

MiKTeX 2.5 Preview

December 10, 2006

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1 System requirements

MiKTeX 2.5 will run on all Windows variants with the exception of Windows 95 and Windows NT.

MiKTeX 2.5 is not designed to be run on Windows Vista. (It may be possible to use MiKTeX 2.5 on Windows Vista systems. But such use is not supported.)

2 Fixed bugs

Numerous bugs have been fixed in MiKTeX 2.5. In order to see the complete list of fixed bugs:

1. visit the bug tracker page¹ <http://sourceforge.net/tracker/?atid=110783&group_id=10783&func=browse>
2. choose status **Closed**
3. enter the summary keyword [2.5]

3 Configuration

3.1 miktex.ini split

`miktex.ini` has been split into several application-specific configuration files. For example, Yap configuration settings are now contained in `yap.ini`.

¹<http://sourceforge.net/tracker/?atid=110783&group_id=10783&func=browse>

3.2 Installation directory

The new installation default is `C:\Program Files\MiKTeX 2.5`.

3.3 Local TEXMF directory

The semantics of the local TEXMF directory have changed: this directory will not be used anymore by MiKTeX to store auto-generated files. As for MiKTeX, the local TEXMF directory is now an ordinary TEXMF directory.

3.4 Data directory

Auto-generated files (e.g. format files) will now be stored in the *MiKTeX data directory*. The default location of this directory depends on the kind of the MiKTeX installation:

Per-user installation

`C:\Documents and Settings\username\Local Settings\Application Data\MiKTeX\2.5`

Per-computer installation

`C:\Documents and Settings\All Users\Application Data\MiKTeX\2.5`

3.5 Paper size

In MiKTeX Options it is now possible to set the preferred paper size for all applications (Dvips, pdfTeX, Dvipdfm). The setup wizard offers to choose between A4 and Letter.

3.6 Format files

The “plain” format files have been renamed:

- `tex.fmt` (was `plain.fmt`)
- `mf.base` (was `plain.base`)
- `mpost.mem` (was `plain.mem`)

The MiKTeX Options utility now makes it possible to manage format files for METAFONT and METAPOST.

3.7 Registry

MiKTeX registry settings have been rearranged in order to support side-by-side installations. This shouldn't be an issue, since MiKTeX registry settings were undocumented in the past.

3.7.1 MiKTeX Registry Root Key

The MiKTeX Registry root key has been changed from `SOFTWARE\MiK\MiKTeX\CurrentVersion` to `SOFTWARE\MiKTeX.org\MiKTeX\2.5`.

3.7.2 MiKTeX Registry Values

Various MiKTeX registry values have been renamed.

4 Programs

4.1 Dvipdfmx

Dvipdfmx has been upgraded to version 20051229.

4.2 Dvipng

Dvipng has been upgraded to version 1.8.

4.3 Dvips

Dvips has been upgraded to version 5.95b.

4.4 epstopdf

The following options have been added:

- antialias**
Enable anti-aliasing of bitmaps.
- enlarge=*n***
Enlarge bounding box by *n* PostScript points..
- gsopt=*options***
Add *options* the the Ghostscript command-line.
- pdf-version=*ver***
Set the PDF version.
- print-only**
Print what would be done.
- trace[=*tracestreams*]**
Enable trace messages. The *tracestreams* argument, if speciefied, is a comma-separated list of trace stream names (Xrefld[??]).
- verbose**
Turn on verbose output mode.

4.5 mpm

The following options have been added to the command-line version of the package manager:

- list-repositories**
Download the list of known package repository URLs from the MiKTeX project server, then print the list.
- pick-repository-url**
Pick up a suitable URL from the package repository list and print it.
- quiet**
Suppress all output, except errors.

-repository=location

Use the specified location as the package repository. The location can be either a fully qualified path name (a local package repository) or an URL (a remote package repository). You can use the `-list-repositories` to retrieve a list of working package repository URLs.

-set-repository=location

This option is only available on Windows systems: permanently register the location of the default package repository. The location can be either a fully qualified path name (a local package repository) or an URL (a remote package repository). Setting the environment variable `MIKTEX_REPOSITORY` has the same effect.

