Installation of the CTAN PMX Distribution

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1   Introduction

We assume that you have already installed a MusiXTeX distribution. Before trying to install PMX from CTAN, check whether your TeX distribution provides a package for PMX; this will be easier than doing it yourself. But if your TeX distribution doesn't have PMX (or doesn't have the most recent version), this distribution of PMX is very easy to install, though you may need to read the material on installation of (La)TeX files in the TeX FAQ[1], particularly the pages on which tree to use[2] and installing files[3].

2   Installing `pmx.tds.zip`

In this distribution of PMX, most of the files to be installed (including macros, documentation, and a processing script) are in `http://mirror.ctan.org/install/support/pmx.tds.zip` at CTAN. The file `pmx.tds.zip` is a zipped TEXMF hierarchy; simply download it and unzip in the root folder/directory of whichever TEXMF tree you decide is most appropriate, likely a "local" or "personal" one. This should work with any TDS[4] compliant TeX distribution, including MikTeX, TeXlive and teTeX.

After unzipping the archive, update the filename database as necessary, for example, by executing `texhash ~/texmf` or clicking the button labelled "Refresh FNDB" in the MikTeX settings program.

Documentation for PMX is installed under `doc/generic/pmx` in the TEXMF tree.

3   Installing `pmxab` and `scor2prt`

The next step in the installation is to install the two essential files that can't be installed in a TEXMF tree: the `pmxab` preprocessor and `scor2prt`, an executable used to produce single-player parts from multi-player scores.

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[1] `http://www.tex.ac.uk/cgi-bin/texfaq2html`

[2] `http://www.tex.ac.uk/cgi-bin/texfaq2html?label=what-TDS`

[3] `http://www.tex.ac.uk/cgi-bin/texfaq2html?label=inst-wlcf`

[4] `http://www.tex.ac.uk/cgi-bin/texfaq2html?label=tds`

3.1 Pre-Compiled Executables

On Windows systems, one can install `pmxab.exe` and `scor2prt.exe` in the `Windows` 32 bit or 64 bit sub-directories; these are pre-compiled executables and should be copied to any folder on the PATH of executables. This might entail creating a suitable folder and adding that folder to the PATH as follows: in "My Computer" click on

View System Information → Advanced → Environment Variables

scroll down to "path", select it, click edit, and add the path to the folder after a semi-colon.

On the MAC OS-X platform (version 10.2 or better), one can install `pmxab` and `scor2prt` that are in the `OSX` sub-directory.

3.2 Compilation from Source

If you have conventional GNU development tools (`tar`, `gunzip`, `make`) and gcc[5] on your platform, you should be able to build `pmxab` and `scor2prt` executables.

To build `pmxab` and `scor2prt` for your platform:

1. Unpack the `pmx-2.7.6.tar.gz` archive:

   ```
   tar zxvf pmx-2.7.6.tar.gz
   ```

   and move to the resulting `pmx-2.7.6` directory.

2. Configure:

   ```
   ./configure
   ```

   or, if you want the executables to be installed in your own path,

   ```
   ./configure --prefix=$HOME
   ```

3. Install:

   ```
   make install
   ```

   as root (admin) to install to the system path, or just

   ```
   make install
   ```

   to install in your own path.

You should now have executables `pmxab` and `scor2prt` available for use.

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[5] http://gcc.gnu.org/gcc/

4 The `musixtex.lua` Processing Script

The Lua script `musixtex.lua` is simply a convenient wrapper that, on files with extension `.pmx`, by default runs the following processes in order (and then deletes intermediate files):

- `pmxab` (pre-processing pass)
- `etex` (1st pass)
- `musixflx` (2nd pass)
- `etex` (3rd pass)
- `dvips` (to convert `dvi` output to Postscript)
- `ps2pdf` (to convert `ps` output to Portable Document Format)

There are many options to vary the default behaviour. If the `musixtex` has been properly installed on your system, you should be able to just enter the command `musixtex myfile`.

5 Discussion

Other pre-processor packages, additional documentation, additional add-on packages, and many examples of PMX and MusiXTeX typesetting may be found at the Werner Icking Music Archive[6]. Support for users of MusiXTeX and related software may be obtained via the MusiXTeX mail list[7]. PMX may be freely copied, duplicated and used in conformance to the GNU General Public License (Version 3, 29 June, 2007, see included file `gpl.txt`).

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[6]`http://icking-music-archive.org`
[7]`http://tug.org/mailman/listinfo/tex-music`