

# The MiKTeX Installation Procedure

February 29, 2004

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## 1 About this document

This document describes the MiKTeX installation procedure. The latest version of this document is available from CTAN (PDF<sup>1</sup> <<http://www.ctan.org/tex-archive/systems/win32/miktex/setup/install.pdf>>, HTML<sup>2</sup> <<http://www.ctan.org/tex-archive/systems/win32/miktex/setup/install.html>>).

## 2 Introduction

Four steps are necessary to install MiKTeX:

1. Check to see if the prerequisites are met.
2. Choose a package set.
3. Download MiKTeX.
4. Install MiKTeX.

## 3 Prerequisites

MiKTeX runs on all current Windows platforms.

MiKTeX Setup Wizard does not install any operating system components (such as `comctl32.dll`). 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:

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

<sup>2</sup><<http://www.ctan.org/tex-archive/systems/win32/miktex/setup/install.html>>

comctl32.dll

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> <<http://www.microsoft.com/downloads/release.asp?releaseid=30318>>.

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).

MiKTeX Setup Wizard displays a message and quits, if one of the required system components is missing.

## 4 Choosing a Package Set

If you install MiKTeX on your hard-disk, you can choose between three package sets: “Small MiKTeX”, “Large MiKTeX” and “Total MiKTeX”.

### “Small MiKTeX”

This is a basic MiKTeX system which gets you started.

### “Large MiKTeX”

This gives you the most important macro packages and fonts.

### “Total MiKTeX”

This includes all available packages.

Choose “Small MiKTeX”, if you are downloading MiKTeX over a slow Internet connection or if you want to conserve disk space. It is possible to configure MiKTeX in such a way, that missing packages are automatically installed later (in the course of use).

## 5 Downloading MiKTeX

### TIP



The small package set and the setup program have been packed together into the “Small MiKTeX Installer” (available on the SourceForge.net download server<sup>a</sup> <[http://sourceforge.net/project/showfiles.php?group\\_id=10783](http://sourceforge.net/project/showfiles.php?group_id=10783)>). It is recommended that you download this installer, if you intend to install the small package set. In this case you can skip the rest of this section.

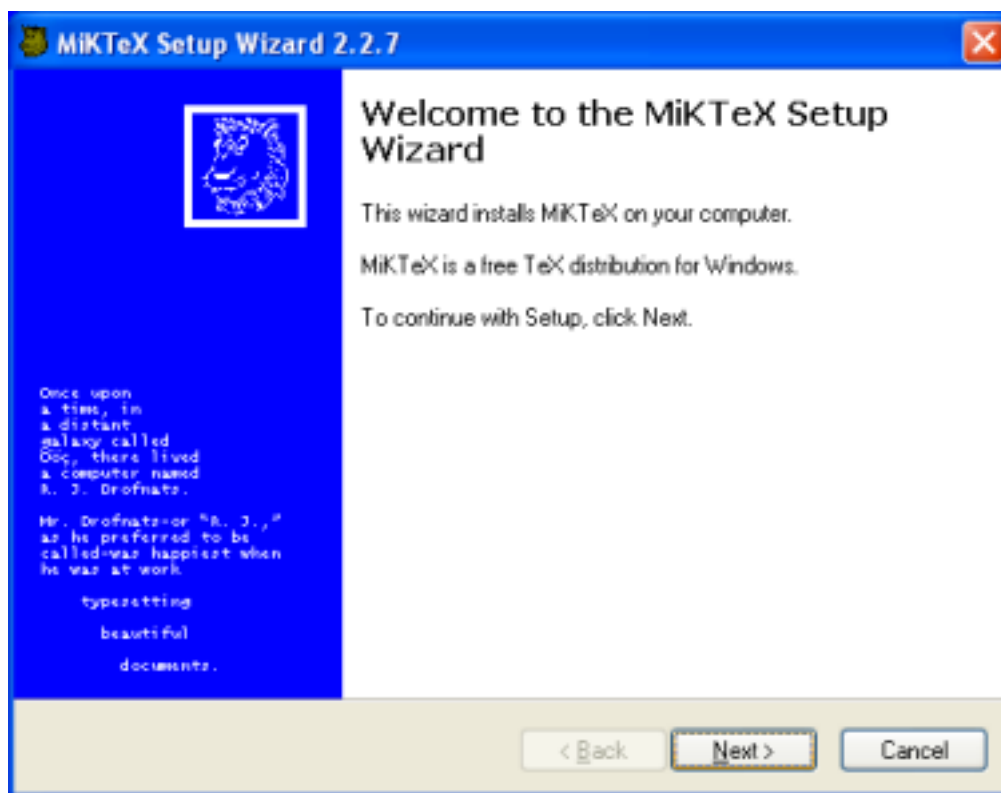
<sup>a</sup><[http://sourceforge.net/project/showfiles.php?group\\_id=10783](http://sourceforge.net/project/showfiles.php?group_id=10783)>

You can download MiKTeX 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 MiKTeX FAQ<sup>4</sup> <<http://www.miktex.org/faq/>>, for a detailed description of the FTP method.

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

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

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

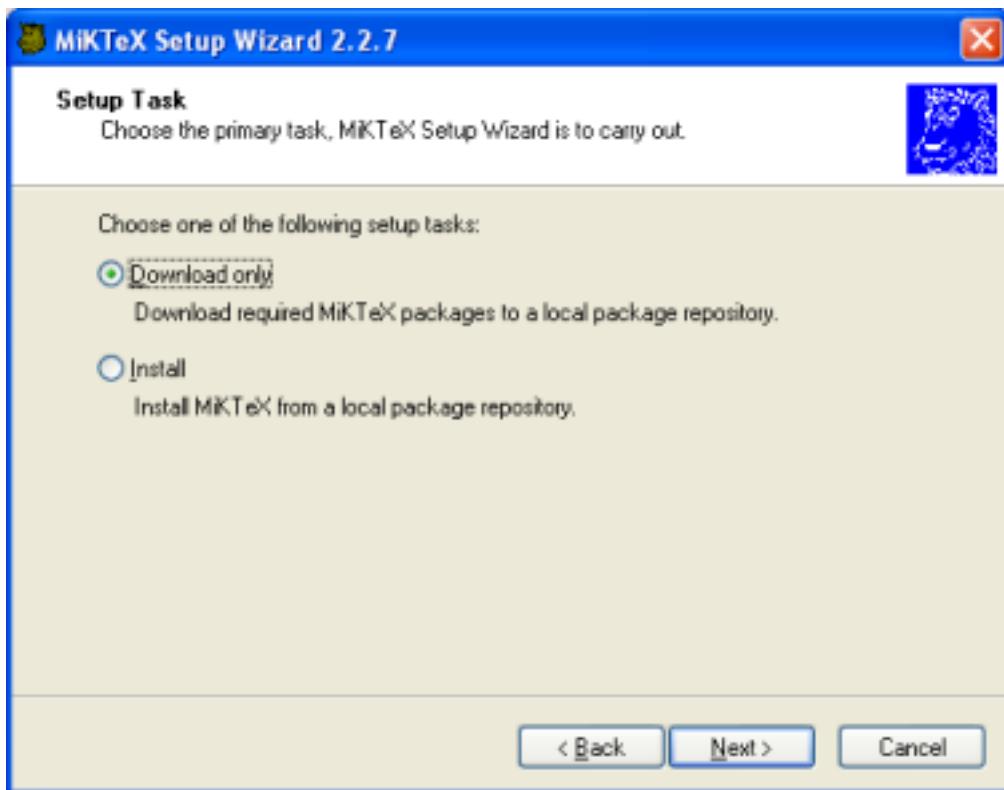


Click **Next >** to advance to the next page.

