# GNU-compiler (gcc-4.9.2) for MATLAB

## 1 Software

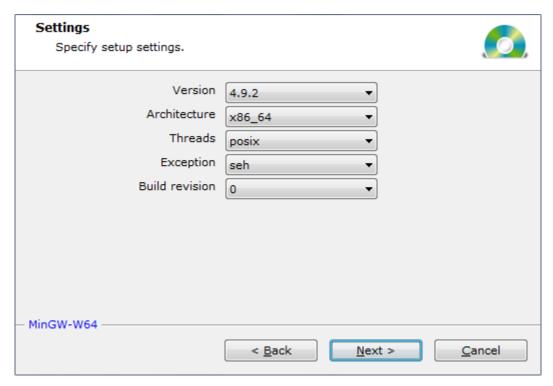
You need to download the two software packages:

- MinGW (make sure it is the w64 version, w32 wont work)
   http://sourceforge.net/projects/mingw-w64/
- gnumexhttp://sourceforge.net/projects/gnumex/

## 2 Installation

• MinGW

When installing MinGW choose following settings when prompted



to any path you like (For me C:\Software\mingw-w64\x86\_64-4.9.2-posix-seh-rt\_v3-rev0\mingw64\).

#### • gnumex

Extract the contents of gnumexX.XX.exe to a folder called gnumex. Place the folder where you want (the developer suggests to put it in the MATLAB installation directory, which I did) and add the path to this folder and all subfolders to the MATLAB path (For me C:\Software\MATLAB R2014b\gnumex2.06\).

Once gnumex is in the MATLAB path run 'gnumex' in MATLAB. In the window appearing, enter the path to your MinGW installation (the rest should already be filled out) and if necessary other values like in the picture below

and hit the 'Make options file' button (this take a while). When done gnumex (hopefully) tells you that it successfully created a options file.

<u>F</u> ile <u>H</u> elp					a a
MinGW root directory (may be blank):		C:\Software\mingw-w64\x86_64-4.9.2-po:		Browse	
Cygwin root directory (or blank):					Browse
Path to g95.exe (or blank):					Browse
Path to gfortran.exe (or blank):					Browse
Path to gnumex utilities (where gnumex.m is):		c:\software\matlab r2014b\gnumex2.06\ti			Browse
Environment / linking type:	MinGW	•	Generate m	nex dll or engine exe?	Mex ▼
Language for compilation:	C / C++	▼	Add stub (y	es if Windows 95/98)?	No ▼
Optimization level:	-03	<b>-</b>			
Path for libraries and .def files:					
C:\Users\s4pfyr\AppData\Roaming\MathWorks\MATLAB\R2014b\gnumex					
Mex options file to create:					Browse
C:\Users\s4pfyr\AppData\Roaming\MathWorks\MATLAB\R2014b\mexopts.bat					
					Browse
				Make options file	Exit

#### • mex

Once gnumex finishes successful run 'mex -setup', allow the setup to search for installed compilers and select 'gcc' in the suggested mingw64 directory, which should look similar to this:

```
>> mex -setup
Welcome to mex -setup. This utility will help you set up
a default compiler. For a list of supported compilers, see
http://www.mathworks.com/support/compilers/R2014b/win64.html
Please choose your compiler for building MEX-files:
Would you like mex to locate installed compilers [y]/n? y
Select a compiler:
[1] Microsoft Software Development Kit (SDK) 7.1 in C:\Program Files (x86)\Microsoft Visual Studio 10.0
[2] Microsoft Visual C++ 2010 in C:\Program Files (x86)\Microsoft Visual Studio 10.0
[3] gcc in C:\Software\MINGW-~1\X86_64~1.2-P\mingw64\bin
[0] None
Compiler: 3
Please verify your choices:
Compiler: gcc
Location: C:\Software\MINGW-~1\X86_64~1.2-P\mingw64\bin
Are these correct [y]/n? y
Trying to update options file: C:\Users\s4pfyr\AppData\Roaming\MathWorks\MATLAB\R2014b\mexopts.bat
From template: C:\Software\MATLAB~1\bin\win64\mexopts\GNUMEXOPTS.bat
Done . . .
```