# The MiKTEX Installation Procedure

February 29, 2004

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### 1 About this document

This document describes the MiKT<sub>E</sub>X installation procedure. The latest version of this document is available from CTAN (PDF $^1$  <a href="http://www.ctan.org/tex-archive/systems/win32/miktex/setup/install.pdf">http://www.ctan.org/tex-archive/systems/win32/miktex/setup/install.pdf</a>, HTML $^2$  <a href="http://www.ctan.org/tex-archive/systems/win32/miktex/setup/install.html">httml</a>).

### 2 Introduction

Four steps are necessary to install MiKT<sub>E</sub>X:

- 1. Check to see if the prerequisites are met.
- 2. Choose a package set.
- 3. Download MiKT<sub>E</sub>X.
- 4. Install MiKTEX.

<sup>1&</sup>lt;http://www.ctan.org/tex-archive/systems/win32/miktex/setup/install.pdf>

<sup>&</sup>lt;sup>2</sup><a href="http://www.ctan.org/tex-archive/systems/win32/miktex/setup/install.html">http://www.ctan.org/tex-archive/systems/win32/miktex/setup/install.html</a>

### 3 Prerequisites

MiKT<sub>E</sub>X runs on all current Windows platforms.

MiKT<sub>E</sub>X Setup Wizard does not install any operating system components (such as comct132.d11). It is taken for granted, that all required system components exist, either because they are a part of the operating system, or because they were installed by an operating system update (service pack).

The following system components are required by MiKTEX:

comct132.d11,

Version 5.80.2614.3600 (or later) of the Common Controls DLL must be installed. This is the case if the operating system is Windows Me or Windows XP. For older operating systems, it might be necessary to get the DLL from Microsoft<sup>3</sup> <a href="http://www.microsoft.com/downloads/release.asp?releaseid=30318">http://www.microsoft.com/downloads/release.asp?releaseid=30318</a>>.

wininet.dll,

Version 4.70.0.1300 (or later) of the Internet Extensions DLL must be installed. It is a part of Internet Explorer 4.0 (or later).

MiKT<sub>E</sub>X Setup Wizard displays a message and quits, if one of the required system components is missing.

### 4 Choosing a Package Set

You can choose between three package sets: "Small MiKTEX", "Large MiKTEX" and "Total MiKTEX".

### "Small MiKT<sub>E</sub>X",

This is a basic MiKT<sub>E</sub>X system which gets you started.

#### "Large MiKT<sub>F</sub>X",

This gives you the most important macro packages and fonts.

#### "Total MiKT<sub>E</sub>X",

This includes all available packages.

Choose "Small MiKT<sub>E</sub>X", if you are downloading MiKT<sub>E</sub>X over a slow Internet connection or if you want to conserve disk space. It is possible to configure MiKT<sub>E</sub>X in such a a way, that missing packages are automatically installed later (during run-time).

# 5 Downloading MiKT<sub>E</sub>X

You can download MiKT<sub>E</sub>X either with the help of MiKTeX Setup Wizard (setup.exe), or manually with the help of an FTP client. This installation guide covers the wizard method, because it is the recommended method for most users. See the MiKT<sub>E</sub>X FAQ<sup>4</sup> <a href="http://www.miktex.org/faq/">http://www.miktex.org/faq/</a>, for a detailed description of the FTP method.

<sup>3&</sup>lt;http://www.microsoft.com/downloads/release.asp?releaseid=30318>

<sup>4&</sup>lt;http://www.miktex.org/faq/>

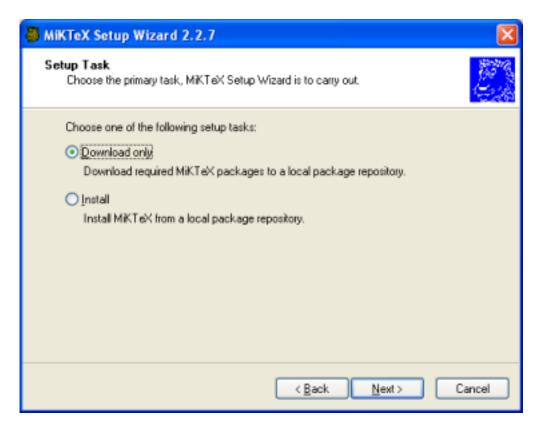
- 1. Download the latest version of the wizard from the SourceForge.net download server<sup>5</sup> <a href="http://sourceforge.net/project/showfiles.php?group\_id=10783">http://sourceforge.net/project/showfiles.php?group\_id=10783</a>.
- 2. Start the wizard (setup.exe). You will be presented with the welcome page:



