## 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 FAQ¹, particularly the pages on which tree to use² and installing files³.

## 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 <a href="http://mirror.ctan.org/install/support/pmx.tds.zip">http://mirror.ctan.org/install/support/pmx.tds.zip</a> at CTAN. The file <a href="pmx.tds.zip">pmx.tds.zip</a> 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 TDS4 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.

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

<sup>2</sup>http://www.tex.ac.uk/cgi-bin/texfaq2html?label=what-TDS

<sup>3</sup>http://www.tex.ac.uk/cgi-bin/texfaq2html?label=inst-wlcf

<sup>4</sup>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  $\rightarrow$  Advanced  $\rightarrow$  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<sup>5</sup> 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-2.7.3.tar.gz archive:

```
tar zxvf pmx-2.7.3.tar.gz
```

and move to the resulting pmx-2.7.3 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.

<sup>5</sup>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<sup>6</sup>. Support for users of MusiXTeX and related software may be obtained via the MusiXTeX mail list<sup>7</sup>. 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).

<sup>6</sup>http://icking-music-archive.org

<sup>7</sup>http://tug.org/mailman/listinfo/tex-music