

NAME

latex, pdflatex, xelatex, lualatex, dvilualatex, cslatex, pdfcslatex, platex, uplatex, lamed – structured text formatting and typesetting

SYNOPSIS

latex [*options*] [**&format**] [*file* [*more-input*] | [*\more-input*]

DESCRIPTION

L^AT_EX is a T_EX macro package (format), not a modification to the compiled T_EX programs, so see **tex**(1) for details of the command line invocation.

The L^AT_EX macros encourage writers to think about the content of their documents, rather than the form. The ideal, very difficult to realize, is to have no formatting commands (like “switch to italic” or “skip 2 picas”) in the document, but to use generic markup instructions: “emphasize”, “start a section”. The L^AT_EX language is described in the books and documents mentioned below, among others.

The primary source of documentation for L^AT_EX is the L^AT_EX manual referenced below.

lualatex, **pdfflatex**, **pdfcslatex**, **xelatex** are L^AT_EX formats based on the respective engines. These all output PDF by default. The lualatex format is built with the lua_hbtex engine, the LuaT_EX variant with HarfBuzz (<https://en.wikipedia.org/wiki/HarfBuzz>) supported for glyph shaping.

platex, **uplatex** are Japanese L^AT_EX formats based on e-pT_EX and e-upT_EX (DVI output).

lamed is the Aleph-based L^AT_EX format (DVI output).

dvilualatex is LuaT_EX-based and outputs DVI.

cslatex is csT_EX-based (primitives integrated into pdfT_EX) and outputs DVI.

On some systems, the commands **latex209** and **slitex** may still be available for compatibility with older versions of L^AT_EX. These should not be used for new documents.

SEE ALSO

amstex(1), **luatex**(1), **pdfptex**(1), **ptex**(1), **tex**(1), **xetex**(1).

Leslie Lamport, *L^AT_EX: A Document Preparation System*.

Frank Mittelbach with Ulrike Fischer, *The L^AT_EX Companion*, Addison-Wesley, 2024, ISBN 0-13-811578-8 (3rd edition). <https://tug.org/l/tlc3>

Package pages on CTAN: <https://ctan.org/pkg/latex>, <https://ctan.org/pkg/latex-base>

L^AT_EX tutorial topic on CTAN: <https://ctan.org/topic/tut-latex>

L^AT_EX reference topic on CTAN: <https://ctan.org/topic/ref-latex>

The L^AT_EX home page: <https://latex-project.org>

Online interactive tutorial: <https://learnlatex.org>

Getting started page: <https://tug.org/begin>

Please report bugs in L^AT_EX following the procedure at <https://www.latex-project.org/bugs>.

Public discussion list for all things T_EX and L^AT_EX: <https://lists.tug.org/texhax>