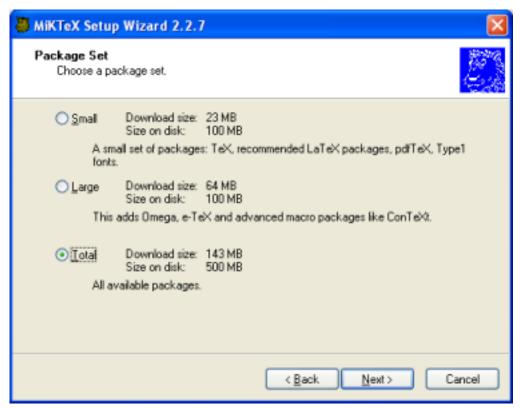
Click **Next >** to advance to the next page.

3. Click on the **Download only** radio button:

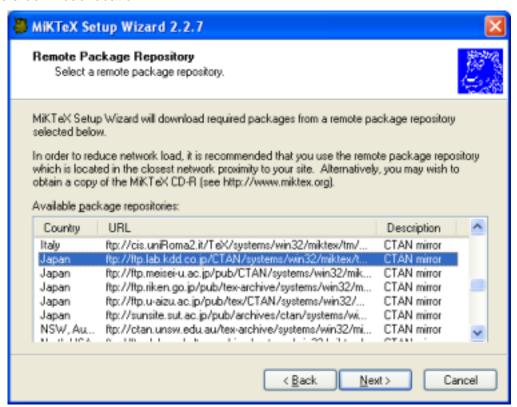
 $<sup>^{5} &</sup>lt; \hspace{-0.1cm} \texttt{http://sourceforge.net/project/showfiles.php?group\_id=10783} >$ 



4. Click on the package set that you wish to download:

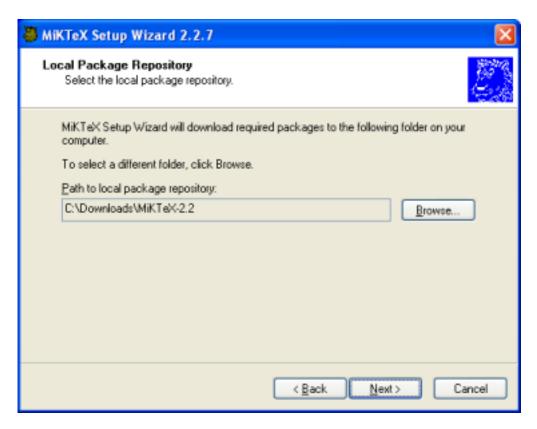


5. Choose a download location:



MiKT<sub>E</sub>X Setup Wizard will download packages from a remote package repository. Choose a repository which is located in the closest network proximity to your location. Click **Next >** to go to the next page.

6. Specify the location of the local package repository:



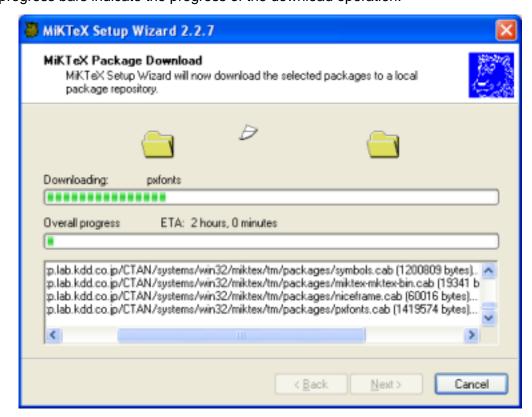
Downloaded packages will be stored in the *local package repository*, a directory on your computer. Later you will run the wizard again to install MiKTEX from here. Click **Next >** to go to the next page.