-trace[=tracestreams]

Enable trace messages. The *tracestreams* argument, if specified, is a comma-separated list of trace stream names (Xrefld[??]).

4.6 mthelp

mthelp is a utility to lookup T_EX package documentation.

mthelp creates an HTML page which contains a short description of the package together with links to all documentation files. An HTML viewer is started to view the page.

4.7 pdf- ϵ -T_EX

pdf- ϵ -T_EX is now the default engine, also for DVI output.

pdf- ϵ -T_EX has been upgraded to version 1.30.6.

4.7.1 Piped Input and Output

T_EX's input/output primitives can be used for unidirectional interprocess communication by prepending a pipe symbol to the file name.

If this feature is enabled, then `\input "|command"` starts the command interpreter (usually **cmd.exe**) to carry out the command. The output of the command becomes the input of T_EX. For example:

```
\input "|dir/b"
```

typesets the file names of the current directory.

Likewise, it is possible to let T_EX write something into the input stream of a command. For example:

```
\immediate\openout1 = "|unix2dos|sort > sorted"  
\immediate\write 1 {b}  
\immediate\write 1 {a}  
\immediate\write 1 {c}  
\immediate\closeout1  
\input sorted
```

typesets a b c.

Piped input and output is disabled by default to avoid security problems. You enable the feature by specifying `-enable-pipes` on the T_EX command-line.

4.8 pdfopen / pdfclose

pdfopen and **pdfclose** can be used to control Adobe Reader. The original author is Fabrice Popineau who wrote these utilities a long time ago for the TeX Live distribution.

4.9 tex4ht

tex4ht has been upgraded to version 1.0.2006_05_06_0156.

4.10 Update Wizard

The user interface has been improved to allow a faster (less mouse-clicks) run:

1. The welcome page can be skipped.
2. The last used update source is offered as the default (see [Figure 1](#))

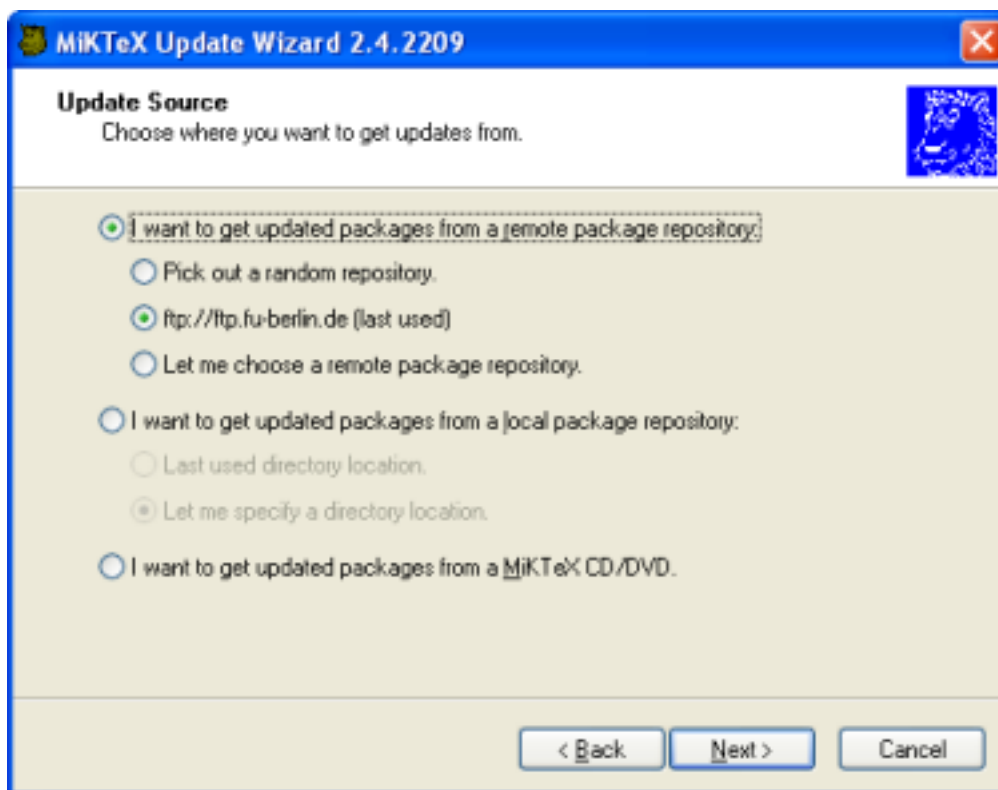


Figure 1: MiKTeX Update Wizard: update source

4.11 Yap

4.11.1 PostScript

Support for PostScript has been improved significantly. For example, in the past Yap refused to display rotated text. This is not a problem anymore (see [Figure 2](#)).

