MinGW Compiler

I have been using MinGW (Minimalist GNU for Windows) to build my code for Windows platform. It has changed a bit since I last used it to build a cross compiler for my class. So, I want to keep a note on how I build using latest binaries. The project has moved here.

Installing MinGW:

- Get the 'package manager' from here
  - version 0.6.3 (beta) at the moment
  - I prefer the standalone binary (no setup)
- Pick a location and extract the zip file
  - I choose `C:\Users\Public\Tool`
  - change the folder name so that we have `C:\Users\Public\Tool\mingw\bin\mingw-get.exe`
- Prepare to use mingw-get binary
  - `cd C:\Users\Public\Tool\mingw\var\lib\mingw-get\data\`
  - `copy defaults.xml profile.xml`
- Open a command prompt and update catalogue
  - `cd C:\Users\Public\Tool\mingw\bin\`
  - `mingw-get.exe update`
- Get stuffs (compiler with Unix-like environment) without using GUI
  - `mingw-get.exe install gcc g++ gmp mpfr mpc msys msys-wget-bin`
- To get GUI interface install mingw-get (apparently, we are NOT running mingw-get! 😎)
  - `mingw-get.exe install mingw-get`
  - now, a window will come up when you run `mingw-get`

Note20211207 *Current software versions {gcc:9.2.0,binutils:2.32}*

Some useful things to do:

- Get helper script(s) - I wrote that for personal use
  - copy everything (except LICENSE, README.md and msys2.vbs) to `C:\Users\Public\Tool\mingw`
  - allows environment to be used on shared computer (no need for admin account)
- Running `msys.vbs` (*Hint*: double-click) will install (or remove if already installed) a pop-up context menu entry (MinGW Shell) whenever you right-click on a folder in Windows Explorer
  - edit `C:\Users\Public\Tool\mingw\msys\1.0\etc\profile` and comment (place '#' at the beginning of) the last line with `cd $HOME` command
- To have git in MinGW shell, install Git-for-Windows at `C:\Users\Public\Tool\Git`
  - edit `C:\Users\Public\Tool\mingw\msys\1.0\etc\profile` and insert `PATH="/c/users/public/tool/git/bin:$PATH"` before the block containing an `export PATH` line(s)
- Running `mingw-setup.bat` sets up normal command prompt for command-line compilation
  - place `mingw-term.bat` script in any folder - when executed, it will open a command prompt (with MinGW path properly configured) in that folder
- Running `mingw-clear.bat` cleans up settings created by `mingw-setup.bat`

Installing wxWidgets

This is what I recommend to my students when developing cross-platform GUI solution. I now compile from source because I can never completely download the pre-built binaries... problem with my uni's network maybe? 😕

Obviously, MinGW must already be installed.

- Get the source file from here
  - since we are compiling on MinGW, get the 'source for Linux...' (I got wxWidgets-3.0.3.tar.bz2)
  - extract (can be done in MinGW shell: `tar xf <file>`)
- Compile... (***note**: '$' is the prompt*)

```
$ ./configure --prefix=/c/Users/Public/Tool/wxwidgets --disable-shared
$ make
$ make install
```

work in progress...

From:
https://azman.my1matrix.cc/ - **Azman @MY1**

Permanent link:
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