7. Review the download settings:



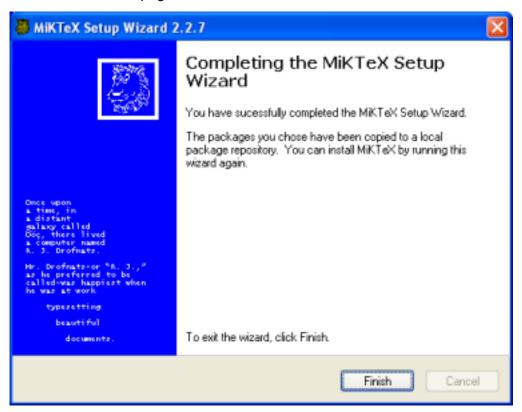
Click < Back, if you want to change the settings. Click Next > to start the download process.

8. Two progress bars indicate the progress of the download operation:



Click **Next >** when the download is complete.

9. You will see the final wizard page:



Click Finish to close the wizard.

# 6 Installing MiKT<sub>E</sub>X

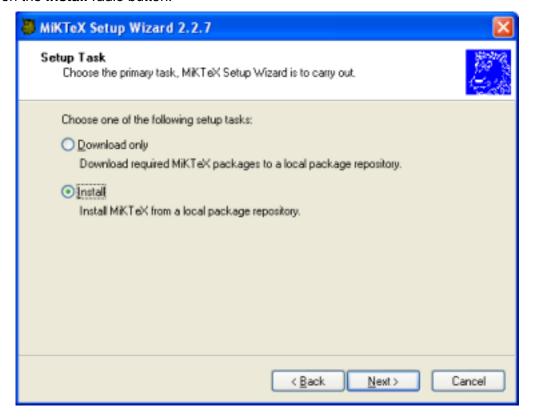
You install MiKT<sub>E</sub>X with the help of MiKT<sub>E</sub>X Setup Wizard:

- 1. Download the latest version of the wizard from the SourceForge.net download server<sup>6</sup> <a href="http://sourceforge.net/project/showfiles.php?group\_id=10783">http://sourceforge.net/project/showfiles.php?group\_id=10783</a>.
- 2. Login as Administrator, if you want to set up a shared MiKTEX system.
- 3. Start the wizard (setup.exe). You will be presented with the welcome page:

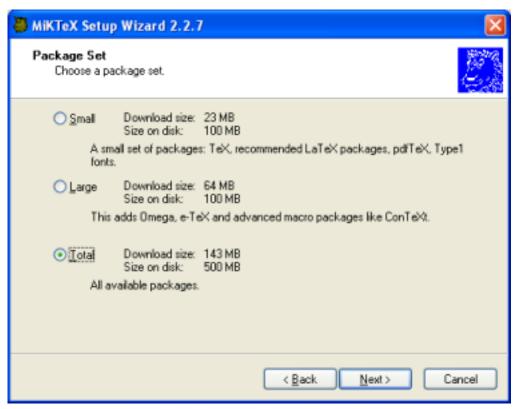
 $<sup>^{6} &</sup>lt; \hspace{-0.05cm} \texttt{http://sourceforge.net/project/showfiles.php?group\_id=10783} >$ 



