux distribution's package system.

2. How to read this document

This document consists of several graphs showing the development of software more or less directly related to TEX. The graphs try to show the time development (downwards), as well as dependencies, changes, etc.

I tried to make the graphs more readable by using colors for different categories. The decisions about what is important and what is "normal" reflect my personal opinion only.

normal That is, not very important in my opinion, no huge user group, but still maybe important for special needs. Was used by a major community at least some time back, but is not of great impact nowadays.

important Engines or formats that had or have a great impact on (everyday) typesetting for a large community.

experimental Developments that might still be under construction or were never used by a large community. Nevertheless, these might be very important to the development of other engines or for use of special typesetting.

planned Things that are planned to raise one day and are in the phase of preparation, i. e. there may be some code but not in the final form yet.

package LATEX-packages or single TEX-files (useable as packages or modules) that seemed worth mentioning. There won't be many of this; just some that might elsewise be confused for something else.

distribution Software bundles that bring TEX and friends to the normal user.

hist. dist. Historical distributions that have no use today but were important for bringing TEXto older computer systems.

program Programs that are not directly connected to TEX (but interesting in the context of using TEX) or separate helper programs.

font Something related to a font. Neither a program nor libraries that provide access to fonts nor the actual files, but rather the abstract definition or specification.

Some of the graphs are quite complex, which is the reason why there are two versions of them: A short one mentioning only the most important things and a full version with everything I could find.

In most cases I did not mention the authors of the programs/packages. This is not to diminish their effort but only for brevity (long names make things harder to read). I did

not write any of the below-mentioned programs or packages. The authors are given in the documents linked in the references.

3. How to contribute

I hope one day this document would become the standard reference for questions like "What program do I need for …?", "What's the difference between …TEX and …TEX?", "Why is it called …?" etc.

To get to this point, I need some help of people who know more about the TEX world than I do. It is up to you to contribute texts, references, links, descriptions, hints etc. I'll be happy about anything I can add here. Also, if you have suggestions about the layout or corrections to the content, let me know.

4. Problems with PDF viewers

As this document makes heavy use of PDF-features, some PDF viewers are not able to show everything correctly or as intended. My experiences with viewers are as follows, where the number is the version which I tested:

evince 3.0.2 Shows the document correct and complete. (Tested on Arch Linux)

Adobe Reader 9 Will show all the information but might hide some text of very long tooltips (at least that's the case on my machine). Also, it draws annoying green boxes around the tooltips which do not belong there. (Tested on Arch Linux)

TEXworks 0.5 r1307 The built-in PDF viewer of the TEXworks editor does not break lines of tooltips, therefore long annotations are not shown completely. (Tested on Arch Linux)

okular 0.13 Also does not break the lines. (Tested on Arch Linux)

xpdf 3.03 Shows only very short tooltips. Most of the information is not visible in the graphs. (Tested on Arch Linux)

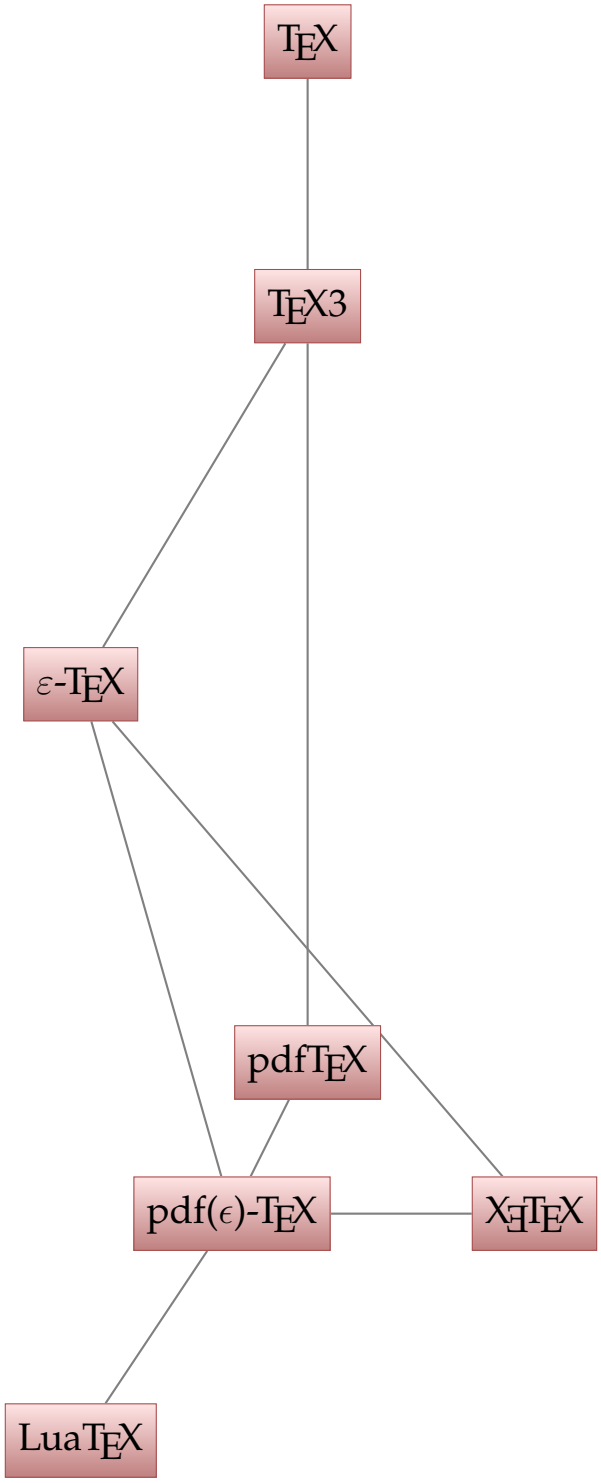
gv 3.7.2 hows no tooltips, but the annoying green boxes. (Tested on Arch Linux)

About this document

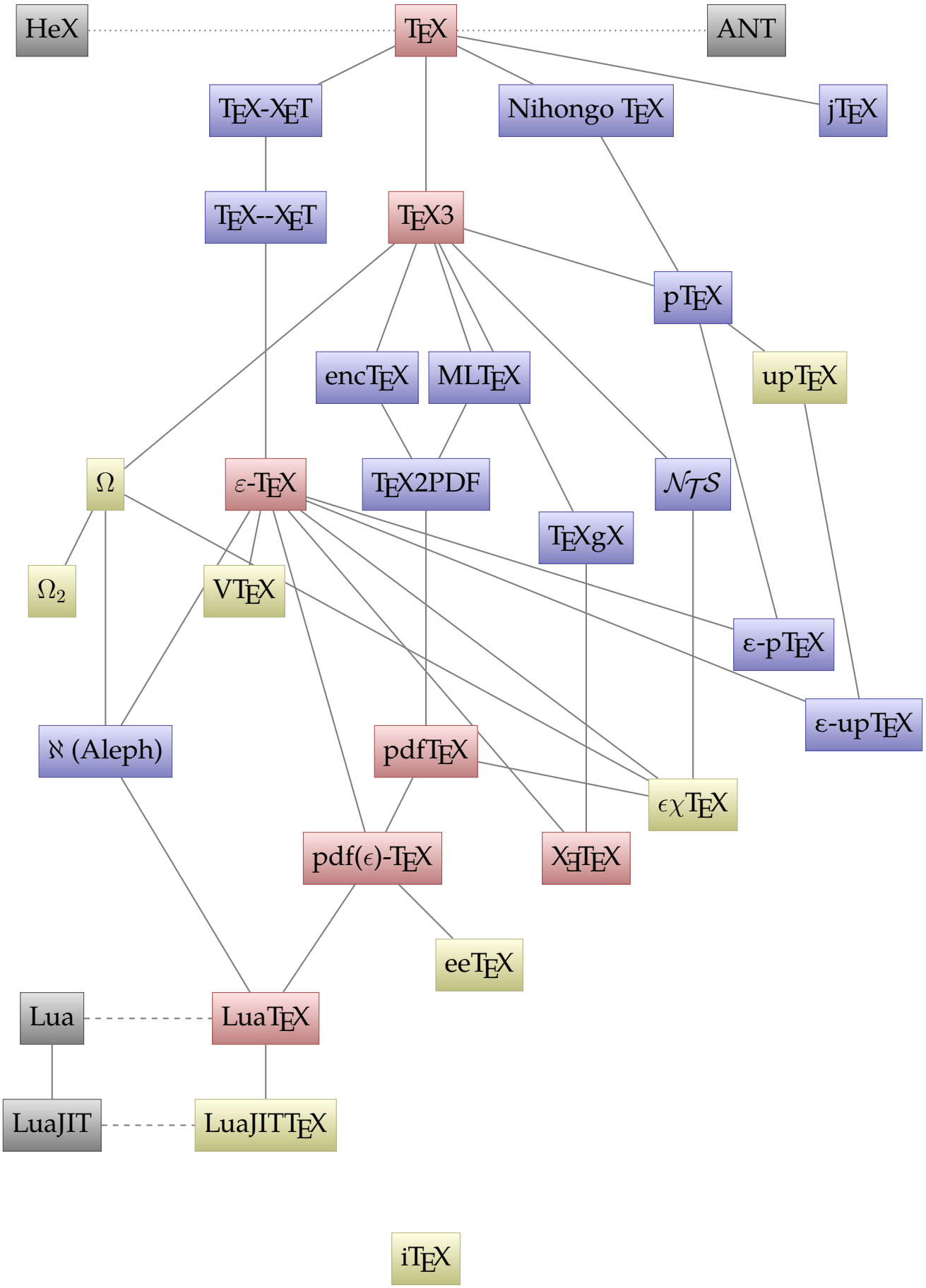
This document is typeset in the TEX Gyre Pagella font using the LuaLATEX 2_ε format with `expl3` and `xpackages` based on LuaTEX 0.79.1.

Part I.
Tree Views

5. TEX – the program short view

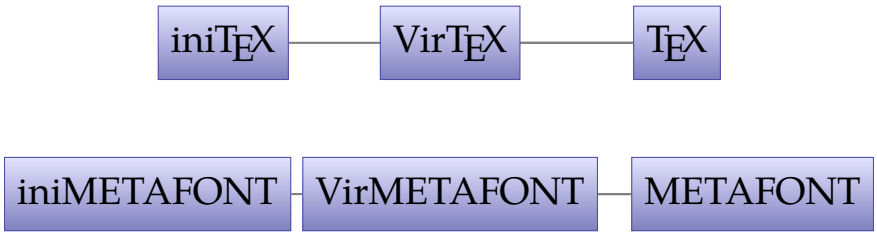


5. TEX – the program



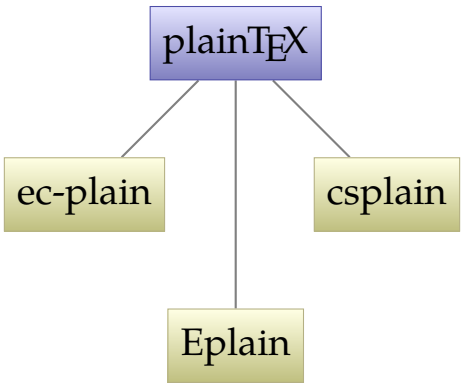
The chronological order may not be exact in this graph. I have to work hard on the arrangement to show both chronological order and code dependence, and for now only the code dependence is (should be) correct.