The motto is:

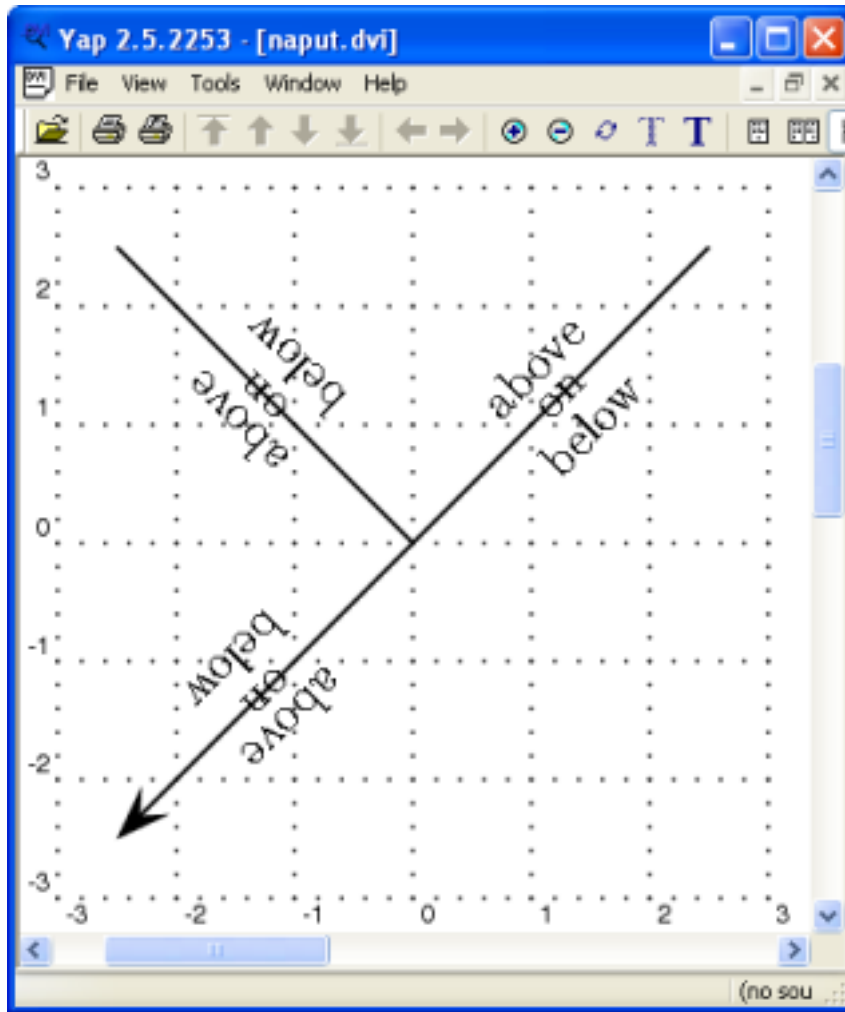


Figure 2: Yap: text rotation

Every DVI document that can be viewed with a PostScript viewer (after DVI-to-PostScript conversion) can be viewed with Yap.

4.11.2 Ruler Tool

The new ruler tool can be used to measure distances on a document page (see [Figure 3](#)).