4. Click on the **Install** radio button:



5. Click on the package set you wish to install:



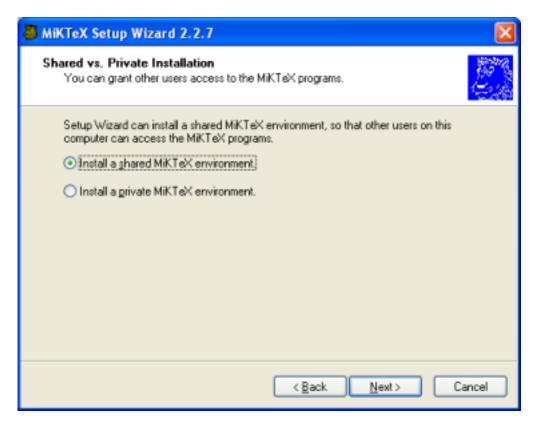
### Note



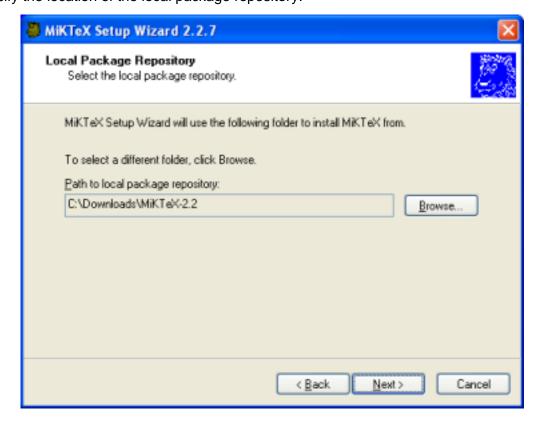
The selected package set must match the downloaded package set, e.g., you cannot install the large package set when you have downloaded the small package set.

Click **Next >** to go to the next page.

6. Choose if you want to set up a shared MiKTEX system or if you want to use MiKTEX privately:



7. Specify the location of the local package repository:



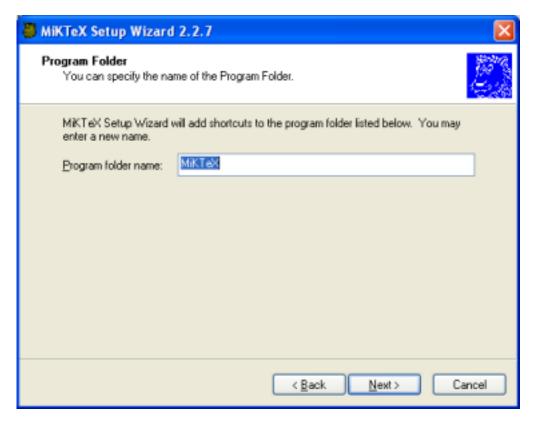
MiKT<sub>E</sub>X will be installed from a local package repository which mirrors the contents (or parts of it) of a remote package repository. You have created the local package repository during the download stage. Click **Next** > to go to the next page.

8. Accept the suggested installation directory or enter your own choice:



The installation directory is the root of the main TEXMF directory hierarchy. Click **Next >** to go to the next page.

9. Accept the suggested program folder name or enter your own choice:

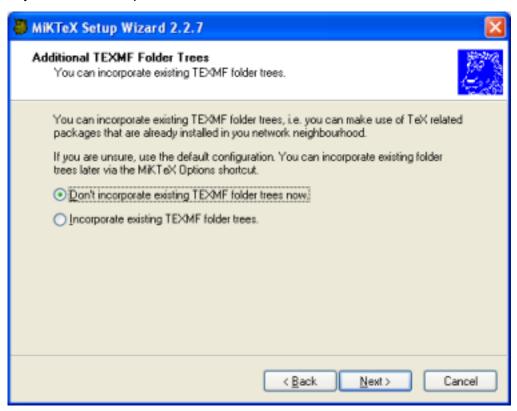


10. Accept the suggested path to the local TEXMF directory or enter your own choice:



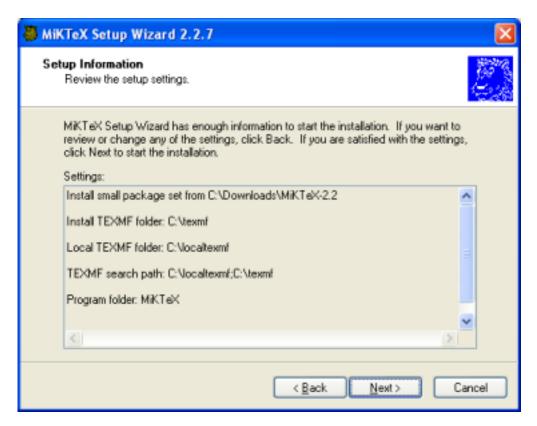
The local TEXMF directory is mainly used for files that are created during run-time. Click **Next** > to go to the next page.