6. iniTEX, VirTEX et. al.

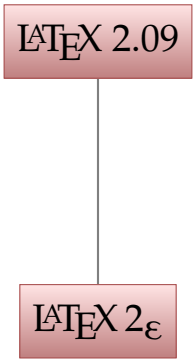


All other engines have the same functionality, but no special names given: |luatex --ini| is the INITEX version of LuaTEX etc.

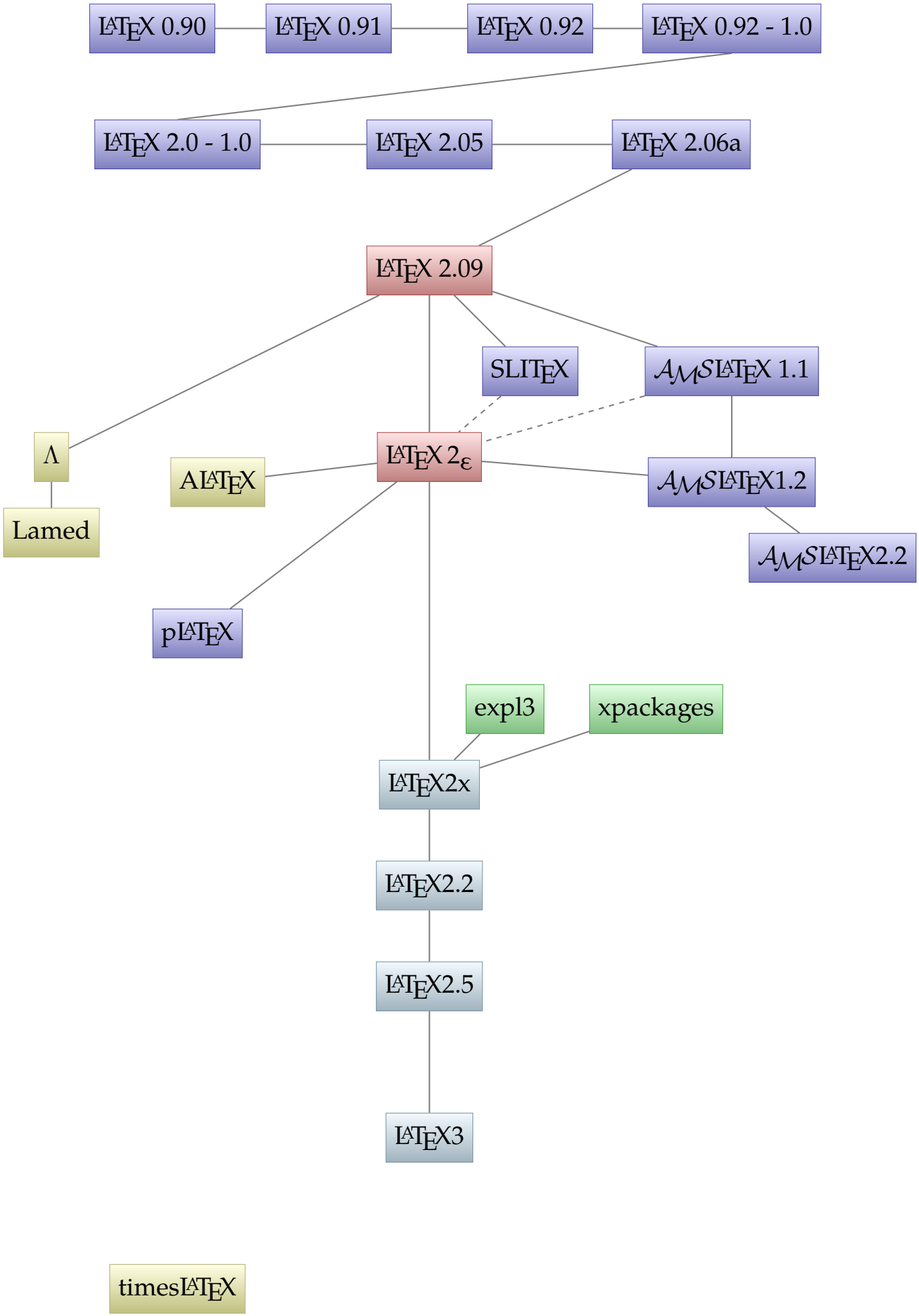
7. plainTEX – the first format



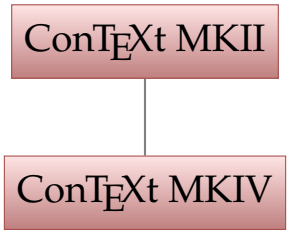
8. LaTeX – Lamport's TeX format short view



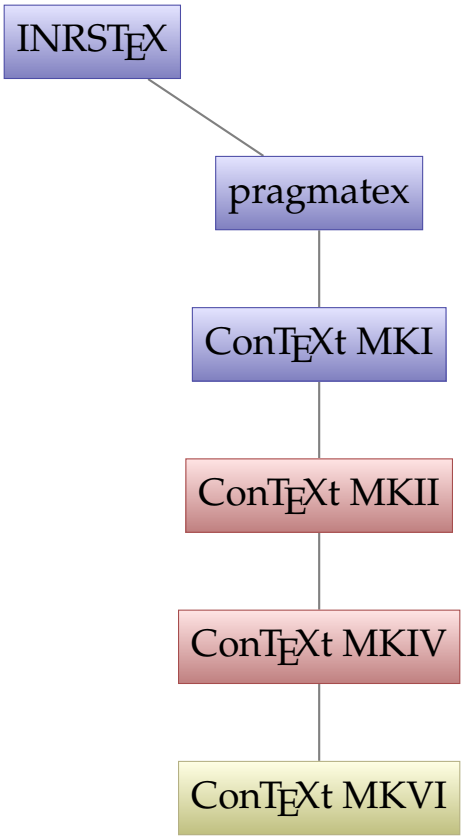
8. LaTeX – Lamport's TeX format



9. ConTEXt: con tex t – text with tex short view

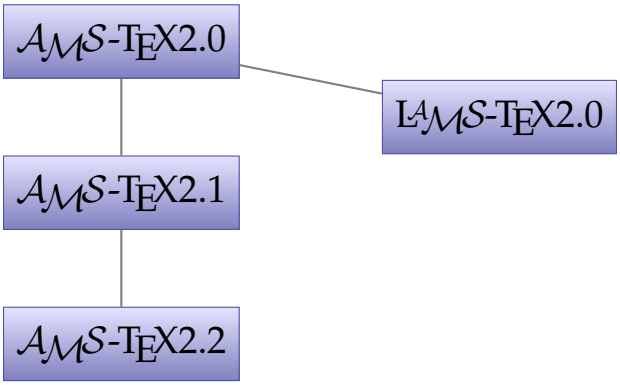


9. ConTEXt: con tex t – text with tex



10. Other Formats

10.1. $\mathcal{AMS}$-TEX

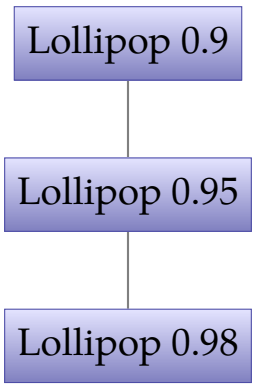


10.2. BLUe

10.3. HPTEX

10.4. JadeTEX

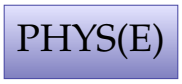
10.5. Lollipop



10.6. MacroTEX

10.7. MeX

10.8. PHYS(E)



10.9. PHYZZX

10.10. StarTEX – Starter's TEX

10.11. Texinfo

10.12. TEXsis

10.13. XMLTEX

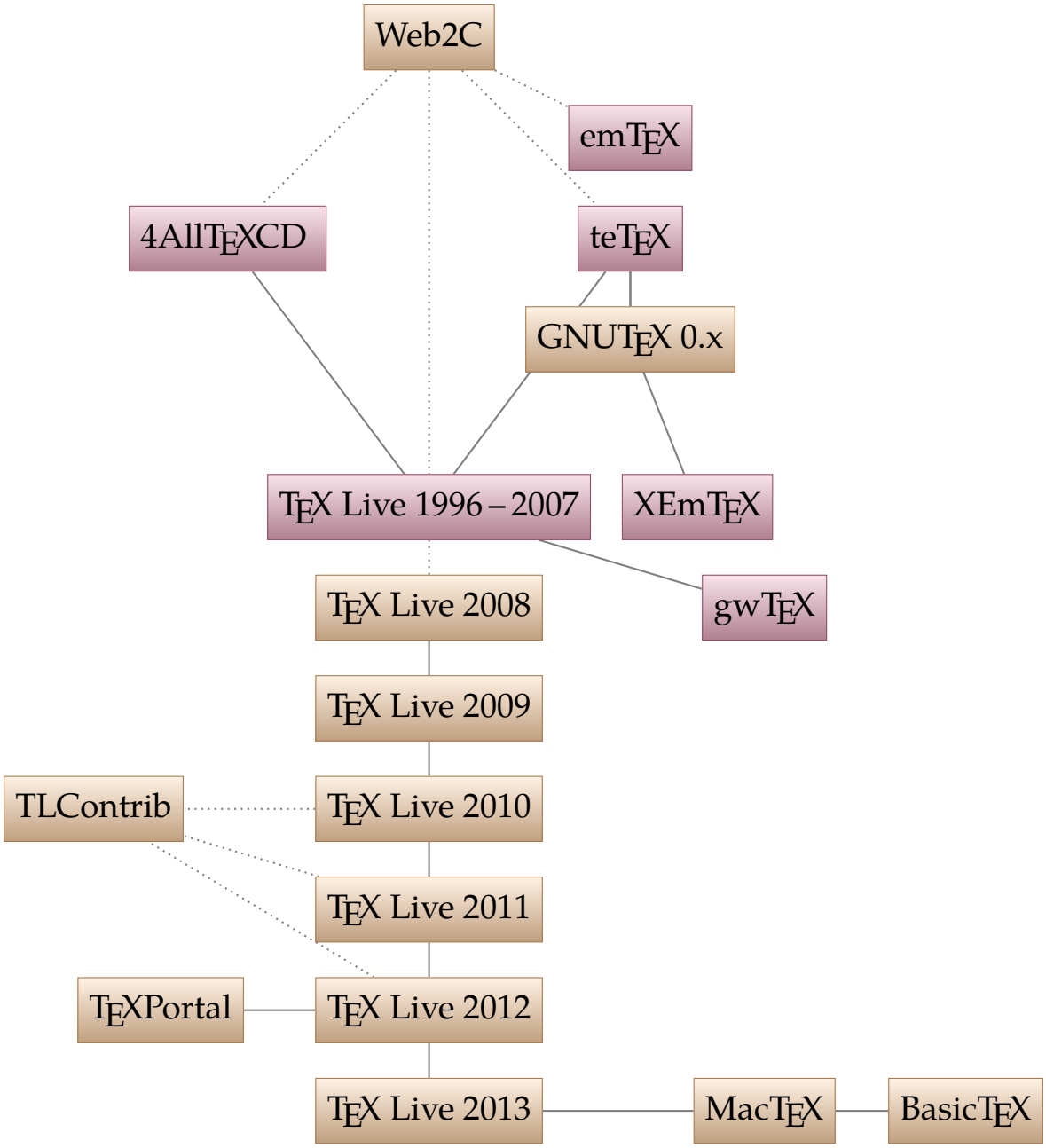
10.14. YTEX

10.15. ZzTEX

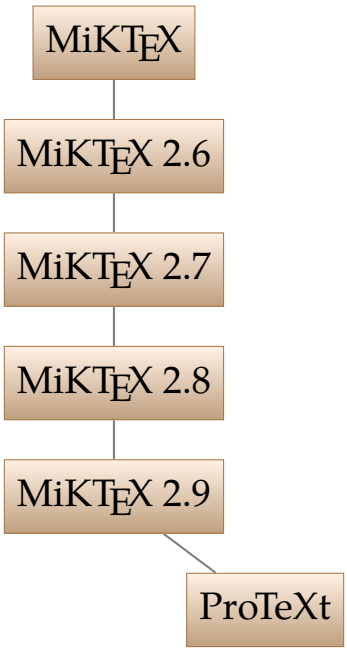
11. Distributions

This section will feature the main distributions of TEX and related programs. Of course, not every Linux Distribution's TEX package can be listed here, but only official upstream distributions.