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

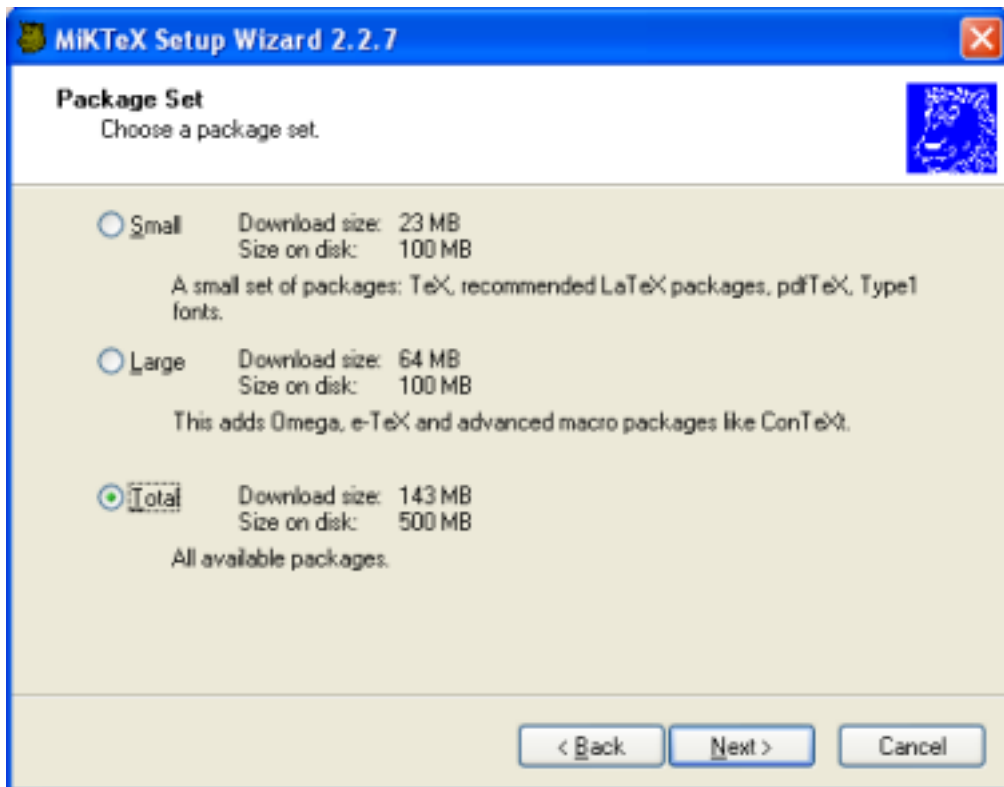
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<sup>5</sup><[http://sourceforge.net/project/showfiles.php?group\\_id=10783](http://sourceforge.net/project/showfiles.php?group_id=10783)>



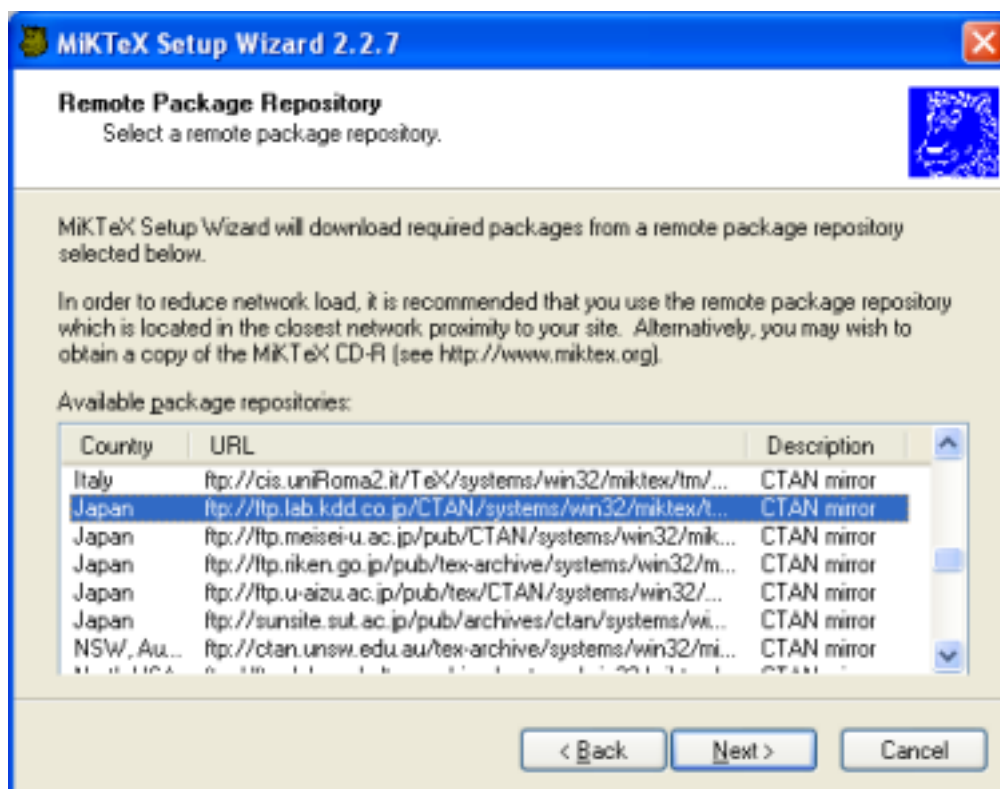
Click **Next >** to go to the next page.

