

LaTeX – A document preparation system

LaTeX, which is pronounced *Lah-tech* or *Lay-tech*, is a document preparation system for high-quality typesetting. It is most often used for medium-to-large technical or scientific documents but it can be used for almost any form of publishing.

LaTeX is not a word processor! Instead, LaTeX encourages authors not to worry too much about the appearance of their documents but to concentrate on getting the right content.

LaTeX is free software under the terms of the LaTeX Project Public License (LPPL). LaTeX is distributed through CTAN servers or comes as part of many easily installable and usable TeX distributions provided by the TeX User Group (TUG) or third parties. If you run into trouble, visit the help section.

LaTeX is not a stand-alone typesetting program in itself, but document preparation software that runs on top of Donald E. Knuth's TeX typesetting system. TeX distributions usually bundle together all the parts needed for a working TeX system and they generally add to this both configuration and maintenance utilities. Nowadays LaTeX, and many of the packages built on it, form an important component of any major TeX distribution.

TeX Distributions

If you're new to TeX and LaTeX or just want an easy installation, get a full TeX distribution. The TeX Users Group (TUG) has a [list of notable distributions](#) or you can download [TeX Live as an ISO image](#) that are entirely, or least primarily, free software.

LaTeX Features

- Typesetting journal articles, technical reports, books, and slide presentations.
- Control over large documents containing sectioning, cross-references, tables and figures.
- Typesetting of complex mathematical formulas.
- Advanced typesetting of mathematics with AMS-LaTeX.
- Automatic generation of bibliographies and indexes.
- Multi-lingual typesetting.
- Inclusion of artwork, and process or spot colour.
- Using PostScript or Metafont fonts.