

Introduction to \LaTeX for BOP LUG

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What is this \LaTeX thing I keep hearing about?

- ▶ “LaTeX is a high-quality typesetting system; it includes features designed for the production of technical and scientific documentation. LaTeX is the de facto standard for the communication and publication of scientific documents. LaTeX is available as free software.”
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- ▶ “It is most often used for medium-to-large technical or scientific documents but it can be used for almost any form of publishing.”
(<http://www.latex-project.org/intro.html>).

What L^AT_EX is not

- ▶ “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.”
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- ▶ When writing a document in L^AT_EX , the author can concentrate on the content of the document and let L^AT_EX handle the typesetting. This is similar to the way that web-page content can be written in html and the appearance can be handled in a cascading style sheet (css).

Why should I use \LaTeX ?

- ▶ Separation of content from presentation
- ▶ \LaTeX produces beautiful documents
- ▶ Entering equations and mathematical symbols is easy
- ▶ \LaTeX source is ascii text so you can use version control and your favorite text editor
- ▶ \LaTeX is multi-platform and is free software
- ▶ References are handled nicely by Bib \TeX
- ▶ \LaTeX enforces document structure
- ▶ You can see all the formatting, labelling and cross-referencing.
- ▶ Easy to write a script to automatically generate \LaTeX source and then compile to produce a document.

When shouldn't I use L^AT_EX?

- ▶ When you want to make quick, rough notes (maybe a wiki or a word-processor would be more appropriate?)
- ▶ When you can't find an existing documentclass that matches what you want. (It is possible to write your own class file or to create a modified version of an existing class file but this is not for the faint-hearted)
- ▶ When you want to do artistic page layout (Scribus and/or GIMP might be a better choice).

Ok, I'm interested so how do I install \LaTeX ?

\LaTeX will almost certainly be in the repositories for your Linux distribution. For example, to install \LaTeX and all the common \LaTeX packages in Ubuntu type:

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Now let's see \LaTeX in action...