

## Using MCSim on Windows with MinGW

### Getting C compiler and command line shell MSYS

1. Download MinGW from: <https://sourceforge.net/projects/mingw/files/latest/download?source=files>
2. Run the setup file mingw-get-setup.exe
3. Select the default directory for installation C:\MinGW
4. In the Installation manager
  - a. Mark the “basic setup” for installation
  - b. Apply changes – this will take a while
5. Go to C:\MinGW\msys\1.0\etc and rename fstab.sample as fstab (without any extension)
6. Go to C:\MinGW\msys\1.0
  - a. Create a shortcut for the “msys.bat” Windows batch file and put on the desktop
  - b. Double click this icon, and it will give you a “unix” shell command line. The “home” directory is C:\MinGW\msys\1.0\home\[USERNAME]\

### Installing basic version of MCSim (WITHOUT any libraries, such as GSL)

1. Download latest version from <http://ftp.gnu.org/gnu/mcsim/> (direct link: <http://ftp.gnu.org/gnu/mcsim/mcsim-5.6.5.tar.gz>)
2. Move to the “home” directory C:\MinGW\msys\1.0\home\[USERNAME]\
3. Open the MSYS command line (if you haven’t already) and do the following:
  - `tar -xvzf mcsim-5.6.5.tar.gz`
  - `cd mcsim-5.6.5`
4. Then compile the program from the MSYS command line (the last one does some checks) [make sure you are in the directory ~\mcsim-5.6.5].
  - `./configure`
  - `make`
  - `make install`
  - `make check`

### Testing with simple models

5. From the MSYS command line, go to the perc example directory and compile the model file:
  - `cd ~/mcsim-5.6.5/examples/perc`
  - `makemcsim perc.model`
6. The new file “mcsim.perc” is the executable. Now run the program with test “perc.lsodes.in” file
  - `./mcsim.perc perc.lsodes.in`

This should create the output file: sim.out

7. You should try similarly the various examples provided to see the various types of simulations available.