

Installing DVIWin 2.9 under MiKTeX

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Abstract

The following information has been collected from the MiKTeX 1.08 Local Guide by Christian Schenk. I assume that your main root directory for MiKTeX is `c:\texmf`. If you've installed the distribution under some other directory, e.g. `d:\texmf`, the following paths should be changed accordingly.

1 Installing DVIWin

1. Make the following directories:

```
mkdir c:\texmf\dviwin29
mkdir c:\texmf\dviwin29\bin
mkdir c:\texmf\dviwin29\doc
mkdir c:\texmf\dviwin29\filters
```

2. Go to the DVIWin scratch directory and extract the files.

```
cd c:\archive\dviwin29
unzip dviwin29.zip
unzip dviwin32.zip
```

3. It's a good idea to pause and read some of the documentation. In particular, see the README file which you can open with your text editor or Wordpad. Also, use Windows Explorer to open the file `dviwin2.hlp`.
4. Now that you're ready to resume the installation...

```
copy *2.exe c:\texmf\dviwin29\bin
copy *.str c:\texmf\dviwin29\bin
```

```
copy *.hlp c:\texmf\dviwin29\bin
copy miscwin2.dll c:\texmf\dviwin29\bin
copy graphio2.dll c:\texmf\dviwin29\bin
copy README c:\texmf\dviwin29\doc
copy *2.flt c:\texmf\dviwin29\filters
```

5. IMPORTANT: You can store the DVIWin help files anywhere if you only access them with Windows Explorer. But if you want to access the Help files from the “Help” menu in DVIWin, they must be somewhere in your path. We recommend adding `c:\texmf\dviwin29\bin` to your path rather than separating the help files from the rest of the DVIWin files. If you place the help files in your path and click on the Help menu in DVIWin, you will get “dviwin.hlp”, not “dviwin2.hlp.” You can access “dviwin2.hlp” via the File menu. Alternatively, if you want DVIWin to open “dviwin2.hlp”, then rename `dviwin.hlp` to `olddvi.hlp` and then rename `dviwin2.hlp` to `dviwin.hlp`.
6. As outlined in DVIWin’s README file, the previewer has the ability to display graphics files in a variety of formats. We consider this step optional, but if you want the full spectrum of options, then it is necessary to add the following section to your `c:\windows\win.ini` file, using your favorite text editor:

```
[NT Graphic Import Filters]
PC Paintbrush(.PCX)=c:\texmf\dviwin29\filters\pcxin2.flt,PCX
Microsoft Paint(.MSP)=c:\texmf\dviwin29\filters\mspin2.flt,MSP
Bitmaps(.BMP)=c:\texmf\dviwin29\filters\bmpin2.flt,BMP
Bitmaps(.DIB)=c:\texmf\dviwin29\filters\bmpin2.flt,DIB
Bitmaps(.RLE)=c:\texmf\dviwin29\filters\bmpin2.flt,RLE
Compuserve GIF(.GIF)=c:\texmf\dviwin29\filters\gifin2.flt,GIF
X Pixmaps(.XPM)=c:\texmf\dviwin29\filters\xpmin2.flt,XPM
```

7. Use Windows Explorer to create a shortcut to `c:\texmf\dviwin29\dviwin2.exe` and put it on your desktop, or wherever you prefer to keep links of this type. Using the properties item in the menu, set the “target” for the shortcut to be

```
c:\texmf\dviwin29\bin\dviwin2.exe -1
```

Now you can preview a file by clicking on the shortcut. When DVIWin appears, you can select a file using the “File” menu, which is at the top left corner.

8. If you like to invoke a screen previewer from the command line, create a batch file, say "preview.bat" using a text editor, and place this file somewhere in your path, for example, in `c:\texmf\miktex\bin`. The file should contain two lines:

```
@ECHO OFF
start c:\texmf\dviwin29\bin\dviwin2.exe -1 %1
```

When you are processing a file, say "jobname.tex" and you create "jobname.dvi", you can then preview this file by typing "preview jobname" or "preview jobname.dvi" on the command line. If you just type "preview", then DVIWin is started and you then select a file using the "File" menu. There may be some problems in using such a batch file when your jobname has spaces or more than one dot. In this case, you should use the shortcut.

2 Configuring DVIWin

1. Start the previewer by clicking on the shortcut or by typing "preview" if you have created the batch file described above.
2. First, you must tell DVIWin where to find fonts. Pull down the Options menu to "Font Directory". Following the standard setup for MiKTeX, we recommend typing the following line in the box:

```
c:\texmf\fonts\pk\ljfive\tmp\dpi$r;c:\texmf\fonts\pk\cx\tmp\dpi$r
```

Note that we are assuming that you will just leave the fonts in the "tmp" directory and not move them up one level higher in the directory tree.

3. This section is based on recommendations provided by John Young. Go to directory `c:\texmf\dviwin29\bin`. Use your text editor to create a file called "genpk.bat". This file should contain the following lines:

```
@ECHO OFF
REM =====
REM Filename:  genpk.bat
REM =====
REM This batch file uses the maketexpk.exe program (with
REM metafont) to create missing fonts when the DVIWin
REM screen previewer is used.  First the resolution determines
REM the mode passed to metafont.
```

```

REM =====
set mode=ljfive
if %3==300 set mode=cx
if %3==600 set mode=ljfivemp
REM =====
REM You may need to edit these lines or add
REM additional lines to set the correct METAFONT
REM for your particular printer.
REM =====
c:\texmf\miktex\bin\maketexpk.exe %1 %2 %3 magstep(%4) %mode%
set mode=
REM EOF

```

4. As commented on in the file `genpk.bat`, the building of fonts is dependent on the mode parameter which is passed to `metafont`. You may want to edit the file `genpk.bat` to use modes which correspond to your printer. See the file

```
c:\texmf\metafont\misc\modes.mf
```

to find the mode for your particular printer. We find that DVIWin works best at the resolutions of 300 and 600. The display quality using the `ibmvg` mode at 110 is not on the same level.

5. Pull down the Options Menu to “Missing Fonts”. Mark the tick “Execute command” and insert the following line in the Cmd box:

```
c:\texmf\dviwin29\bin\genpk.bat $f $x $X $m
```

6. As these instructions provide, you can now invoke DVIWin at the resolutions 300 and 600. As a general rule, displaying at 600 will provide sharper resolution, but depending on the size and quality of your monitor, you may have difficulty getting a page to fit on your screen, even with the zoom set to 6. On a 21” Viewsonic 21PS, a full page of text will almost fit on the screen when the resolution is set to 600, but it is necessary to use the arrow keys to see the last line or two. A full page at 300 fits nicely on the screen with the zoom set to 4.

3 Printing Using DVIWin

DVIWin can be used to send dvi files to your printer. It works fairly well with a wide variety of printers. If you click on the print command in the file menu, then DVIWin will send the dvi file to your printer. Our experience is that this is fairly slow, although the output is high quality.

One can also have DVIWin use dvips for printing. This is typically faster (and saves a trip back to the command line). Open a test file with DVIWin. Drag down the File menu and click on Print. You will get a dialogue window with Print in the titlebar. One of the options listed in this window is a box for External print. In this box, you can type:

```
c:\texmf\miktex\dvips.exe -o lpt1 -p$1 -l$2 $b
```

This will pipe the dvi file through dvips and then on to your printer (again assuming your printer is connected to the port lpt1).

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