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



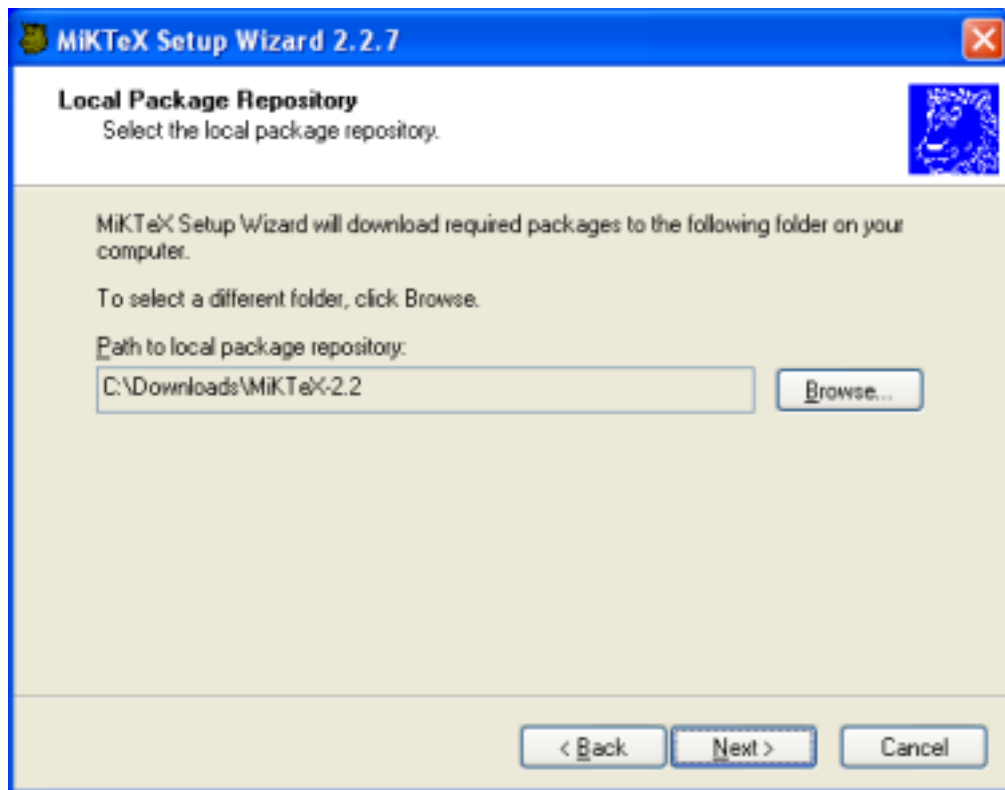
Click **Next >** to go to the next page.

5. Choose a download location:



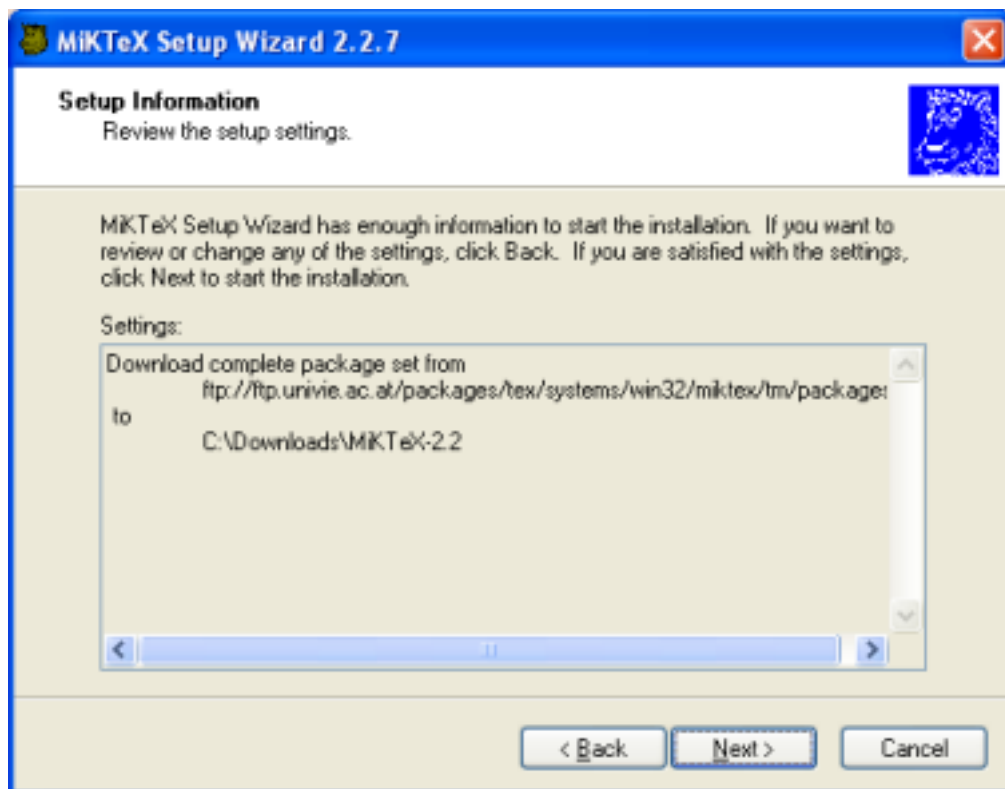
MiKTeX Setup Wizard will download packages from a remote package repository. Choose a repository which is located in the closest network proximity to your location. Click **Next >** to go to the next page.

6. Specify the location of the local package repository:



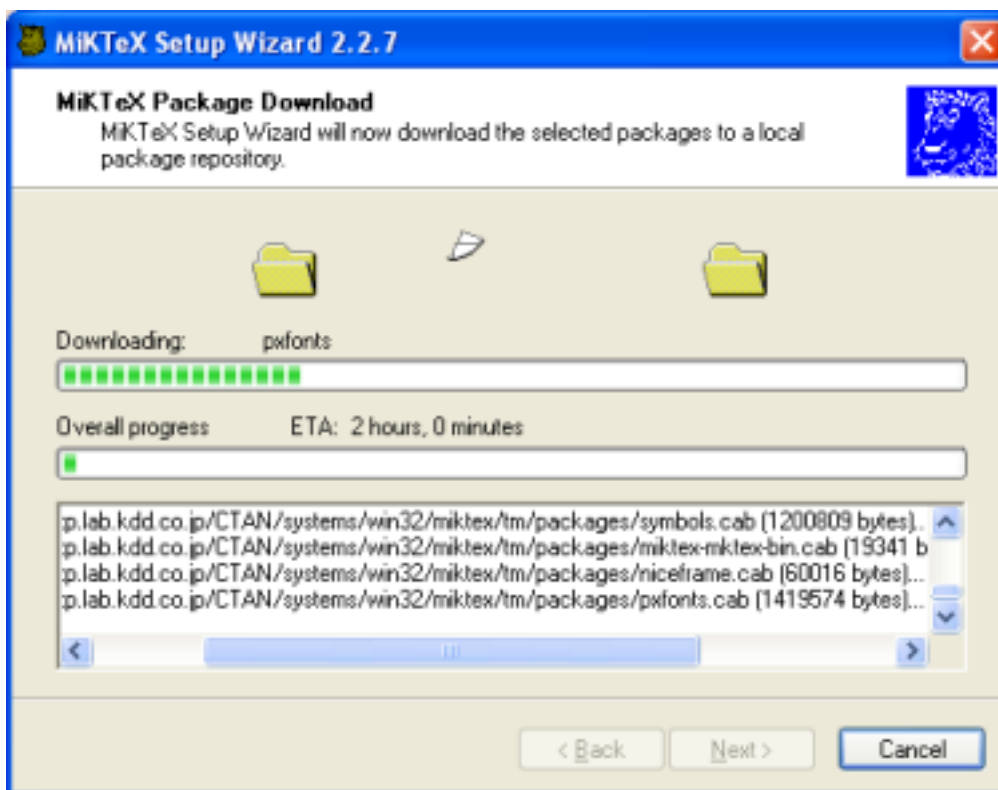
Downloaded packages will be stored in the *local package repository*, a directory on your computer. Later you will run the wizard again to install MiKTeX from here. Click **Next >** to go to the next page.