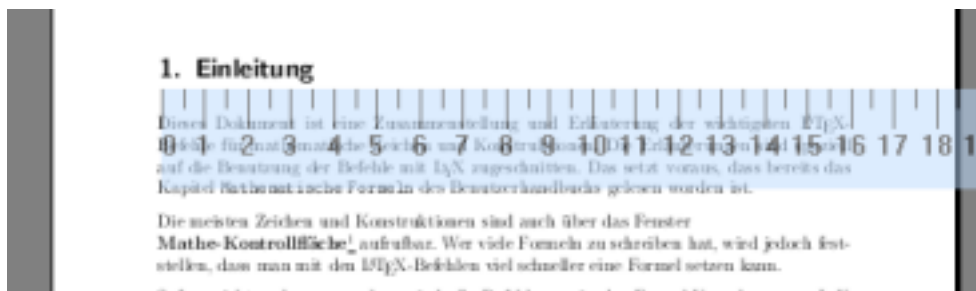
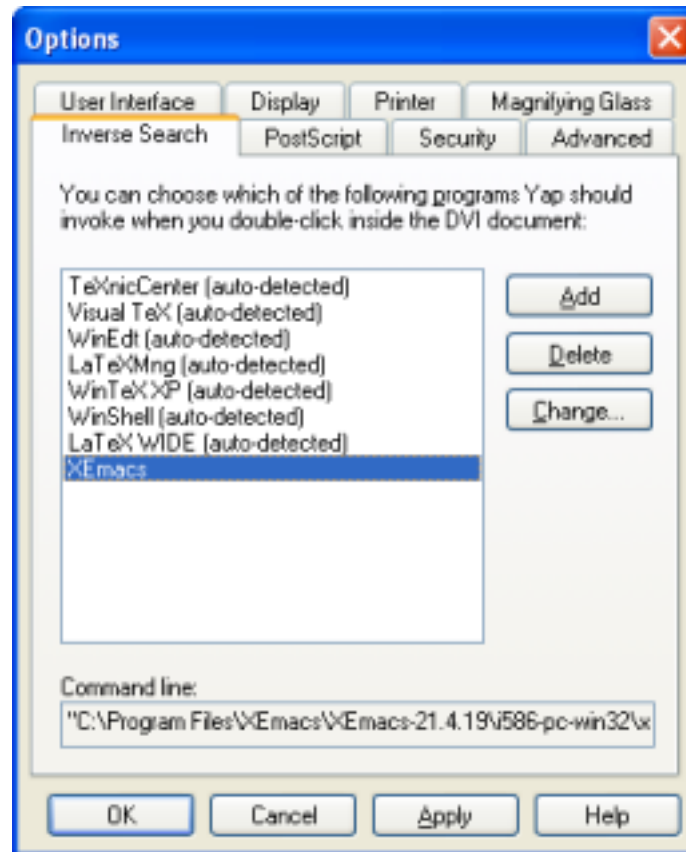


Figure 3: Yap: ruler

4.11.3 Command-Lines for Inverse DVI Search

It is now possible to configure more than one command-line for inverse search. The Inverse Search property page (Figure 4) allows you to associate a command-line with an editor name (Figure 5).



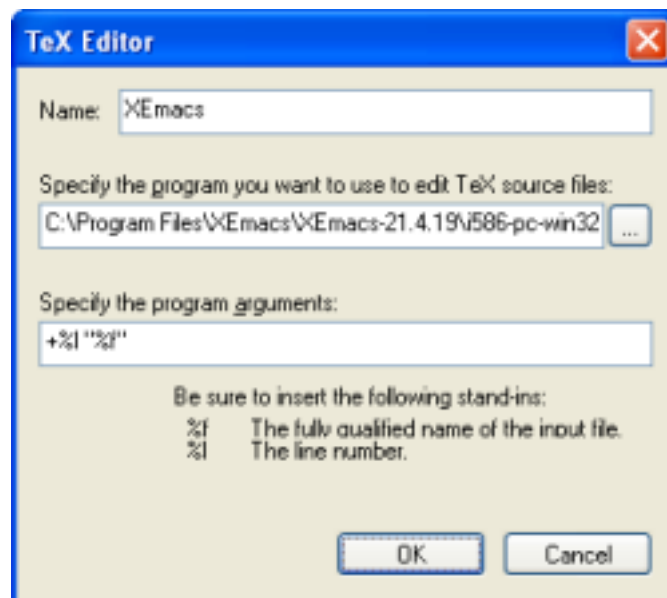


Figure 5: Yap: TeX editor configuration