11.1. TEX Live



11.2. MiKTEX



11.3. TEX collection

11.4. standalone ConTEXt

11.5. Decus TEX

11.6. KerTEX

11.7. W32TEX

11.8. OzTeX

11.9. For Amiga

Amiga-TeX pasTeX

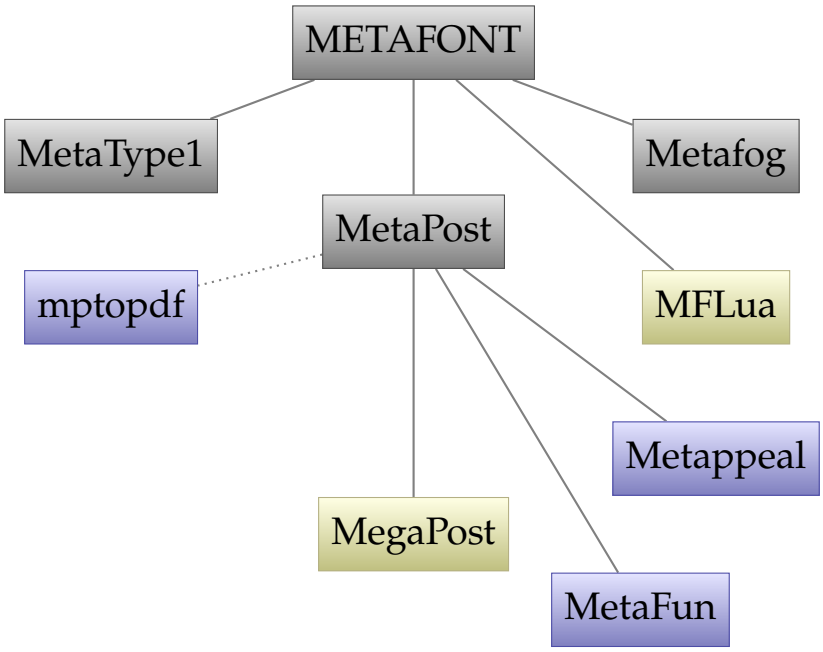
11.10. NTEX

NTEX

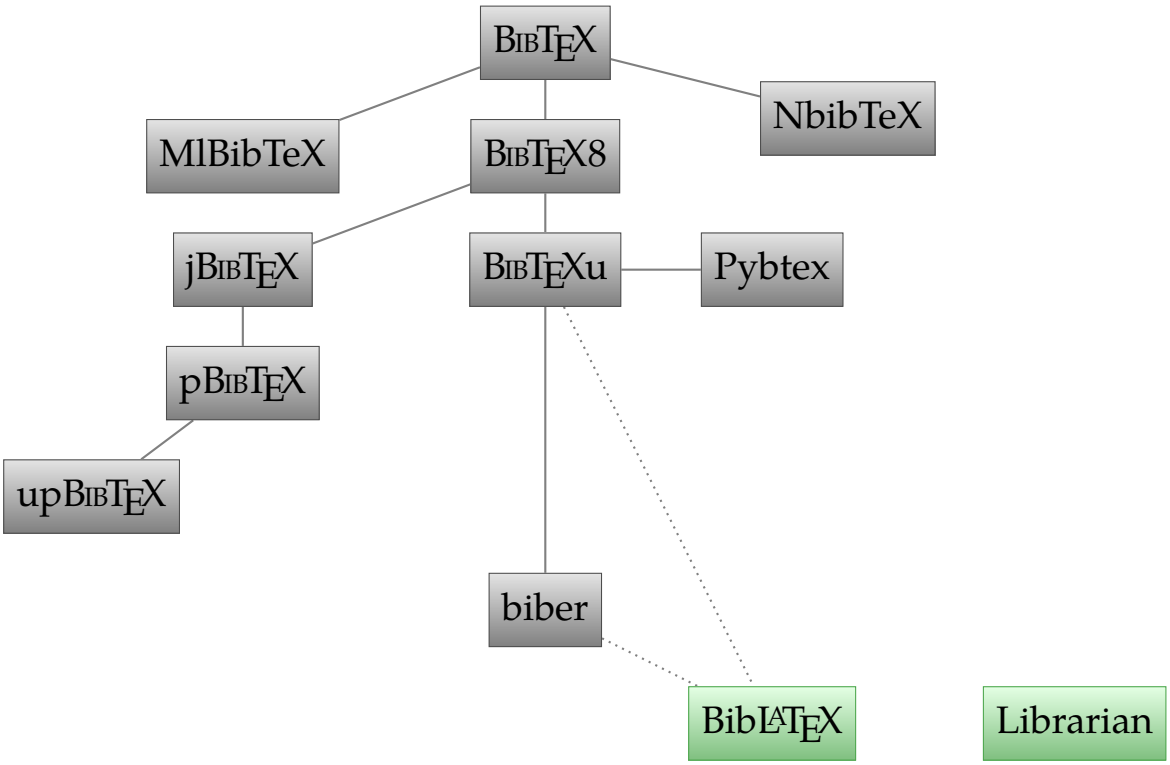
12. Pandora's Box

The following pages will be a hodge-podge of many things that are related to TEX and used in the process of generating documents in different file formats, i. e. conversion tools, bibliography tools etc. Feel free to contribute, I'll choose case-by-case if I'll add something or won't include it. Text editors or viewers will *not* be included!

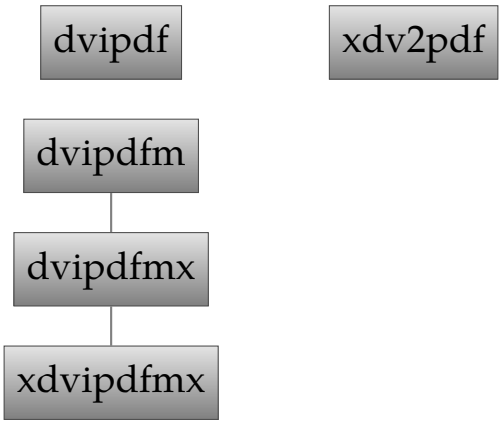
12.1. META*


METAFONT
MetaType1
Metafog
MetaPost
mptopdf
MFLua
Metappeal
MegaPost
MetaFun

12.2. BibTeX

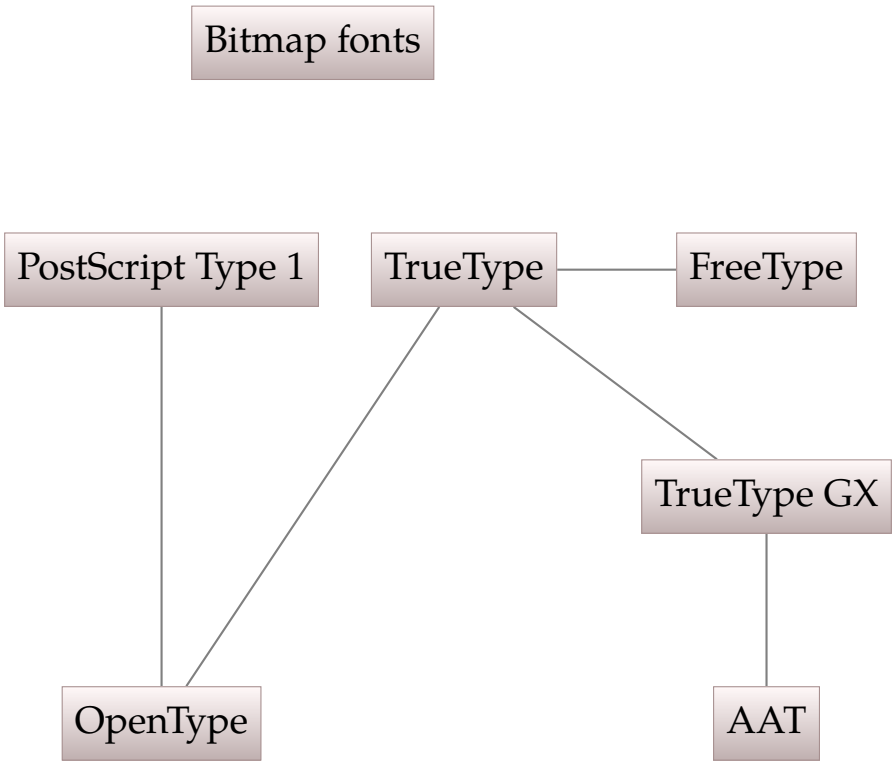


12.3. (x)dvipdf(m)(x)



12.4. Fonts

This section tries to cover the development of fonts – the most important thing for a typesetting system are font mechanism …



12.5. Work Flow – Under Construction!

Ok, this section might never be ready, but I will leavi it here in the hope that someone will help out: I want to try to depict the typical work flow for working with TEX. This will never be complete as there are many ways to work with any of the TEX flavours, including helper programs etc. We will start with a simple LATEX document, and maybe we will extend this to different formats, engines etc. … The preliminary nomenclature is:

red	necessary files
yellow	additional input files
blue	automatically produced files
green	program that is used – editor, processing tool, viewer, …

Part II.
Text Views

5. TEX – the program

TEX

Born in 1978 by Donald Erwin Knuth.

ANT

Ant is Not TeX. A typesetting system inspired by TeX. Only *inspired*, so it has nothing to do with TeX in terms of common code.

HeX

An experimental reimplementation of TeX in Haskell.

TEX-XET

The first extension to TeX, 1987. It was able to typeset in two directions, but only with a mark in the DVI to change the direction.

Nihongo TEX

A true multibyte extension of TeX. Could handle all Japanese characters in one font.

jTEX

An extension of TeX for typesetting Japanese. (1987, Yasuki Saito)

TEX--XET

TeX--XeT was able to really put the glyphs on the right place in the DVI.