7. Review the download settings:



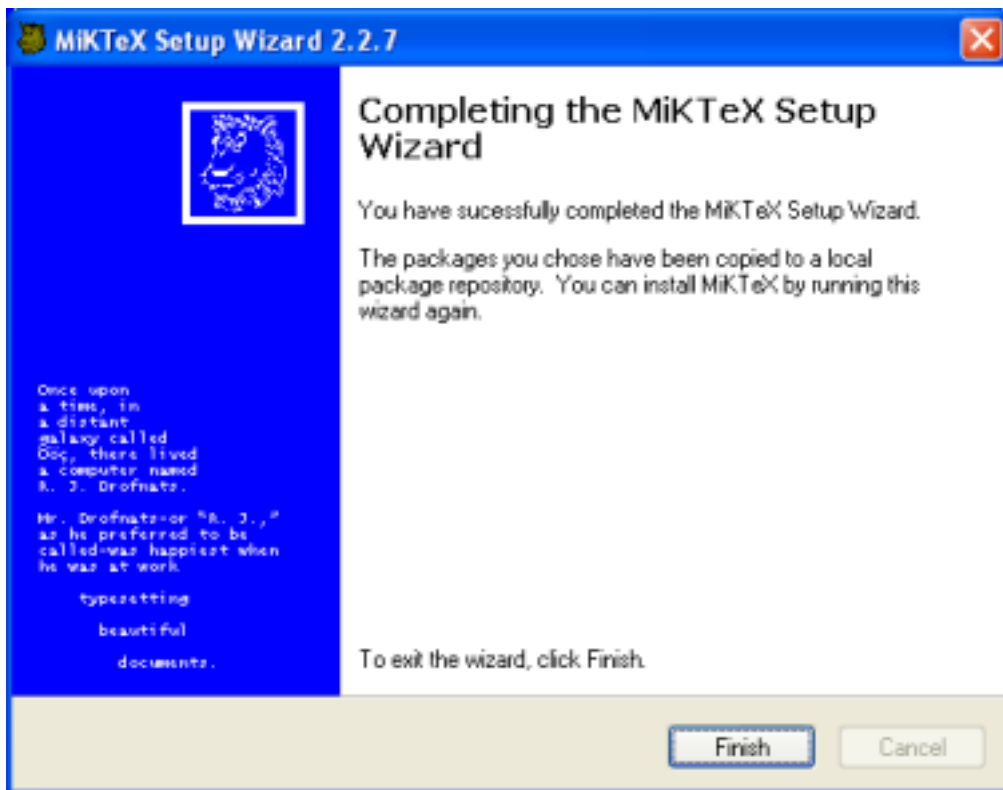
Click **< Back**, if you want to change the settings. Click **Next >** to start the download process.

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.

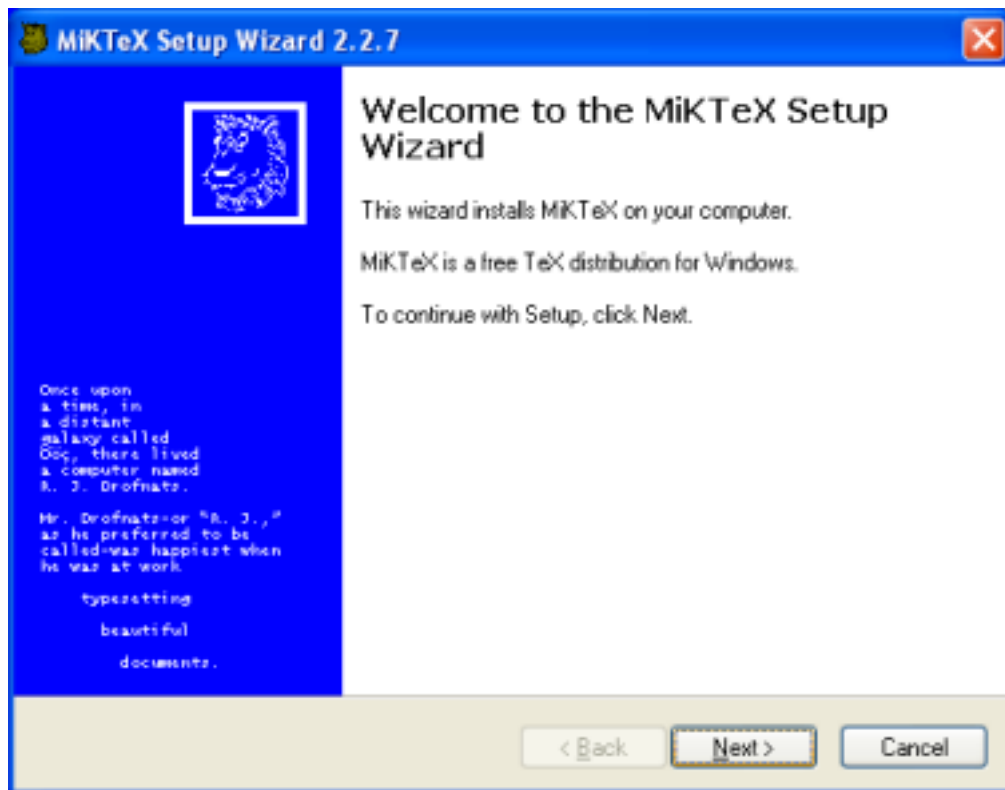
## 6 Installing MiKTeX

You install MiKTeX with the help of MiKTeX Setup Wizard:

1. Download the latest version of the wizard from the SourceForge.net download server<sup>6</sup> <[http://sourceforge.net/project/showfiles.php?group\\_id=10783](http://sourceforge.net/project/showfiles.php?group_id=10783)>.
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:

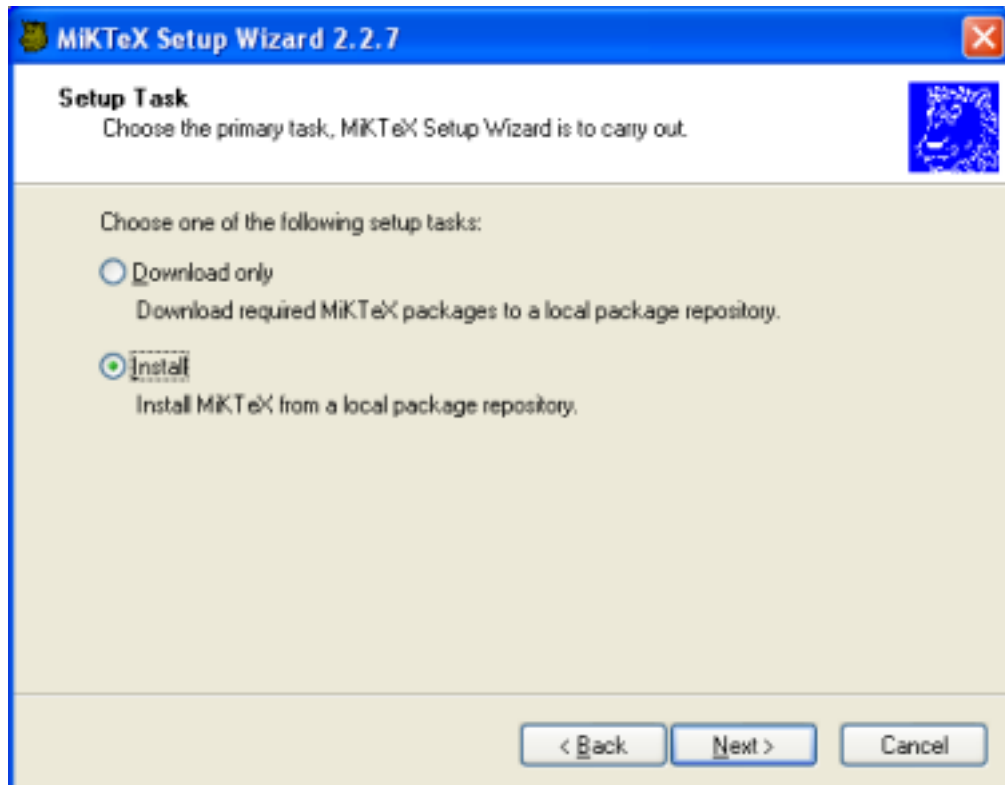
<sup>6</sup><[http://sourceforge.net/project/showfiles.php?group\\_id=10783](http://sourceforge.net/project/showfiles.php?group_id=10783)>