11. Choose if you want to incorporate additional TEXMF directories:



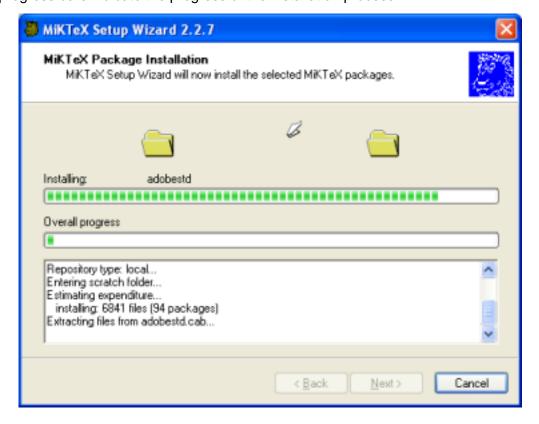
You can safely defer the decision. TEXMF trees can be configured later with the help of MiKT<sub>E</sub>X Options. Click **Next >** to go to the next page.

12. Review the setup settings:



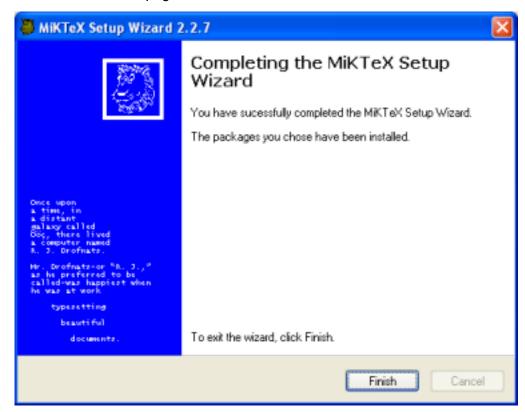
Click < Back, if you want to change the settings. Click Next > to start the installation process.

13. Two progress bars indicate the progress of the installation process:



Click **Next** > when the installation is complete.

14. You will see the final wizard page:



Click Finish to close the wizard.

# 7 Making Sure that the Installation Worked

Open a command prompt window and run the following commands (prefixed with > ):

```
> latex sample2e
This is e-TeX, Version 3.141592-2.1 (MiKTeX 2.4)
entering extended mode
(C:\texmf\tex\latex\base\sample2e.tex
LaTeX2e <2001/06/01>
Babel <v3.7m> and hyphenation patterns for english, french, german, ngerman, du
mylang, nohyphenation, loaded.
(C:\texmf\tex\latex\base\article.cls
Document Class: article 2001/04/21 v1.4e Standard LaTeX document class
(C:\texmf\tex\latex\base\size10.clo))
No file sample2e.aux.
(C:\texmf\tex\latex\base\omscmr.fd) [1] [2] [3] (sample2e.aux) )
Output written on sample2e.dvi (3 pages, 7256 bytes).
Transcript written on sample2e.log.
```

```
> yap sample2e
```

## 8 Troubleshooting the Setup Process

MiKT<sub>E</sub>X Setup Wizard logs all actions into the DebugView window. You may want to download and install DebugView, if you intend to troubleshoot setup related problems.

To download DebugView, visit the DebugView page<sup>7</sup> <a href="http://www.sysinternals.com/ntw2k/freeware/debugview.shtml">http://www.sysinternals.com/ntw2k/freeware/debugview.shtml</a>> and follow the download/installation instructions.

To create a trace, start DebugView prior to the setup wizard.

In addition, the wizard reports some actions into a log file. The name of the log file is setup-currentdate.log. Search for this file in the config directory (usually C:\texmf\miktex\config\).

<sup>&</sup>lt;sup>7</sup><http://www.sysinternals.com/ntw2k/freeware/debugview.shtml>