TEX3

Ability to handle 8-bit input. 1989. TeX development was frozen in 1991 and only bugfixes were made. Now in version 3.1415926, it gets closer to pi with every bugfix. Don Knuth wishes the version number to be pi when he dies.

pTEX

Extension of Nihongo TeX to enable vertical typesetting. (“p” for “publishing”) Distributed as WEB change files. Primary author is D. E. Knuth, latest version (TeX Live 2012) is pTeX 3.1415926-p3.3.

encTEX

A small extension to TeX, started 1997. Adds 10 new primitives relating input re-encoding

MLTEX

Extension to TeX (started 1990) that allows hyphenation of words with accented letters. (Therefore the name: MultiLingual TeX.) Distributed as a change file to the original WEB sources of TeX.

upTEX

Unicode-aware version of pTeX – "Unicode-publishing"-TeX.

Ω

Support for 16bit-Unicode-input. Still constrained on the output encoding. Started 1994.

ε-TEX

An extension to TeX, provided by the NTS team as an intermediate project until NTS would be ready. eTex is a full TeX and backward compatible. The number of TeX's registers is increased and various new primitives useful to programmers are added.

TEX2PDF

Early name for pdfTeX. Don't confuse with converters like dvi2pdf.

NTS

A project to completely reimplement TeX in Java. Now NTS is officially declared dead.

TEXgX

"GX" stands for Graphic eXtension, a font technology available only on Mac OS. TeXGX was able to handle these fonts.

Ω_2

A short-time try to pick up the development of Omega again in 2006. Seemed more like a good plan and is now regarded as obsolete. LuaTeX is kind of a successor.

VTEX

VTeX (VisualTeX) can produce PDF, HTML, SVG, DVI or ps output directly from input. In contrast to pdfTeX, it includes a full PostScript interpreter, thus capable to include EPS figures, PStricks etc. First official version I found: February 15, 1999: VTeX 6.3; last official version seems to be from Oct 1, 2005: VTeX 8.61. Commercial product.

ε-pTEX

A merge of e-TeX with pTeX written by Hironori Kitagawa. Additional support for 256 math fonts, and some pdfTeX functionality. Latest Version (TeX Live 2012) is 3.1415926-p3.3-110825-2.4.

ε-upTEX

No description so far.

ℵ (Aleph)

Originally named epsilon-Omega, an attempt to stabilize Omega while merging epsilon extensions. Authors: John Plaice and Yannis Haralambous, now maintained for severe bugfixes by Taco Hoekwater. Latest version number is 3.1415926-1.15-2.1-0.0-rc4.

pdfTEX

A new engine to directly produce PDF-files from TeX, without the need of DVI-PS-PDF. This allows to use microtypographic extensions and many other features of the PDF format like page transitions etc.

εχTEX

Planned implementation of a high-quality typesetting system, written in Java. Based on experiences in NTS, eTeX, pdfTeX and Omega. Started in 2003, current version in repository is 0.0. (i. e. not very far ...)

pdf(ε)-TEX

Merging the pdfTeX engine with the eTeX-extensions. This engine can produce DVI (with or without the eTeX-extensions) as well as PDF (again, with or without extensions).

XƎTEX

This extension enables full multilingual support for left-to-right typesetting, right-to-left and almost any other possible direction. Unicode encoding is fully supported (utf8 as native encoding). XeTeX also features support for OpenType, AAT, TrueType and Graphite-fonts (via the operation system). In contrary to pdfTeX or LuaTeX, no external configuration file is needed to use fonts. Since version 3.1415926-2.2-0.9997.4, code from pdf(e)TeX for margin kerning has been added. Latest version series is 0.9999.x. XeTeX version numbers will converge to 1.

eeTEX

Experimental extension to pdfeTeX by Taco Hoekwater, created 2000. Distributed as change file. Now dead due to his development of LuaTeX.

Lua

A script language; has nothing to do with TeX.

LuaTEX

LuaTeX supports utf8, OpenType and many more things. TeX Live 2012 ships version 0.70.2. LuaTeX features an embedded scripting language, Lua, making it easy to extend and to change the TeX interna, so most of the programming can be done in Lua instead of TeX-hackery.

LuaJIT

A just-in-time compiler for Lua.

LuaJITTEX

LuaJITTeX is a LuaTeX based on LuaJIT, a just-in-time compiler for Lua.

iTEX

iTeX is the official successor of TeX3, announced by Don Knuth at the TUG conference 2010. Not to be confused with William Cheswick's application for the iPad.

6. iniTeX, VirTeX et. al.

iniTeX

The program TeX without preloaded format ("initial TeX"), intended for format creation. (Format dump possible.)

VirTeX

The program TeX without preloaded format ("virgin TeX"), intended for production use. (Format dump not possible.) No longer part of TeX Live.

TeX

In this special context, TeX means the program with the plain format preloaded. (Format dump not possible.)

iniMETAFONT

The program metafont without preloaded format ("initial metafont"), intended for format creation. (Format dump possible.)

VirMETAFONT

The program metafont without preloaded format ("virgin metafont"), intended for production use. (Format dump not possible.) No (longer?) part of TeX Live.

METAFONT

In this special context, mf means the program with the plain format preloaded. (Format dump not possible.)

7. plainTeX – the first format

plainTeX

The basic format offered by Don Knuth to provide a minimal set of macros to work with.

ec-plain

A plainTeX using EC fonts. Latest changes in May 2002 for pdfTeX.

csplain

A plainTeX using cs-fonts.

Eplain

Extensions of plainTeX to provide often-used utilities. Not thought for document preparation as LaTex is; you can use it as a standalone format or as extension to a given format. First version that is still available is 2.1 from 1992. Latest version 3.5 is from 2013-02-13.

8. LaTeX – Lamport's TeX format

LaTeX 0.90

First version still on web (historic archive, see refs) is 0.90, for use with TeX 0.95. No installation help found. Apparently one needs the files lplain.tex and latex.tex to create the format.

LaTeX 0.91

Version 0.91 for use with TeX 0.97 (C) 1983 by Leslie Lamport. Most changes to previous version are in the file lplain.tex.

LaTeX 0.92

First version with the @ as letter for internal names. Seeminlgy first version with a manual. For use with TeX Version 0.999999. (no joke, that's the version number given in the latex.tex file!) (C) 1983 by Leslie Lamport, conversion to 0.92 from 0.91 by Arthur Keller.

LaTeX 0.92 - 1.0

Adaptation of 0.92 for TeX version 1.0. (C) 1983 by Leslie Lamport, conversion to 0.92 from 0.91 by Arthur Keller.

LaTeX 2.0 - 1.0

Seemingly heavy changes compared to 0.92. Version for TeX 1.0. Release of 11 Dec 1983. There were never public versions 1.x

LaTeX 2.05

No sure information found so far.

LaTeX 2.06a

Release of version 2.06a of the LaTeX macros. September 1984.

LaTeX 2.09

The first official version by Leslie Lamport, 1985.

SLiTeX

A variation of LaTeX2.09 to provide an easy way for producing presentations. In LaTeX2e absorbed as a documentclass (slides).

AMS-LaTeX 1.1

A port of Spivak's AMS-TeX to LaTeX 2.09 by Frank Mittelbach and Rainer Schöpf, released 1990.

LaTeX 2ε

June 1994: New release of LaTeX to avoid incompatible dialects of LaTeX 2.09. Introduced by the LaTeX3-Team. This is the latest stable version of LaTeX at the moment. Support for pdfTeX, XeTeX and LuaTeX is give, where small changes allow for the special abilities of the engines. Most adaption to the engines is done on package level (fonts, encodings etc.)

Λ

A LaTeX based format for the omega engine.

Lamed

A LaTeX based format for the aleph engine.

AMS-LaTeX1.2

A port of version 1.1 to LaTeX 2e by Downes and Jones.

ALaTeX

A slightly changed LaTeX format by Matt Swift to offer modularity at format level. Acts as normal LaTeX if not explicitly told to do different. “A” for “alternate”, “abstract” or the indefinite article.

AMS-LaTeX2.2

Latest AMSLaTeX version is 2.2 from 2001. Intermediate versions are not shown.

pLaTeX

A LaTeX based format for the pTeX engine.

expl3

The expl3 bundle is the ground stock of LaTeX3. It is a bundle of packages that can be used with LaTeX2e, but are planned to become the kernel of LaTeX3. They provide the low-levle structures, programming structures and everything needed for package authors.

xpackages

The xpackages are a bundle of packages intended to become the ground stock of packages for the high-levle and user-level interface in LaTeX3. Based on expl3, they can be used with LaTeX2e already.

LaTeX2x

A (somewhat) planned experimental step towards LaTeX3. LaTeX2x is a normal LaTeX2e, but with expl3 and xpackages compiled in the format. It is *not* intended for everyday use but only for experimenting with LaTeX3. Might be concentrated on LuaTeX, but XeTeX and pdfTeX variants will be available.

LaTeX2.2

Inofficial suggestion by Philipp Stephani on the LuaLaTeX list. LaTex2.2 should still be a full LaTeX2e, but with the expl3 bundle in the format. In fact, this is what LaTeX2x is planned to be.

LaTeX2.5

Will Robertson suggested in an interview (see refs) an interim unstable version on the way to LaTeX3 with version number 2.5 that should bring package authors towards using LaTeX3 syntax. This version should be backwards *incompatible* to LaTeX2e. (This version does not exist in any official plannings, but I liked the idea, so it is mentioned here ;))

LaTeX3

The long-time successor of LaTeX2e. It is planned to implement a very elaborate low-level programming language. (Almost done by now.) The expl3-package provides an implementation that can be used on top of LaTeX2e. Several LaTeX packages already make heavy use of expl3. (As does this document.) LaTeX3 makes use of eTeX primitives and therefore needs this engine or successors. Special adaptions of LuaTeX features are starting to evolve.

timesLaTeX

Some LaTeX 2.09 derivate, need more information.

9. ConTeXt: con tex t – text with tex

INRSTeX

"Extended Plain TeX for use with MLTeX."

pragmatex

Former name of ConTeXt. Based, besides others, on INRSTeX.

ConTeXt MKI

Original ConTeXt with Dutch low level interface. "MK" stands for "Mark", meaning "version".

ConTeXt MKII

ConTeXt with English low level interface. Works with any TeX-engine, as LaTeX does: TeX, e-TeX, pdfTeX, Aleph, XeTeX, ... For the end user, no difference to MKI.

ConTeXt MKIV

Specially designed for LuaTeX. MKIII was "skipped" for "practical reasons", as Hans Hagens says, and "MKii, MKvi, MKvi all have 4 chars (which is why I skipped the v, but who knows if MKv will show up some day")

ConTeXt MKVI

Latest experimental version of ConTeXt.

10. Other Formats

10.1. AMS-TeX

AMS-TeX2.0

A macro package provided by the American Mathematical Society. Version 2.0 from 1990. No information found for versions pre-2.0.

LAMS-TeX2.0

"LamSTeX is an extension of AmSTeX, and thus almost completely compatible with plain TeX", as the documentation says. See references for details.

AMS-TeX2.1

Version 2.1 released 1991.

AMS-TeX2.2

Latest version is 2.2 from 2001.

10.2. BLUe

BLUe

A macro package based on plainTeX. Shareware, last version on CTAN from June 1996.

10.3. HPTeX

HP TeX

A format specially written for HP hardware, written 1984.

10.4. JadeTeX

JadeTeX

A macro package for processing Jade/OpenJade output, based on LaTeX.