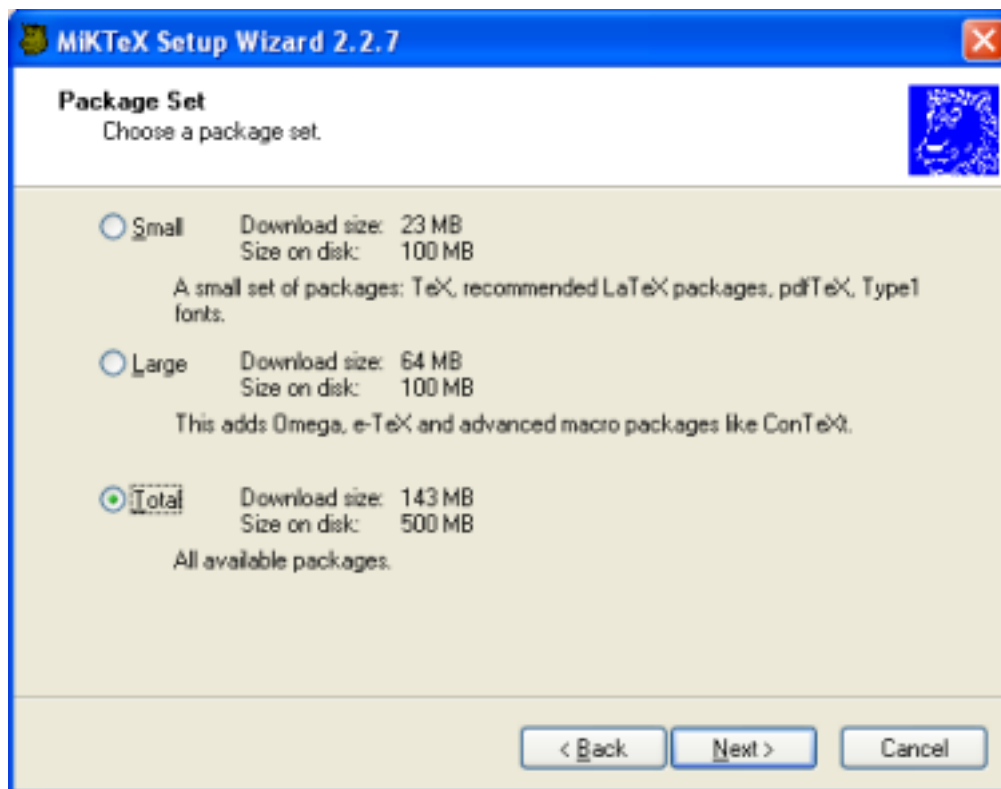
Click **Next >** to go to the next page.

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



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

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



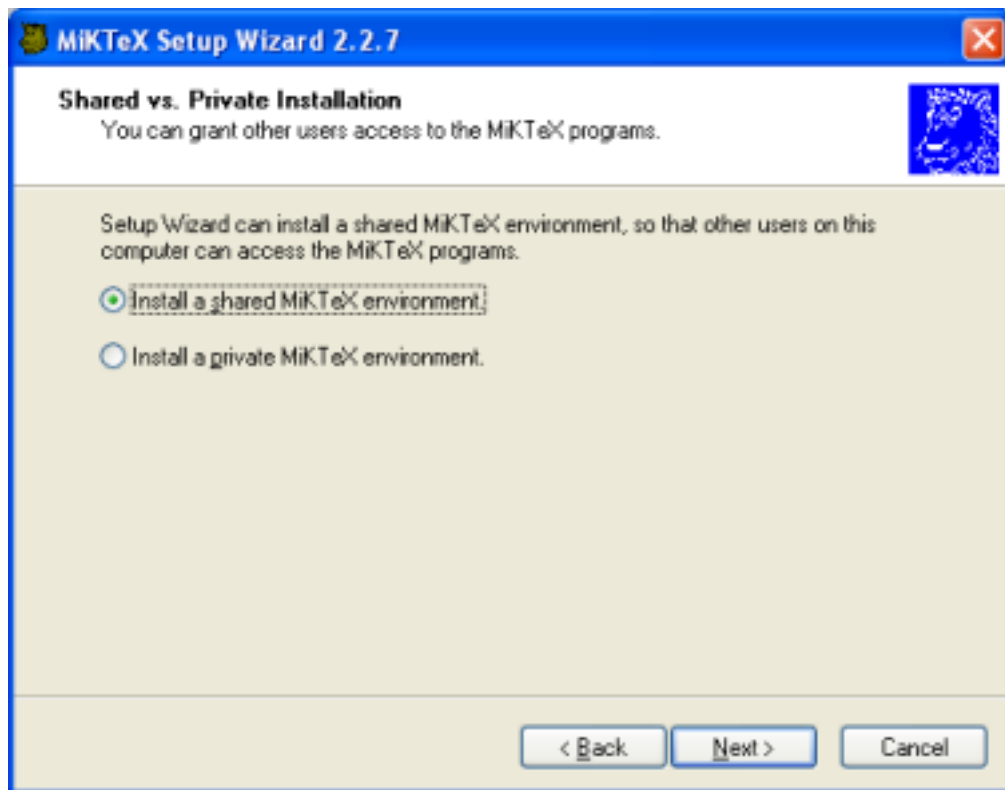
#### NOTE



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.

