
TeX on Windows: MiKTeX or TeX Live?

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On Windows, there are two actively-developed free TeX systems with similar coverage: MiKTeX (Schenk, 2011) and TeX Live (TeX Users Group, 2011). The good news is that there is a lot of similarity between the two systems, so for most users both systems are equally usable, and (L)TeX documents are portable between them. However, there are differences and depending on what you need these might be important.

- The default settings install everything for TeX Live, but only a minimal set of packages for MiKTeX. MiKTeX will then install extra packages ‘on the fly’, while TeX Live does not (there is a package to do that in TeX Live, but it is aimed at GNU/Linux users). Install-on-the-fly is useful if space is limited, but is more problematic on server setups. So this is very much a feature whose usefulness depends on your circumstances. Of course, there is nothing to stop you from installing everything with MiKTeX.
- The xindy program (Schrod, 2010) is available only in TeX Live. For those of you not familiar with it, xindy is an index processor, and is much more capable of dealing with multi-lingual situations than MakeIndex. If you need xindy, TeX Live is the way to go.
- MiKTeX is very much a Windows tool set, while TeX Live comes from a Unix background. This shows up from time to time in the way TeX Live is administered, and the fact that the TeX Live GUI is written based on Perl rather than as a ‘native’ Windows application.
- As TeX Live is the basis of MacTeX, and is the TeX system for Unix, if you work cross-platform and want an identical system on all of your machines, then TeX Live is the way to go.

A reminder that MiKTeX and TeX Live are not the only choices. W32TeX (Kakuto, 2012) is popular in the far east. As well as being a TeX system in its own right, it is the source of the Windows binaries for TeX Live, and TeX Live acquires more CJK support from it every year. For users focussed on ConTeXt, ConTeXt standalone (Pragma ADE, 2012) is probably the best way to go (it uses the W32TeX binaries on Windows). There are also the commercial options, for example BaKoMa TeX (BaKoMa Soft., 2011) or PCTeX (Personal TeX, Inc., 2011). However, for most users it comes down to a choice between the ‘big two’.

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