10.5. Lollipop

Lollipop 0.9

First release, October 1992.

Lollipop 0.95

Latest, unofficial, release, January 1993.

Lollipop 0.98

Resurrection of this old format, now by Victor Eijkhout and Vafa Khalighi. Put to CTAN on 04.09.2014.

10.6. MacroTEX

MacroTEX

Information needed.

10.7. MeX

MeX

Information needed. There seems to be different formats that use the pdfTeX engine: mex, pdfmex, htmex and utf8mex.

10.8. PHYS(E)

PHYS(E)

Documentation says: "The TeX formats PHYSE and PHYS are extensions of the PLAIN format and should simplify the writing of physics papers." Latest version I found is from 1986. PHYS is for german, PHYSE for english usage.

10.9. PHYZZX

PHYZZX

Documentation says: "PHYZZX is a macropackage which is designed to make typing papers destined for Physical Review or Nuclear Physics as simple as possible." Created 1984, latest version I found is from 1988.

10.10. StarTEX – Starter's TEX

StarTEX

A format designed to help students with short documents. Using html-like notation: <command> instead of command

10.11. Texinfo

Texinfo

The official documentation format of the GNU project. Uses TeX to provide documentations.

10.12. TEXsis

TEXsis

A plainTeX-based format for physicists. Latest version is 2.18 from 21 April 2001.

10.13. XMLTEX

XMLTEX

A format (based on machines like pdfTeX, XeTeX and maybe LuaTeX) that converts XML input to DVI or PDF output. Can also be based on other formats when parsed at format-building time.

10.14. YTEX

YTEX

A macro package developed at MIT. Pronounced "why-TeX", "upsilon-TeX" or "oops-TeX". Tries to offer an easy structure for novices as well as a powerfull macro libraries for experienced users.

10.15. ZzTEX

ZzTEX

"a macro package for producing books, jour- nals, and technical documentation", named "after a rock group from Texas." The author Paul C. Anagnostopoulos found LaTeX too unflexible. Appeared around 1992.

11. Distributions

11.1. TEX Live

Web2C

An Implementation and Distribution of TeX which translates the original WEB sources to a C code.

emTEX

Eberhard Mattes' TeX Distribution for MS-DOS and OS2.

teTEX

Maintained by Thomas Esser (hence the te in teTeX) from 1994 to May 2006.

4AllTEXCD

The (vague) past ... (?)

fpTEX

A free TeX distribution for Win32 based on teTeX, by Fabrice Popineau. Still active, provides up-to-date binaries for Windows. Special support for Japanese Typesetting.

GNUTEX 0.x

A temporary attempt to distribute TeX and related programs according to the GPL. Not a change of teTeX, but a new approach inspired by teTeX. As most (La)TeX packages are not GPL compatible, it was quite "crippled" and never made it into the real world.

XEmTEX

A TeX distribution for Windows, based on fpTeX with XEmacs/AucTeX as IDE for (La)TeX. XemTeX was sponsored by the French government.

TEX Live 1996 – 2007

First version 1996 (UNIX only, later also Windows binaries), and then a long story of ongoing work – see the documentation for a detailed history. Some of the binaries (still) identify themselfes as *TeXk. The “k” stands for “Karl” meaning that they were compiled with kpathsea.

TEX Live 2008

A new package manager and network installer are available. So installation via the net is possible as well as package updates. Missing packages are not installed on-the-fly. The last of the modern machines is added: LuaTeX

gwTEX

A (re)distribution for Mac OS based on TeX Live (earlier on teTeX) by Gerben Wierda. Provides TeX-related packages for the i-Installer. Unsupported from 2007 on.

TEX Live 2009

Dropped Omega and Lambda. Aleph and Lamed are kept.

TEX Live 2010

Release of 2010.

TLContrib

An extension to TeX Live that contains packages that TeX Live cannot hold because: not-free lizence, binary update, not on CTAN or intermediate release. Useable via the TeX Live manager. Latest version can handle several TL sources.

TEX Live 2011

2011 release of TeX Live.

TEX Live 2012

Release of TeX Live for 2012.

TEXPortal

A TeX Live port for Android OS. Based on binaries from the TeXAndroid project; not all binaries are available at the moment.

TEX Live 2013

Latest release of TeX Live for 2012.

MacTEX

Once based on teTeX, MacTeX is now TeX Live-based. For Mac OS X only, it provides a native installer, the TeXShop editor and Mac-specific tools.

BasicTEX

“BasicTeX is a subset of TeX Live designed for easy download by users with limited download speed.”

11.2. MiKTEX

MiKTEX

MiKTeX is a TeX distribution originally for Windows only. Copyright by Christian Schenk goes back to 2001. Regarding the name, the author stated: “mik used to be my login name. It is an acronym for: Micro-kid. Hence the capital K in MiKTeX.”

MiKTeX 2.6

Windows only. featuring pdftex 1.40.4, mpost 1.000

MiKTeX 2.7

Windows only. featuring XeTeX 0.999.6, pdftex 1.40.9, mpost 1.005

MiKTeX 2.8

Windows only. featuring XeTeX 0.9995.1, pdftex 1.40.10, mpost 1.005

MiKTeX 2.9

Windows only (stable version). Beta version for GNU/Linux available. Featuring XeTeX 0.9997.4, pdftex 1.40.11, LuaTeX 0.60.2, mpost 1.211. Offers both LaTeX and ConTeXt (MK IV) formats.

ProTeXt

A distribution based on MiKTeX (since 2004) with a comfortable install procedure, Editor etc. Provides an easy installation for a full (La)TeX environment.

11.3. TeX collection

TeX Collection

A meta-distribution. Provided on DVD by the TUG, this distribution ships with TeX Live, MacTeX and ProTeX as well as with a full CTAN snapshot.

11.4. standalone ConTeXt

Standalone

standalone ConTeXt provides a distribution of latest (beta and stable) ConTeXt versions with binaries and formats. Efficient upgrading is possible as well as parallel use with another TeX distribution. Was renamed from “minimals” into standalone in 2011.

11.5. Decus TeX

Decus TeX

A TeX/LaTeX distribution for VMS. Started at least in 1988.

11.6. KerTeX

KerTeX

A lightweight TeX distribution including all of Don Knuth's programs and fonts, dvips, MetaPost, bibtex and more. It is pure C89 and under a BSD like license.

11.7. W32TeX

W32TeX

A distributon to provide binaries for MS Windows, with special support for Japanese. First version (up to the changelog): 2009/08/02. Still up-to-date.

11.8. OzTeX

OzTeX

A commercial distribution for Mac OS. No longer supported.

11.9. For Amiga

Amiga-TeX

By Thomas Rockicki and Radical Eye Software. Commercial distribution for Amiga.

pasTeX

A free distribution for Amiga. Distributed as 5 floppy disks (TeX) plus 2 floppy disks (Metafont). Available from the Aminet.

11.10. NTeX

NTeX

A distribution for Linux and other Unix systems. Latest version is 2.3.2, released at 23-Aug-1998. No longer developed.

12. Pandora's Box

12.1. META*

METAFONT

The program for creating the fonts originally used by TeX.

Metafog

A program to convert metafont shapes to Type1 contours. Uses mathematically correct transformations instead of autotracing.

MetaType1

A program to produce Type1 fonts from METAFONT source code.

MetaPost

A graphic generating program written by John Hobby, inspired by METAFONT. MetaPost can produce PostScript graphics as well as SVG. Latest (experimental) version is 1.750 as of spring 2011.

mptopdf

Actually a pdfTeX-generated format, this program can be used to compile MetaPost source code directly into PDF output. Metafun is supported, too.

MFLua

A (so far) experimental implementation of METAFONT with Lua embedded for better extraction of information from METAFONT.

Metappeal

"Metappeal is an extension to Plain MetaPost, providing a lightweight framework for consistent development in MetaPost."

MegaPost

A planned extension of MetaPost “that will extend the range and precision of the internal data types.”

MetaFun

“MetaFun is Hans Hagen's extension to (or module for) the MetaPost language.” A format for MetaPost that is useable with ConTeXt.

12.2. BibTeX

BibTeX

A helper program to sort a bibliography list.

NbibTeX

“NbibTeX helps authors take better advantage of BibTeX data” says the homepage.

BibTeX8

The documentation says: "An 8-bit Implementation of BibTeX 0.99 with a Very Large Capacity"

MlBibTeX

Mentioned in the kpathsea-manual. No idea what it is. BibTeX for MLTeX?

BibTeXu

A Unicode-aware version of BibTeX

jBibTeX

jBibTeX was developed by Shoichi Matsui around 1988. It is included in the pTeX distribution since 1995.

Pybtex

A python implementation of BibTeX.

pBibTeX

Kind of a successor of jBibTeX, pBibTeX is a Japanese-aware version of BibTeX supporting Japanese bibliography lists. Special support for Japanese (input/output) encodings and punctiation.

upBibTeX

Can be found in the development repositories, but no documentation found.

biber

A perl implementation of a BibTeX-like program, designed as backend for BibLaTeX. “biber” is an animal handling bibliographies. (german for “beaver”, hence the beaver in the biber logo)

BibLaTeX

A LaTeX package as frontend for biber (can also be used with BibTeXu/8).

Librarian

A TeX file (useable with all formats) that typesets BibTeX-style bibliographies without the need of BibTeX. Therefore, it provides a format-independent typesetting of bibliographies.

12.3. (x)dvipdf(m)(x)

dvipdf

A shellscript from Ghostscript that uses dvips and gs for conversion.

xdv2pdf

No idea so far what this is, but it is mentioned in the fontspec manual as possible driver for XeTeX.

dvipdfm

Converts DVI files to PDF files. Does /not/ build on dvipdf, but is an independent implementation.

dvipdfmx

Extended version of dvipdfm. Support for multi-byte encodings and more pdfTeX features. Still active. Combined work of dvipdfm-jpn and dvipdfm-kor.

xdvipdfmx

Converts XDVI files produced by XeTeX to PDF files. Normally always executed after a XeTeX run, so the user won't notice that an xdvi document was created in between.

12.4. Fonts

Bitmap fonts

Bitmap fonts contain the shape of the letters as a number of dots. If you zoom in, a bitmap letter will show pixels. Hence one needs a special version for every resolution.

PostScript Type 1

Outline font. The shape of a letter is described as mathematical curves so the letter can be made arbitrarely large without getting pixeled.

TrueType

Available on Windows and Mac OS. Outline font technology with quadratic B splines.

FreeType

TrueType implementation for Unix.

TrueType GX

“Graphis eXtension”. A font format only available for Mac OS.

OpenType

Extension of the TrueType font format, adding support for PostScript font data. Developed by Microsoft and Adobe.

AAT

“Apple Advanced Typography” fonts are succesors of the GX fonts. Only available for Mac OS, too.

12.5. Work Flow – Under Construction!

.tex

The .tex file. A plain text file that typically contains all of the document information.

.pdf

The resulting, ready-compiled document is most often a PDF document. Production of DVI documents is also mostly possible, but seldom used.

