

# Mex File Custom App Wizard for Visual Studio.Net

## Installation

1. Copy the contents of the vcprojects folder to your <VC>\vcprojects folder, and the contents of the VCWizards folder to your <VC>\VCWizards folder, where <VC> is your Visual C++ installation, i.e.

<VC> = C:\Program Files\Microsoft Visual Studio .NET 2003\Vc7

2. Open the <VC>\VCWizards\MatMex\Scripts\1033\default.js file (it is just a text file), and change the first two lines

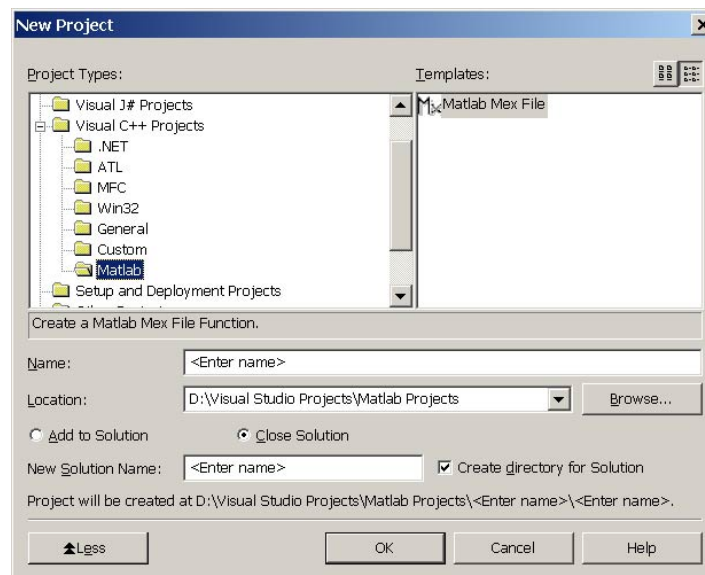
```
var MATLAB_LIB_PATH =  
    "C:\\PrograFiles\\MATLAB704\\extern\\lib\\win32\\microsoft\\msvc71";  
  
var MATLAB_INC_PATH = "C:\\Program Files\\MATLAB704\\extern\\include";
```

to point to your MATLAB installation. Note that the path uses double backslashes '\\' for directories. Save the file, and you are done! If Visual Studio is open, you may need to restart it to finish the installation.

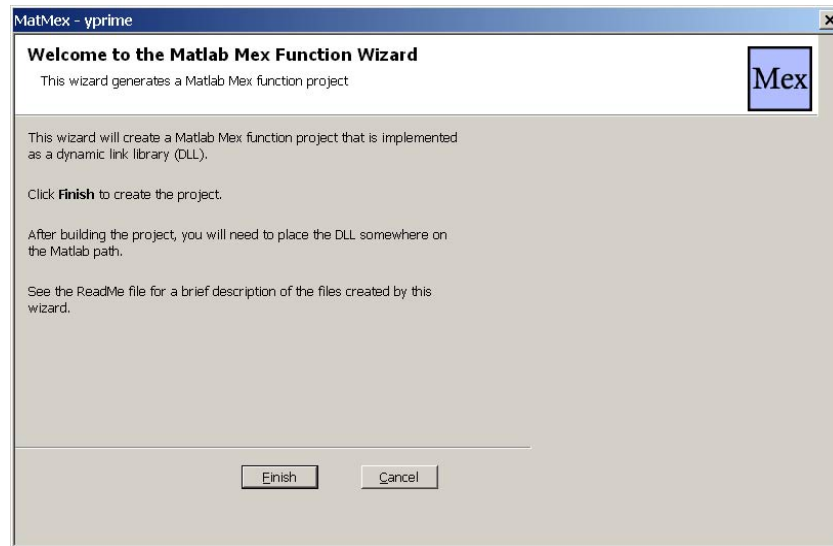
## Running the Wizard

To create a new mex-file project, choose

File | New Project | Visual C++ Projects | Matlab | Matlab Mex File



Give the project the same name as your desired mex function (e.g. yprime). Click **OK** to bring up the wizard dialog



Click **Finish** to create the project. The new project will contain the following files:

- *projName.cpp*
- *projName.def*
- *projName.vcproj*
- *DllMain.cpp*
- *stdafx.cpp*
- *stdafx.h*
- *ReadMe.txt*

The *ReadMe.txt* file contains a brief description of each of the files. The only file that needs to be edited is the *projName.cpp* file, which contains the `mexFunction` gateway. Simply add your function code, and compile. Check out the Matlab help for some example Mex-files; you should be able to just cut and paste the code into your *projName.cpp* file. The project settings are (hopefully) already set up to create a dynamic link library (DLL). After building the project, you need to copy the constructed DLL to some place that is on your matlab path.

I'm hoping to add debugging and MFC support to future versions. Comments (good/bad/indifferent) and suggestions are always welcome.

Thanks go to Peter Webb, whose Yprime package on Matlab Central first taught me how to build mex files in Visual Studio.