

How to install and compile the MEX interfaces


There are three methods (alternatives) to install and use the MEX files.

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With MATLAB and `mex -setup`

This is possible if you have a C **and** Fortran compiler installed which are both supported by MATLAB. "Bind" **both** compilers to MATLAB typing

```
mex -setup
```

at the MATLAB command prompt and choose the right option files (more information can be found at the [Mathworks Support](#) ). You have to do this step only once.

To check if everything is prepared for compilation type

```
mex -v
```



If you get a list with a C-compiler (CC) and a Fortran compiler (FC) you have everything you need. Here is an example: [mexconfig.txt](#).

Then you can install a MEX Interface:

1. unpack zip-File with the interface in an empty folder
2. Start MATLAB and change to this directory
3. call "compile", i.e. type "compile" at the MATLAB command prompt
4. if there are no errors, you have got at least one `.mexsol` file (solaris) or one `.dll` file (Windows, MATLAB<7.1) or one `.mexw32` file (Windows, MATLAB>=7.1)
5. Now you have two possibilities for using the interface: Either you add the directory from 1. to MATLAB's search-paths or you copy the `.mexsol` or `.dll` and `.m` files in the directory you want to use them

With lcc-win32

This is possible if you have a Windows-PC.

1. Visit <http://www.cs.virginia.edu/~lcc-win32/>  and <ftp://ftp.cs.virginia.edu/pub/lcc-win32> 
2. Download `lccwin32.exe` (at the moment 3.9 Mb)



3. Download `fortran.exe` (at the moment 0.5 Mb)
4. Install `lccwin32.exe` (if possible **DON'T USE** spaces in your installation-path, e.g. `C:\lcc`)
5. Install `fortran.exe` at the **exact** same location (in our example `C:\lcc`)
6. unpack the zip file with the interface in an empty folder
7. change in this directory, open a editor of your choice and edit `create.bat`. You have to put in two paths (one for MATLAB and one for lcc)
8. start `create.bat` at a Dos Command Prompt (Dos-Box)
9. if there are no errors, you have got at least one `.dll` file
10. Now you have two possibilities for using the interface: Either you add the directory from 6. to MATLAB's search-paths or you copy the `.dll` and `.m` files in the directory you want to use them

With OpenWatcom 1.3

This is possible if you have a Windows-PC and your MATLAB version supports OpenWatcom 1.3. To check: go in the directory

`<MATLAB-Path>/extern/lib/win32/watcom`

If there is a subfolder `openwc13` then OpenWatcom 1.3 ist supported.

1. Visit <http://openwatcom.mirrors.pair.com/> 
2. Dowload [open-watcom-win32-1.3.exe](#) 
3. Install OpenWatcom 1.3
4. unpack the zip file with the interface in an empty folder
5. change in this directory, open a editor of your choice and edit `create_wc.bat`. You have to put in two paths (one for MATLAB and one for Watcom)
6. start `create_wc.bat` at a Dos Command Prompt (Dos-Box)
7. if there are no errors, you have got at least one `.dll` file
8. Make sure the Watcom folders `binnt` and `binw` are listed (in that order) in the PATH environment variable and start MATLAB
9. Now you have two possibilities for using the interface: Either you add the directory from 4. to MATLAB's search-paths or you copy the `.dll` and `.m` files in the directory you want to use them

Questions, Problems, Bugs

Send them to Ludwig_C@gmx.de