13. Program Names

The following list tries to explain what happens if a programm is called by a given name. E. g. calling the command `latex` on the command line will start the PDFε-TEX engine[2] in DVI mode with the format LATEX 2ε. This will list the names used in the *official* (upstream) TEX Live 2014 distribution, which should mostly (but not all) be the same in MiKTEX.

program	meaning
engines / no preloaded format	
`initex`	INITEX (same as `tex --ini`)
`inimf`	INIMF (same as `mf --ini`
`texlua`	LuaTEX in Lua mode
`texluac`	LuaTEX as byte compiler
plain formats	
`tex`	TEX with the plain format
`aleph`	Aleph with the plain format
`csplain`	PDFε-TEX with the csplain format and DVI output
`dviluatex`	LuaTEX with the plain format and DVI output
`eplain`	PDFε-TEX with the eplain format and DVI output
`eptex`	ε-pTEX with the plain format
`euptex`	ε-upTEX with the plain format
`etex`	PDFε-TEX with the plain format and DVI output
`luatex`	LuaTEX with the plain format and PDF output
`luajittex`	LuaJITTEX with the plain format and PDF output
`mltex`	PDFε-TEX with MLTEX extensions enabled, DVI output
`pdfcsplain`	PDFε-TEX with the csplain format and PDF output
`pdfetex`	PDFε-TEX with the plain format and PDF output
`pdftex`	PDFε-TEX with the plain format and PDF output
`ptex`	pTEX with the plain format
`xetex`	XETEX with the plain format
LATEX 2ε	
`latex`	PDFε-TEX with the LATEX 2ε format and DVI output
`dvilualatex`	LuaTEX with the LATEX 2ε format and DVI output
`lamed`	Aleph with the Lamed format
`lualatex`	LuaTEX with the LATEX 2ε format and PDF output
`mllatex`	PDFε-TEX with MLTEX extensions enabled, LATEX 2ε format and DVI output
`pdflatex`	PDFε-TEX with the LATEX 2ε format and PDF output
`platex`	ε-pTEX with the pLATEX format and DVI output
`uplatex`	ε-upTEX with the upLATEX format and DVI output
`xelatex`	XETEX with the LATEX 2ε format
ConTEXt	
`texexec`	PDFε-TEX with ConTEXt MKII format and PDF output
`texexec --interface = de`	dito, with german interface (only an example, more languages available)
`texexec --xtx`	XETEX with ConTEXt MKII format
`context`	LuaTEX with ConTEXt MKIV format and PDF output
`context --interface = de`	dito, with german interface (only an example)

[2] Actually it's only called PDFTEX now, but it is always the version that includes ε-TEX extensions. Here, always the full name is used for clearness.

other formats	
`amstex`	PDFε-TEX with the $\mathcal{AMS}$TEX format and DVI output
`jadetex`	PDFε-TEX with the JadeTEX format and DVI output
`mex`	PDFε-TEX with the MeX format and DVI output
`pdfjadetex`	PDFε-TEX with the JadeTEX format and PDF output
`pdfmex`	PDFε-TEX with the MeX format and PDF output
`pdfxmltex`	PDFε-TEX with the XMLTEX format
`texsis`	PDFε-TEX with the TEXsis format and DVI output
`utf8mex`	PDFε-TEX with the UTF8MeX format and DVI output
`xmltex`	PDFε-TEX with the XMLTEX format
metafont	
`mf`	the METAFONT program
`mp`	the METAPOST program
`mptopdf`	PDFε-TEX with the mptopdf format and PDF output

14. LATEX Packages

This will be a very tideous task, but I'll try to list all LATEX packages available by the latest TEX Live version. Why? To keep an overview myself and maybe also help you to find something interesting. This list of course does *not* substitute any of the great documentation offerend online by the CTAN team!
In the following, only the "main" package is listed, for example only PSTricks instead of all the additional extensions to it. For this, the red color indicates a "bundle", i. e. there is not only one or a few |.sty| files, but a whole lot of them.

Name	type	comment/description
Packages from the `latex` subdirectory		
12many		
a0poster		
a4wide		
a5comb		
aastex		
abc		
abntex2		
abraces		
abstract		
accanthis		
accfonts		
achemso		
acmconf		
acro		
acronym		
acroterm		
active-conf		
actuarialangle		
addlines		
adfathesis		
adforn		
adfsymbols		
adjmulticol		
adjustbox		
adrconv		
advdate		
ae		
aecc		

Table continues on next page.

Name	type	comment/description
aeguill		
afthesis		
aguplus		
aiaa		
akktex		
akletter		
alegreya		
alg		
algorithm2e		
algorithmicx		
algorithms		
allrunes		
alnumsec		
alterqcm		
altfont		
ametsoc		
amsaddr		
amscls		
amsfonts		
amsmath		
amsrefs		
animate		
anonchap		
anonymouspro		
answers		
antiqua		
antt		
anyfontsize		
anysize		
aobs-tikz		
aomart		
apa		
apa6		
apa6e		
apacite		
appendix		
appendixnumberbeamer		
apptools		
arabi		
arabtex		
aramaic-serto		
archaic		
arcs		
arev		
armenian		
arraysort		
arsclassica		
articleingud		
arydshln		
asaetr		
ascelike		
ascii-font		
askmaps		
aspectratio		
assignment		
asyfig		
asymptote		
asypictureb		
attachfile		
augie		

Table continues on next page.

Name	type	comment/description
auncial-new		
aurical		
authoraftertitle		
authorindex		
autoarea		
autonum		
autopdf		
auto-pst-pdf		
avantgar		
b1encoding		
babelbib		
babel-hungarian		
background		
backnaur		
bangtex		
barcodes		
bardiag		
base		
bashful		
baskervald		
baskervaldx		
basque-book		
basque-date		
bbding		
bbm-macros		
bbold		
bchart		
bclogo		
beamer		
begriff		
bengali		
bera		
berenisadf		
betababel		
beton		
bez123		
bezos		
bgreek		
bgteubner		
bguq		
bhcexam		
bibarts		
biblatex		
bibleref		
biblist		
bibtopic		
bibtopicprefix		
bibunits		
bigfoot		
bigints		
binomexp		
biocon		
bizcard		
blacklettert1		
blindtext		
blkarray		
block		
bloques		
blowup		
bodegraph		

Table continues on next page.

Name	type	comment/description
bohr		
boisik		
boites		
bold-extra		
boldtensors		
bondgraph		
bookest		
bookhands		
booklet		
bookman		
booktabs		
boolexpr		
boondox		
bophook		
bosisio		
boxedminipage		
boxhandler		
bpchem		
bracketkey		
braids		
braille		
braket		
brandeis-dissertation		
breakcites		
breakurl		
bropd		
brushscr		
bullcntr		
bundledoc		
burmese		
bussproofs		
bxbase		
bxcjkjatype		
bxdpx-beamer		
bxeepic		
bxjscls		
bytefield		
cabin		
cachepic		
calcage		
calctab		
calculator		
calrsfs		
cals		
calxxxx-yyyy		
cancel		
canoniclayout		
cantarell		
captcont		
captdef		
caption		
capt-of		
carlisle		
cascadilla		
cases		
casyl		
catchfilebetweentags		
catechis		
catoptions		
cbcoptic		

Table continues on next page.

Name	type	comment/description
cbfonts-fd		
ccaption		
ccfonts		
ccicons		
cclicenses		
cd		
cd-cover		
cdpbundl		
cell		
cellspace		
censor		
cfr-lm		
changebar		
changelayout		
changepage		
changes		
chappg		
chapterfolder		
chbibref		
chemarrow		
chemcompounds		
chemcono		
chemexec		
chemmacros		
chemnum		
chemstyle		
cherokee		
chess		
chessboard		
chessfss		
chess-problem-diagrams		
chet		
chextras		
chicago		
chkfloat		
chletter		
chngcntr		
chronology		
chscite		
cinzel		
circ		
circuitikz		
cite		
cjhebrew		
cjk		
cjk-ko		
cjkpunct		
classics		
classicthesis		
classpack		
clearsans		
clefval		
cleveref		
clipboard		
clock		
clrscode		
cmap		
cmbright		
cmdstring		
cmdtrack		

Table continues on next page.

Name	type	comment/description
cm-lgc		
cmll		
cmpj		
cmsd		
cm-super		
cmtiup		
cnbwp		
cnltx		
codedoc		
codepage		
codicefiscaleitaliano		
collcell		
collectbox		
collref		
colordoc		
colorinfo		
colortbl		
colorwav		
colorweb		
colourchange		
combelow		
combine		
combinedgraphics		
comfortaa		
comma		
commath		
comment		
compactbib		
complexity		
computational-complexity		
concepts		
concmath		
concprog		
confproc		
constants		
conteq		
context		
contour		
contracard		
cooking		
cookingsymbols		
cool		
coollist		
coolstr		
coolthms		
cooltooltips		
coordsys		
copyrightbox		
coseoul		
countriesofeurope		
counttexruns		
courier		
courier-scaled		
courseoutline		
coursepaper		
coverpage		
covington		
cprotect		
crbox		
crop		

Table continues on next page.

Name	type	comment/description
crossreference		
crossword		
crosswrd		
csbulletin		
csquotes		
csvsimple		
csvtools		
ctable		
ctex		
ctib		
cuisine		
currfile		
currvita		
curve		
curve2e		
curves		
custom-bib		
cutwin		
cv		
cv4tw		
cweb-latex		
cyklop		
cyrillic		
dashbox		
dashrule		
dashundergaps		
dataref		
datatool		
dateiliste		
datenumber		
datetime		
dblfloatfix		
dccpaper		
decimal		
decorule		
dejavu		
delim		
delimtxt		
detlev-cm		
dhua		
diagbox		
diagmac2		
diagnose		
dialogl		
dichokey		
dictsym		
digiconfigs		
dinbrief		
dingbat		
directory		
dirtytalk		
disser		
dk-bib		
dlfltxb		
dnaseq		
docmfp		
docmute		
documentation		
doi		
doipubmed		

Table continues on next page.

Name	type	comment/description
dot2texi		
dotarrow		
dotseqn		
dottex		
doublestroke		
download		
dox		
dozenal		
dpfloat		
dprogress		
drac		
draftcopy		
draftwatermark		
dramatist		
drawstack		
droid		
droit-fr		
drs		
dtk		
duerer-latex		
duotenzor		
dutchcal		
dvdcoll		
dvgloss		
dvipdfmx-def		
dynblocks		
dyntree		
ean13isbn		
easy		
easyfig		
easylist		
easy-todo		
ebezier		
ebgaramond		
ebook		
ebsthesis		
ecclesiastic		
ecltree		
eco		
economic		
ecv		
ed		
edfnotes		
edmargin		
ednotes		
eemeir		
eepic		
efbox		
egameps		
egplot		
eiad		
eiad-ltx		
ejpecp		
elbioimp		
electrum		
eledform		
eledmac		
ellipsis		
elmath		
elpres		

Table continues on next page.

Name	type	comment/description
elsarticle		
elteikthesis		
eltex		
emarks		
embedall		
embrac		
emp		
emptypage		
emulateapj		
encxvlna		
endfloat		
endheads		
endiagram		
endnotes		
engpron		
engrec		
engtlc		
enigma		
enotez		
enumitem		
enumitem-zref		
envbig		
environ		
envlab		
epigrafica		
epigraph		
epiolmec		
epsdice		
epspdfconversion		
eqell		
eqlist		
eqname		
eqnarray		
eqparbox		
erdc		
errata		
esami		
esdiff		
ESIEEcv		
esint		
esk		
eskd		
eskdx		
eso-pic		
esstix		
estcpmm		
esvect		
etaremune		
etex-pkg		
etextools		
ethiop		
etoc		
etoolbox		
euenc		
eukdate		
euler		
eulervm		
euro		
europecv		
eurosym		

Table continues on next page.