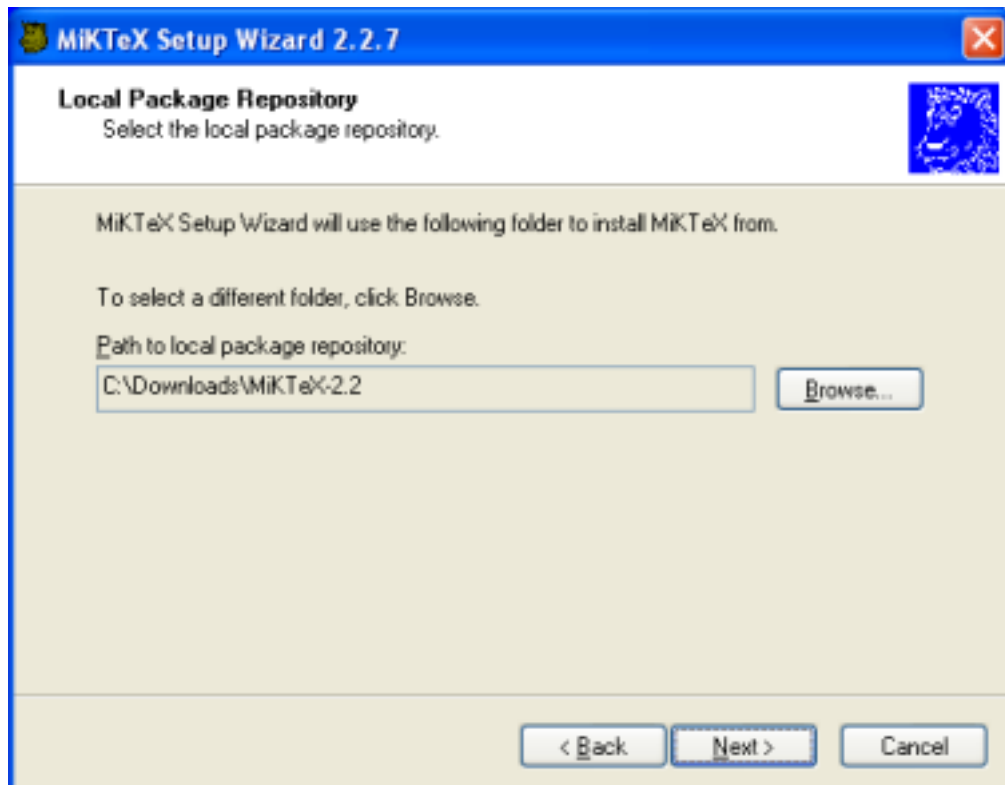
Click **Next >** to go to the next page.

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



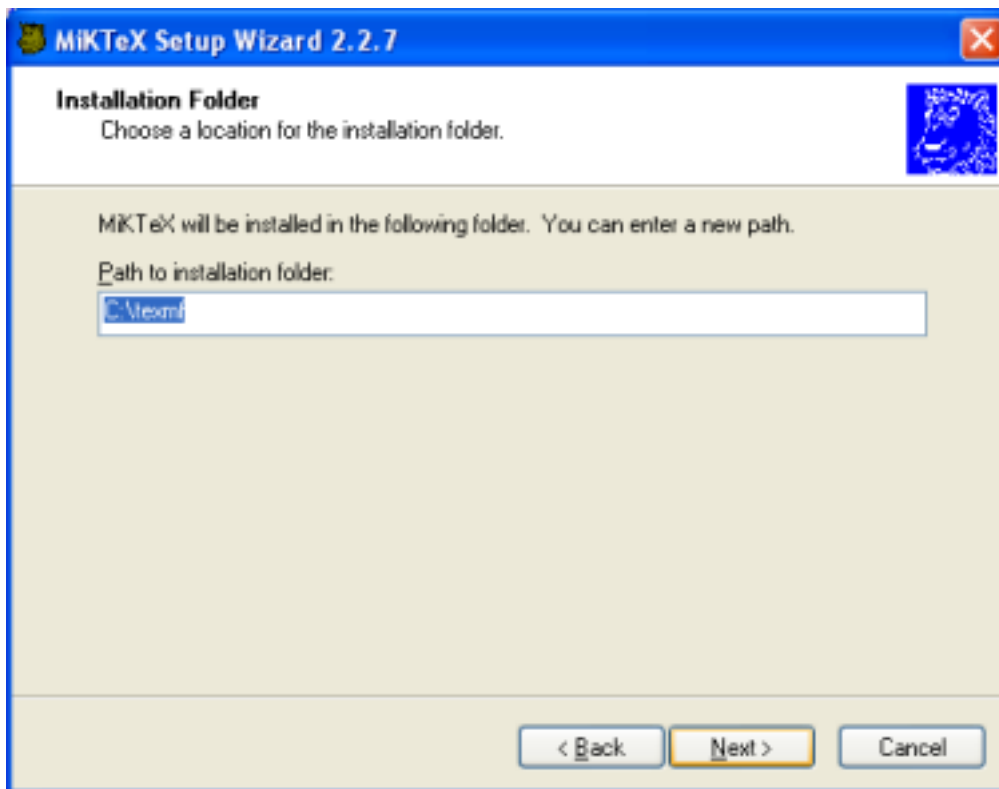
Click **Next >** to go to the next page.

7. Specify the location of the local package repository:



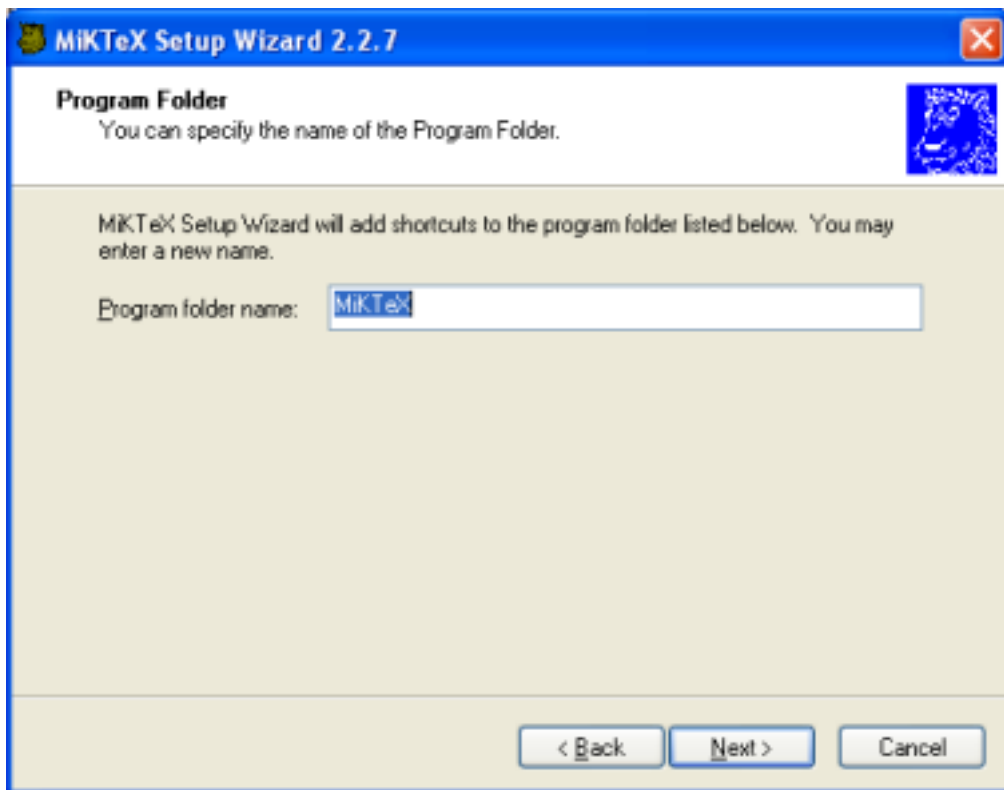
MiKTeX will be installed from a local package repository which mirrors the contents (or parts of it) of a remote package repository. You have created the local package repository during the download stage. Click **Next >** to go to the next page.

