

A brief comparison of figure generation methods for LaTeX documents

September 22, 2014

Comparison Table

	Win	Mac	Linux	Input Latex	Render Vectors	Free
X _g	3	3	3	3	3	3 ¹
IPE	3	3	3	3	3	3
Inkscape	3	3	3	3	3	3
PowerPoint	3	3	5	2:3	5	5
Apple Keynote	5	3	5	2	5	3
Matlab ⁴	3	3	3	5	?	5
Maple ⁵	3	3	3	5	?	5
LatexDraw	3	3	3	3		

Details

X_g

X_g is an older vector drawing tool. Latex code can be input if the text field is set to `\special` and the figure is exported as Combined PS/Latex. Latex code is not rendered within x_g, but instead is compiled when latex'ing the document. This makes using latex placement with figures somewhat more difficult with x_g.

<http://xfi.g.org/userman/installation.html#install-xfi-gwin>

<http://winfig.com/>

IPE

IPE is a WYSIWYG vector drawing tool with built-in Latex support. Creating figures with Latex math symbols and formulae is very easy. Files can be exported as PDFs. If exported PDFs are not modified by other applications, they can be opened and edited.

<http://ipe7.sourceforge.net/>

Inkscape

Inkscape is a vector drawing tool with built-in support for Latex. However, latex, dvips and pstodivips (Pn)5336(des5336upp)-28(or)1(t)-337(for)-336(Latex.)-466im-slatex.docu in pu.i. .pu.i. fo.pl.an.edr,

Powerpoint

Powerpoint has basic vector drawing features and recent versions allow the export of PDF files. It does not support the input of Latex code, however LaTeXiT could be used with this.

Apple Keynote

Apple Keynote can export as PDF, however only as complete slides.
<https://www.apple.com/nz/mac/keynote/>

Matlab

Matlab's Symbolic Math Toolbox has some basic support for rendering Latex symbols.

<http://www.mathworks.com.au/help/symbolic/latex.html>

<http://www.mathworks.com.au/help/symbolic/textlabel.html>

Maple

Maple does not support Latex code input. However, it can export equations in Latex code.

<http://www.maplesoft.com/support/help/Maple/view.aspx?path=latex>

PSTricks / PSpicture

The PSTricks Latex package allows the plotting of figures directly in the Latex document. This is not so easy because one cannot view the figure until the document is compiled. However, the LatexDraw editor is a WYSIWYG editor that can generate PSTricks code and also PDF/PS files.

<http://en.wikibooks.org/wiki/LaTeX/PSTricks>

<http://latexdraw.sourceforge.net/>

TikZ

The TikZ Latex package also allows the plotting of figures within the Latex document. TikZ allows the plotting of technical and complex figures.

<http://www.texample.net/tikz/examples/>