Name	type	comment/description
everyhook		
everypage		
exam		
examdesign		
exam-n		
example		
examplep		
exceltex		
excludeonly		
exercise		
expdlist		
export		
exp-testopt		
exsheets		
exsol		
extarrows		
extpfeil		
extract		
extsizes		
facsimile		
factura		
faktor		
fancybox		
fancyhdr		
fancynum		
fancypar		
fancyref		
fancytabs		
fancytooltips		
fancyvrb		
fast-diagram		
fbb		
fbithesis		
fc		
fcltxdoc		
fdsymbol		
fetamont		
feupphdteses		
feyn		
feynmf		
feynmp-auto		
fge		
fifo-stack		
figbib		
figsize		
filecontents		
filedate		
filehook		
fileinfo		
filemod		
fink		
finstrut		
fira		
fix2col		
fixfoot		
fixltxhyph		
fixme		
fixmetodonotes		
fjodor		
flabels		

Table continues on next page.

Name	type	comment/description
flacards		
flagderiv		
flashcards		
flashmovie		
flipbook		
flippdf		
float		
floatflt		
floatrow		
flowchart		
flowfram		
fmp		
fmtcount		
fn2end		
fnbreak		
fncychap		
fncylab		
fnpara		
fnpct		
fnumprint		
foekfont		
foilhtml		
fonetika		
fontawesome		
fontaxes		
fontinst		
fontspec		
fonts-tlwg		
fonttable		
footbib		
footmisc		
footnotebackref		
footnoterange		
footnpag		
forarray		
foreign		
forest		
forloop		
formular		
fouridx		
fourier		
fouriernc		
fp		
fragments		
framed		
frankenstein		
frcursive		
frege		
frenchle		
frletter		
frontespizio		
ftcap		
ftnxtra		
fullblck		
fullwidth		
functan		
fundus-calligra		
fundus-cyr		
fundus-sueterlin		
fwlw		

Table continues on next page.

Name	type	comment/description
gaceta		
galois		
gamebook		
gastex		
gatech-thesis		
gauss		
gb4e		
g-brief		
gcard		
gchords		
gcite		
gene-logic		
genmpage		
gentium-tug		
geometry		
germbib		
germkorr		
geschichtsfrkl		
getfiledate		
gfsartemisia		
gfsbaskerville		
gfsbodoni		
gfscomplutum		
gfsdidot		
gfsneohellenic		
gfsporson		
gfssolomos		
ghab		
gillcm		
gillius		
gincltex		
ginpenc		
gitinfo		
gloss		
glossaries		
gmdoc		
gmdoc-enhance		
gmiflink		
gmp		
gmutils		
gmverb		
gmverse		
gnuplottex		
go		
gradientframe		
grafcet		
graphics		
graphicxbox		
graphicx-psmin		
graphviz		
greekdates		
greek-fontenc		
greek-inputenc		
greektex		
grfpaste		
grid		
gridset		
grid-system		
grotesq		
grundgesetze		

Table continues on next page.

Name	type	comment/description
GS1		
gtl		
gtrcrd		
gu		
guitar		
guitarchordschemes		
guitlogo		
hacm		
handout		
hanging		
HA-prosper		
har2nat		
hardwrap		
harmony		
harnon-cv		
harpoon		
harvard		
harveyballs		
hausarbeit-jura		
hc		
helvetic		
hep		
hepnames		
hepparticles		
hepthesis		
hepunits		
here		
he-she		
heuristica		
hexgame		
hfoldsty		
hf-tikz		
hhtensor		
histogr		
historische-zeitschrift		
hitec		
hletter		
hobby		
hobete		
horoscop		
hpsdiss		
hrefhide		
hrlatex		
hvfloat		
hvindex		
hypdvips		
hyper		
hypernat		
hyperref		
hyperxmp		
hyphenat		
ibycus-babel		
icsv		
idxcmds		
idxlayout		
IEEEconf		
ieeepes		
IEEEtran		
ifetex		
ifmslide		

Table continues on next page.

Name	type	comment/description
ifmtarg		
ifnextok		
ifoddpage		
ifplatform		
ifsym		
ifthenx		
iitem		
ijmart		
imac		
image-gallery		
imakeidx		
impnattypo		
import		
imtekda		
incgraph		
inconsolata		
index		
initials		
inlinebib		
inlinedef		
inputtrc		
interactiveworkbook		
interfaces		
interval		
inversepath		
invoice		
ionumbers		
ipaex-type1		
iso		
iso10303		
isodate		
isodoc		
isomath		
isonums		
isorot		
isotope		
issuulinks		
itnumpar		
iwhdp		
iwona		
jamtimes		
jknapltx		
jlabels		
jmlr		
jneurosci		
jpsj		
junicode		
jura		
juraabbrev		
jurabib		
juramisc		
jurarsp		
jvlisting		
kantlipsum		
karnaugh		
kdgdocs		
kerkis		
kerntest		
keycommand		
keyreader		

Table continues on next page.

Name	type	comment/description
keystroke		
keyval2e		
kix		
kluwer		
knitting		
knittingpattern		
koma-moderncvclassic		
koma-script		
koma-script-sfs		
kotex-oblivoir		
kotex-utf		
kpfonts		
ktv-texdata		
kurier		
l3experimental		
l3kernel		
l3packages		
labbook		
labelcas		
labels		
labyrinth		
lapdf		
lastpage		
latex2man		
latexconfig		
latexfileinfo-pkgs		
lato		
layaureo		
layouts		
lazylist		
lcd		
lcg		
lcyw		
leading		
leaflet		
ledmac		
leftidx		
leipzig		
lengthconvert		
lettre		
lettrine		
lewis		
lexikon		
lexref		
lgreek		
lh		
lhcyr		
lhelp		
libertine		
libgreek		
librebaskerville		
librecaslon		
libris		
limap		
linearA		
linegoal		
lineno		
linguex		
lipsum		
lisp-on-tex		

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Name	type	comment/description
listbib		
listing		
listings		
listings-ext		
listliketab		
listofsymbols		
lithuanian		
liturg		
lkproof		
lm		
lmake		
lobster2		
locality		
localloc		
logbox		
logical-markup-utils		
logicproof		
logicpuzzle		
logpap		
logreq		
longnamefilelist		
loops		
lpic		
lplfitch		
lps		
lsc		
lstaddons		
lt3graph		
ltablex		
ltabptch		
ltxdockit		
ltxindex		
ltxkeys		
ltxmisc		
ltxnew		
ltxtools		
lxfonts		
ly1		
macroswap		
mafr		
magaz		
mailing		
mailmerge		
makebarcode		
makebox		
makecell		
makecmds		
makedtx		
makeglos		
makeplot		
makeshape		
mandi		
manfnt		
manuscript		
margbib		
marginfix		
marginnote		
marvosym		
matc3		
matc3mem		

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Name	type	comment/description
mathalfa		
mathastext		
mathcomp		
mathdesign		
mathexam		
mathspic		
mattens		
maybemath		
mbenotes		
mcaption		
mceinleger		
mcite		
mciteplus		
mdframed		
mdputu		
mdsymbol		
mdwtools		
media9		
meetingmins		
memexsupp		
memoir		
memory		
mentis		
menu		
menukeys		
merriweather		
metalogo		
method		
metre		
metrix		
mflogo		
mfnfss		
mfpic4ode		
mftinc		
mh		
mhchem		
mhequ		
microtype		
midpage		
miller		
minibox		
minipage-marginpar		
miniplot		
minitoc		
minorrevision		
minted		
mintspirit		
minutes		
mla-paper		
mlist		
mltex		
mmap		
mnotes		
mnsymbol		
moderncv		
moderntimeline		
modiagram		
modref		
modroman		
mongolian-babel		

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Name	type	comment/description
monofill		
montex		
moreenum		
morefloats		
morehype		
moresize		
moreverb		
morewrites		
movie15		
mparhack		
mpgraphics		
ms		
msc		
msg		
mslapa		
msu-thesis		
mtgreek		
multenum		
multibbl		
multibib		
multibibliography		
multicap		
multido		
multienv		
multiexpand		
multiobjective		
multirow		
musixguit		
musixtex		
musuos		
muthesis		
mversion		
mwcls		
mwe		
mweights		
mxedruli		
mychemistry		
mycv		
mylatexformat		
nag		
nameauth		
namespc		
nanumtype1		
natbib		
natded		
nath		
nature		
ncclatex		
ncctools		
ncntrsbk		
nddiss		
needspace		
nestquot		
neuralnetwork		
newenviron		
newfile		
newlfm		
newpx		
newspaper		
newtx		

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Name	type	comment/description
newtxtt		
newunicodechar		
newvbtm		
newverbs		
nextpage		
nfssext-cfr		
nicefilelist		
niceframe		
nicetext		
nih		
nlctdoc		
noconflict		
noindentafter		
noitcrul		
nolbreaks		
nomencl		
nomentbl		
nonfloat		
nonumonpart		
nopageno		
nostarch		
notes		
notes2bib		
notoccite		
nowidow		
nox		
nrc		
ntgclass		
ntheorem		
nuc		
numberedblock		
numericplots		
numname		
numprint		
oberdiek		
objectz		
obnov		
ocg-p		
ocgx		
ocr-latex		
octavo		
oldstyle		
onlyamsmath		
onrannual		
opcit		
opensans		
opteng		
optional		
ordinalpt		
oscola		
othello		
othelloboard		
otibet		
ot-tableau		
oubraces		
outline		
outliner		
outlines		
overpic		
pacioli		

Table continues on next page.

