A brief comparison of figure generation methods for LaTeX documents

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Comparison Table

	Win	Mac	Linux	Input Latex	Render Vectors	Free
Xfig	✓	✓	✓	✓	✓	✓ [1]
IPE	✓	✓	✓	✓	✓	✓
Inkscape	✓	✓	✓	✓	✓	✓
PowerPoint	✓	✓	✗	[2,3]	✗	✗
Apple Keynote	✗	✓	✗	[2]	✗	✓
Matlab [4]	✓	✓	✓	✗	?	✗
Maple [5]	✓	✓	✓	✗	?	✗
LatexDraw	✓	✓	✓	✓	✓	✓
LaTeXiT	✗	✓	✗	✓	n/a	✓
IguanaTex	✓	✗	✗	✓	n/a	✓
TikZ[6]	✓	✓	✓	✓	✓	✓
PSTricks[6]	✓	✓	✓	✓	✓	✓

[1] Xfig is free. However, WinFIG is shareware.
[2] via LaTeXiT (Mac only)
[3] via IguanaTex (Windows only)
[4] can generate Latex symbols
[5] can output equations as Latex code
[6] packages to plot figures within Latex code

Details

Xfig

Xfig 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 xfig, but instead is compiled when latex'ing the document. This makes using latex placement with figures somewhat more difficult with xfig.
`http://xfig.org/userman/installation.html#install-xfigwin`
`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 pstoedit packages will also need to be installed separately.
`http://wiki.inkscape.org/wiki/index.php/LaTeX`

LaTeXiT

LaTeXiT is a tool that can generate equations from Latex code to insert into documents. The default output is PDF. LaTeXiT is for Mac only, and it requires that you have a Latex distribution installed already.
`http://www.chachatelier.fr/latexit/`

IguanaTex

IguanaTex is much like LaTeXiT, however it is a plug-in for Powerpoint. It is only available for Windows.
`http://www.jonathanleroux.org/software/iguanatex/`

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 Toolnbox has some basic support for rendering Latex symbols.
http://www.mathworks.com.au/help/symbolic/latex.html
http://www.mathworks.com.au/help/symbolic/texlabel.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/