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



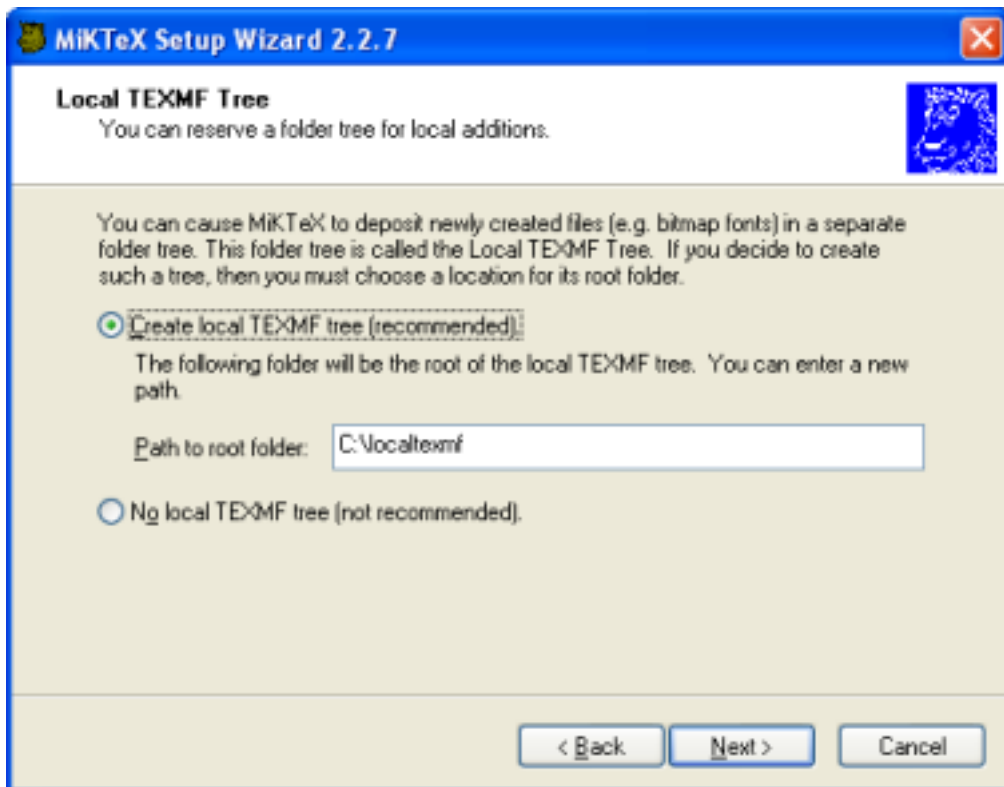
The installation directory is the root of the main TEXMF directory hierarchy. Click **Next >** to go to the next page.

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



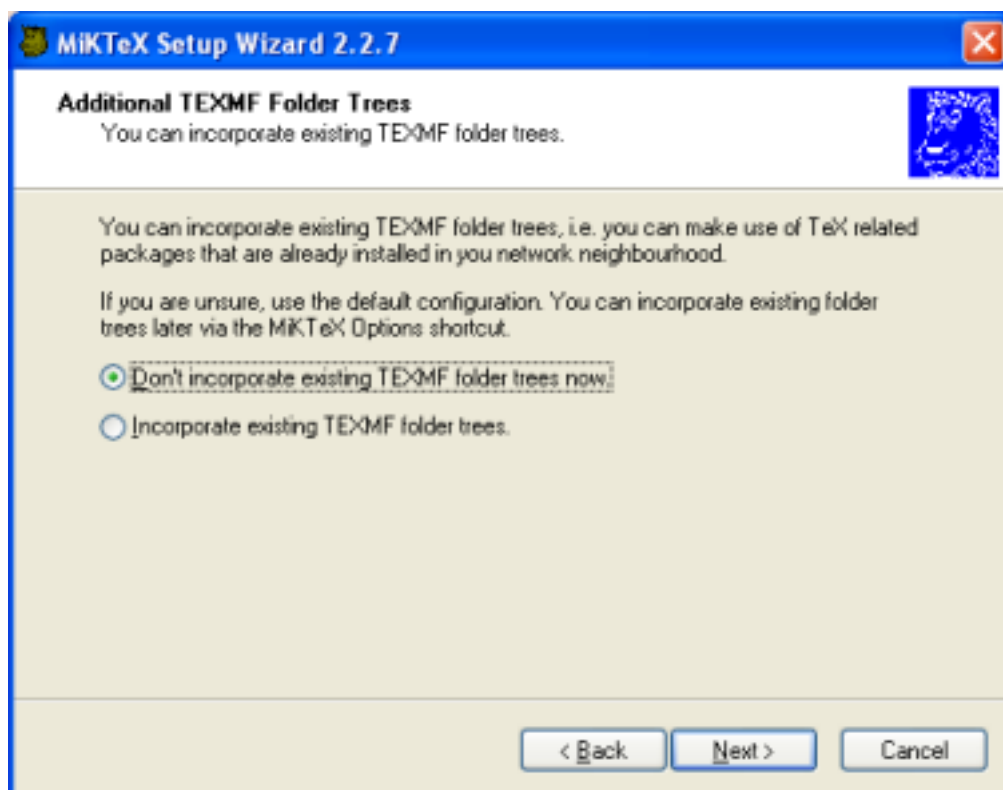
Click **Next >**, to go to the next page.