Name	type	comment/description
pagecolor		
pagecont		
pagenote		
pagerange		
pageslts		
palatino		
paper		
papercdcase		
papermas		
papertex		
paracol		
paralist		
parallel		
paratype		
paresse		
parnotes		
parrun		
parselines		
parskip		
pas-cours		
pas-crosswords		
pas-cv		
pas-tableur		
patchcmd		
pauldoc		
pawpict		
pax		
pb-diagram		
pbox		
pbsheet		
pdf14		
pdfcomment		
pdfcprot		
pdfmarginpar		
pdfpages		
pdfscreen		
pdfslide		
pdfsync		
pdftex-def		
pdftricks		
pdftricks2		
pdfwin		
pdfx		
pecha		
perfectcut		
perltex		
permute		
petiteannonce		
pfarrei		
pgf		
pgf-blur		
pgfgantt		
pgfkeyx		
pgfopts		
pgfplots		
pgf-soroban		
pgf-umlcd		
pgf-umlsd		
phaistos		
philex		

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Name	type	comment/description
philosophersimprint		
phonetic		
phonrule		
photo		
physics		
physymb		
piano		
picinpar		
pict2e		
pictex2		
piff		
pigpen		
pinlabel		
pittetd		
pkgloader		
pkuthss		
placeins		
plantslabels		
plari		
plates		
play		
playfair		
plweb		
pmgraph		
poemscol		
poetrytex		
polski		
poltawski		
polyglossia		
polynom		
polynomial		
polytable		
postcards		
powerdot		
powerdot-FUBerlin		
ppr-prv		
pracjourn		
preprint		
prerex		
prettyref		
preview		
printlen		
proba		
probsoln		
procIAGssymp		
prodint		
productbox		
program		
progress		
progressbar		
properties		
proposal		
prosper		
protex		
protocol		
przechlewski-book		
psbao		
pseudocode		
psfrag		
psfragx		

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Name	type	comment/description
psgo		
pslatex		
psnfss		
pspicture		
pstool		
pstricks		
pstricks-add		
psu-thesis		
ptptex		
punk-latex		
pxcjkcat		
pxfonts		
pxgreeks		
pxpgfmark		
pxtxalfa		
python		
pythontex		
qcm		
qobitree		
qstest		
qsymbols		
qtree		
quattrocento		
quotchap		
quoting		
quotmark		
raleway		
randbild		
randomwalk		
randtext		
ran_toks		
rccol		
rcs		
rcsinfo		
rcs-multi		
readarray		
realboxes		
realscripts		
recipe		
recipecard		
rec-thy		
rectopma		
recycle		
refcheck		
refenums		
reflectgraphics		
refman		
refstyle		
regcount		
regexpatch		
register		
regstats		
relenc		
relsize		
reotex		
repeatindex		
repltext		
resphilosophica		
revtex		
revtex4		

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Name	type	comment/description
ribbonproofs		
rjlparshap		
rmpage		
robustcommand		
robustindex		
romanbar		
romande		
romanneg		
romannum		
rotating		
rotfloat		
rotpages		
roundbox		
rrgtrees		
rsc		
rsfso		
rterface		
rtkinenc		
rtklage		
rubik		
rulercompass		
r_und_s		
russ		
rviewport		
rvwrite		
ryethesis		
sageep		
sanskrit		
sansmath		
sansmathaccent		
sansmathfonts		
sapthesis		
sasnrdisplay		
sa-tikz		
sauerj		
sauterfonts		
savefnmark		
savesym		
savetrees		
scale		
scalebar		
scalerel		
scanpages		
schemabloc		
schule		
schulschriften		
schwalbe-chess		
sciposter		
screenplay		
scrjrnl		
sdrt		
secdot		
section		
sectionbox		
sectsty		
seealso		
selectp		
semantic		
semaphor		
seminar		

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Name	type	comment/description
semioneside		
sepfootnotes		
sepnum		
seqsplit		
serbian-apostrophe		
serbian-date-lat		
serbian-def-cyr		
serbian-lig		
setdeck		
setspace		
sf298		
sffms		
sfg		
sfmath		
sgame		
shadethm		
shadow		
shadowtext		
shipunov		
shorttoc		
show2e		
showcharinbox		
showdim		
showexpl		
showlabels		
showtags		
shuffle		
sidecap		
sidenotes		
sides		
silence		
simplecd		
simplecv		
simplewick		
SIstyle		
sitem		
SIunits		
siunitx		
skak		
skb		
skdoc		
skeycommand		
skeyval		
skmath		
skrapport		
skull		
slantsc		
smalltableof		
smartdiagram		
smartref		
snapshot		
snotez		
songbook		
songs		
soton		
soul		
sourcecodepro		
sourcesanspro		
spanglish		
spanish-mx		

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Name	type	comment/description
sparklines		
spath3		
sphack		
spie		
splitbib		
splitindex		
spot		
spotcolor		
spreadtab		
spverbatim		
srbook-mem		
srcltx		
sr-vorl		
sseq		
sslides		
stack		
stackengine		
stage		
standalone		
starfont		
statex		
statex2		
statistik		
staves		
stdclsdv		
stdpage		
steinmetz		
stellenbosch		
stex		
stix		
stmaryrd		
storebox		
storecmd		
stringstrings		
struktex		
sttools		
stubs		
subdepth		
subeqn		
subeqnarray		
subfig		
subfigmat		
subfigure		
subfiles		
subfloat		
substances		
substitutefont		
substr		
subsupscripts		
sudoku		
sudokubundle		
suftesi		
sugconf		
superiors		
supertabular		
susy		
svg		
svgcolor		
svn		
svninfo		

Table continues on next page.

Name	type	comment/description
svn-multi		
svn-prov		
swimgraf		
syllogism		
symbol		
sympytexpackage		
synproof		
syntax		
syntrace		
synttree		
t2		
Tabbing		
tabfigures		
tableaux		
tablefootnote		
tableof		
tablists		
tablor		
tabls		
tabriz-thesis		
tabstackengine		
tabto-ltx		
tabu		
tabularborder		
tabularcalc		
tabularew		
tabulary		
tabvar		
tagging		
talk		
tamefloats		
t-angles		
tcldoc		
tcolorbox		
tdclock		
tdsfrmath		
technics		
ted		
tengwarscript		
tensor		
termcal		
termlist		
test.tex		
teubner		
tex-gyre		
texilikechaps		
texilikecover		
tex-label		
texlogos		
texmate		
texments		
texpower		
texshade		
textcase		
textfit		
textglos		
textgreek		
textopo		
textpath		
textpos		

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Name	type	comment/description
tfrupee		
thalie		
theoremref		
thesis-ekf		
thesis-titlepage-fhac		
thinsp		
thmbox		
thmtools		
threadcol		
threeparttable		
threeparttablex		
thumb		
thumbs		
thumby		
thuthesis		
ticket		
tikz-3dplot		
tikz-cd		
tikz-dependency		
tikzinclude		
tikz-inet		
tikzmark		
tikz-opm		
tikzorbital		
tikzpagenodes		
tikzpfeile		
tikzposter		
tikz-qtree		
tikzscale		
tikzsymbols		
tikz-timing		
times		
timing-diagrams		
tipa		
titlecaps		
titlefoot		
titlepic		
titleref		
titlesec		
titling		
tkz-base		
tkz-berge		
tkz-doc		
tkz-euclide		
tkz-fct		
tkz-graph		
tkz-kiviat		
tkz-linknodes		
tkz-orm		
tkz-tab		
tocbibind		
tocloft		
tocvsec2		
todo		
todonotes		
tokenizer		
toolbox		
tools		
topfloat		
toptesi		

Table continues on next page.

Name	type	comment/description
totcount		
totpages		
tpslifonts		
tqft		
trajan		
tram		
translations		
tree-dvips		
trfsigns		
trimspaces		
trivfloat		
trsym		
truncate		
tsemlines		
tucv		
tudscr		
tufte-latex		
tugboat		
tui		
turkmen		
turnstile		
turnthepage		
twoinone		
twoup		
txfonts		
txfontsb		
txgreeks		
type1cm		
typeface		
typehtml		
typogrid		
uaclasses		
uadocs		
uafthesis		
ucbthesis		
ucdavisthesis		
ucs		
ucthesis		
udesoftec		
uebungsblatt		
uestcthesis		
uiucredborder		
uiucthesis		
ulqda		
ulthese		
umich-thesis		
uml		
umlaute		
umoline		
umthesis		
unamthesis		
underlin		
underoverlap		
underscore		
undolabl		
unicode-math		
units		
unitsdef		
universa		
universalis		

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Name	type	comment/description
uni-wtal-ger		
uni-wtal-lin		
unravel		
unswcover		
uothesis		
uowthesis		
uowthesistitlepage		
upmethodology		
upquote		
uri		
url		
urwchancal		
usebib		
ushort		
uspatent		
ut-thesis		
uwmslide		
uwthesis		
varindex		
varsfromjobname		
varwidth		
vdmlisting		
velthuis		
venndiagram		
venturis		
venturis2		
venturisadf		
venturisold		
venturissans		
venturissans2		
verbasef		
verbatimbox		
verbatimcopy		
verbdef		
verbments		
verse		
version		
versions		
vertbars		
vgrid		
vhistory		
vmargin		
vntex		
vocaltract		
volumes		
vpe		
vruler		
vwcol		
wallpaper		
warning		
warpcol		
was		
wasysym		
widetable		
williams		
withargs		
wnri-latex		
wordlike		
wrapfig		
wsemclassic		

Table continues on next page.

Name	type	comment/description
wsuipa		
xargs		
xcharter		
xcite		
xcjk2uni		
xcolor		
xcookybooky		
xdoc		
xfor		
xhfill		
xifthen		
xkeyval		
xltxtra		
xmpincl		
xnewcommand		
xoptarg		
xpatch		
xpeek		
xpicture		
xpinyin		
xpunctuate		
xq		
xskak		
xtab		
xwatermark		
xyling		
xymtex		
xytree		
yafoot		
yagusylo		
ydoc		
yfonts		
yhmath		
york-thesis		
youngtab		
yplan		
ytableau		
zapfchan		
zapfding		
zed-csp		
zhmetrics		
zhnumber		
ziffer		
zlmtt		
zwgetfdate		
zwpagelayout		
zxjafbfont		
zxjafont		
zxjatype		
test		
chickenize		
hyph-utf8		
interpreter		
lualibs		
luamplib		
luaotfload		
luatexbase		
luatexja		
luatexko		

Table continues on next page.

Name	type	comment/description
lua-visual-debug		
luaxml		
spelling		

Part III.
Appendix

A. References

The references are in order of occurance in the above document. i. e. if you want information about LuaTEX, it will be below e. g. εTEX. Everything that is not listet as "book" is freely available on the internet. (TUGboat articles will become freely accessible about one year after publication.)

Books

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Addison-Wesley Reading, MA, 1986.

F. Mittelbach, M. Goossens, J. Braams, D. Carlisle, C. Rowley, C. Detig, and J. Schrod. *The LATEX companion.*
Addison-Wesley, 2004.

Overview Articles / Pages

Arthur Reutenauer. *A Brief History of TEX*. Talk at EuroBachoTEX 2007.
http://www.gust.org.pl/bachotex/EuroBachoTeX2007/presentations/bhot.pdf/view

A Brief History of LATEX
http://www.xent.com/FoRK-archive/feb98/0307.html

Hans Hagen: *16 years of ConTEXt*. Article in TUGboat Vol. 32, Number 1, 2011.

Short Article About Omega And Aleph
http://www.tex.ac.uk/cgi-bin/texfaq2html?label=omegaleph

Interviews with Will Robertson, Hans Hagen et. al.
http://www.tug.org/interviews

The levels of TEX – explains shortly the differences between engines, distributions, front ends etc.
http://tug.org/levels.html

Things with "TEX" in the name – a page with a similar aim as this document, and many interesting links
http://www.tex.ac.uk/cgi-bin/texfaq2html?label=texthings

Archives

CTAN – Comprehensive TEX Archive Network:
http://www.ctan.org

Historic Archive of TEX Distributions:
ftp://ftp.tug.org/historic

Engines

ANT project page
http://ant.berlios.de

HeX project page
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Yasuki S AITO. Report on JTEX: A Japanese TEX. TUGboat 8 (1987), no. 2, 103 – 116.
http://www.tug.org/TUGboat/Articles/tb08-2/tb18saito.pdf

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http://dante.ctan.org/tex-archive/help/Catalogue/entries/ptex.html

encTEX page
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pdfTEX project page
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B. List of Contributors

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C. To do list

- (maybe) Add copyright and licence mark to each software.