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



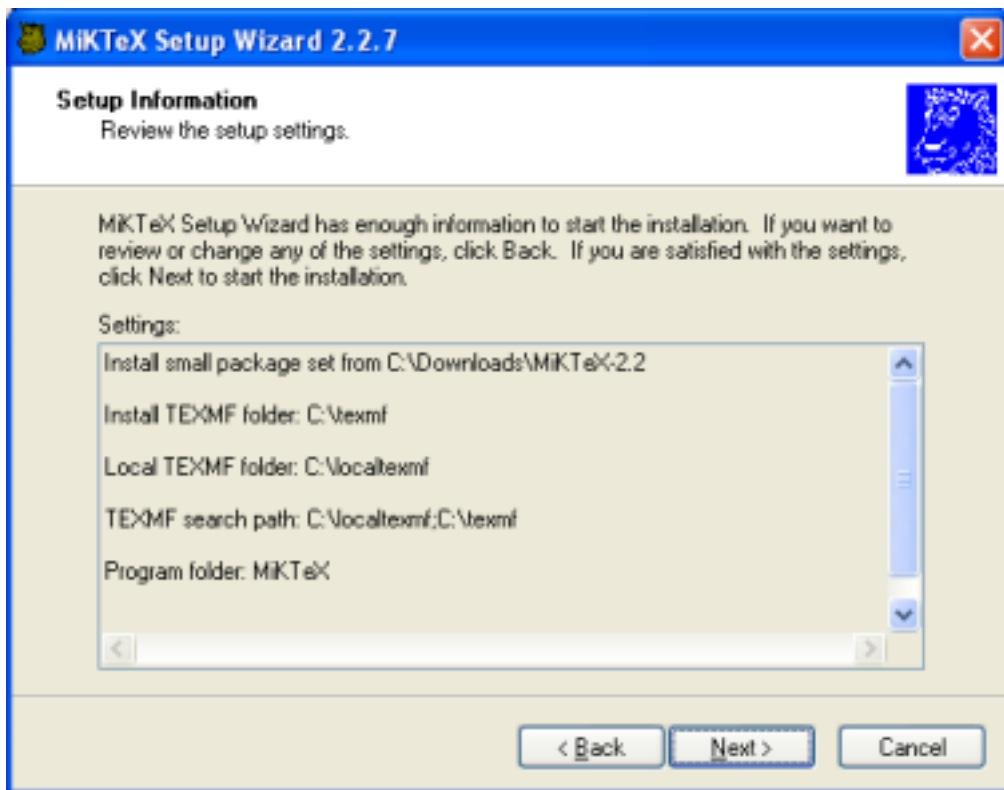
The local TEXMF directory is mainly used for files that are created during run-time. Click **Next >** to go to the next page.

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



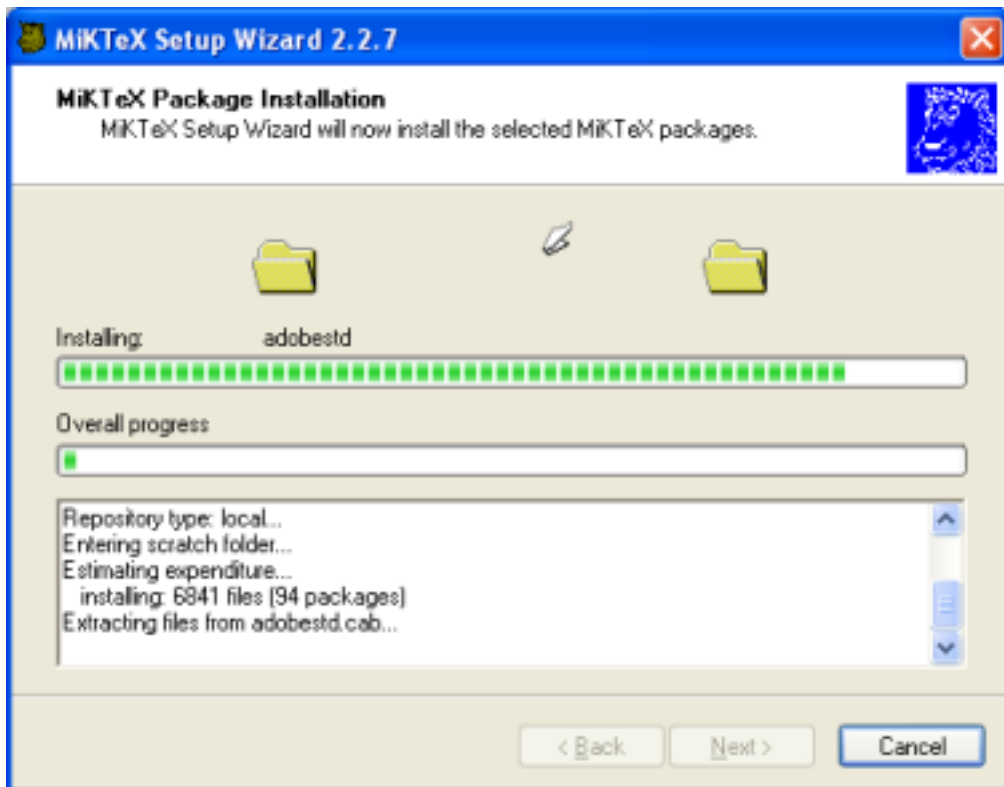
You can safely defer the decision. TEXMF trees can be configured later with the help of MiKTeX Options. Click **Next >** to go to the next page.

12. Review the setup settings:



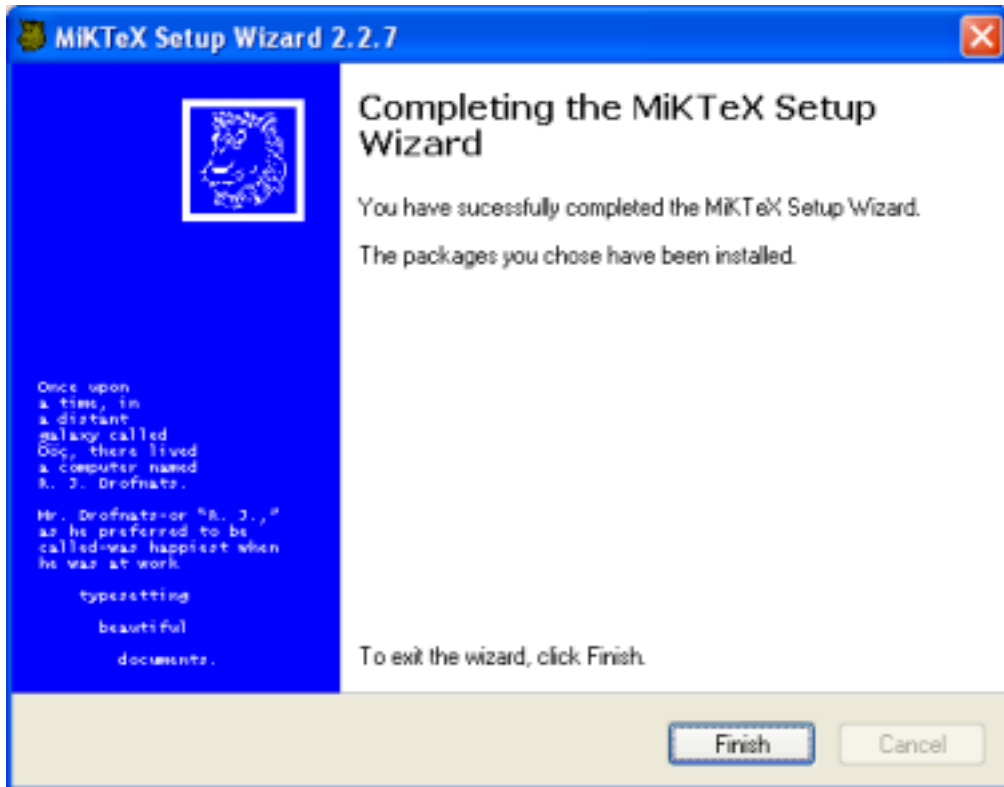
Click **< Back**, if you want to change the settings. Click **Next >** to start the installation process.

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

MiK<sub>T</sub>E<sub>X</sub> 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> <<http://www.sysinternals.com/ntw2k/freeware/debugview.shtml>> 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\`).

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