

Running FOCUS on Mac

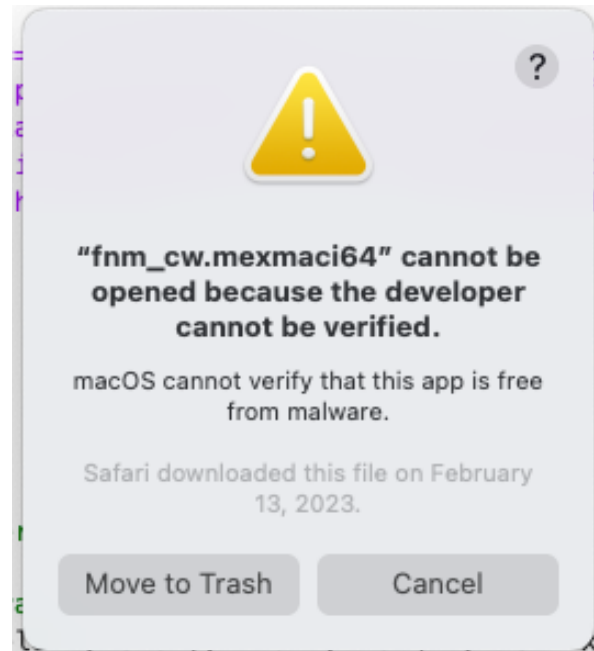
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FOCUS uses compiled Mex files for quick execution of C++ scripts. Apple doesn't like when user run pre-compiled files, since some users might run something that they shouldn't.

Therefore, there are "hoops" that Mac users must jump through in order to run compiled code. This will detail a straightforward override process.

A common warning for running compiled MEX files is below:



To resolve this, there are two solutions.

1. When a Mac user downloads a file from the internet, a "quarantine" attribute is attached to the downloaded files. Since the files are pre-compiled with this "quarantine" attribute, the Mac notices that it could be potential malware and throws the above warning. If you trust the downloaded files, you can remove these "quarantine" attributes once with the following command in the Mac terminal:

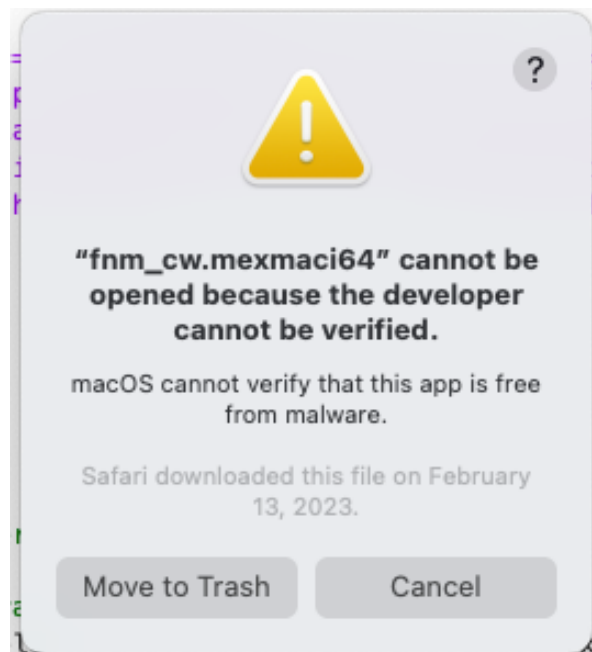
```
xattr -d com.apple.quarantine  
path/to/files/FOCUS_maci64_version/build/Core/MEX/*  
.mexmaci64
```

Replace the path/to/files with the path to FOCUS. Replace the _version with your current FOCUS version. Make sure that the above command is all one line.

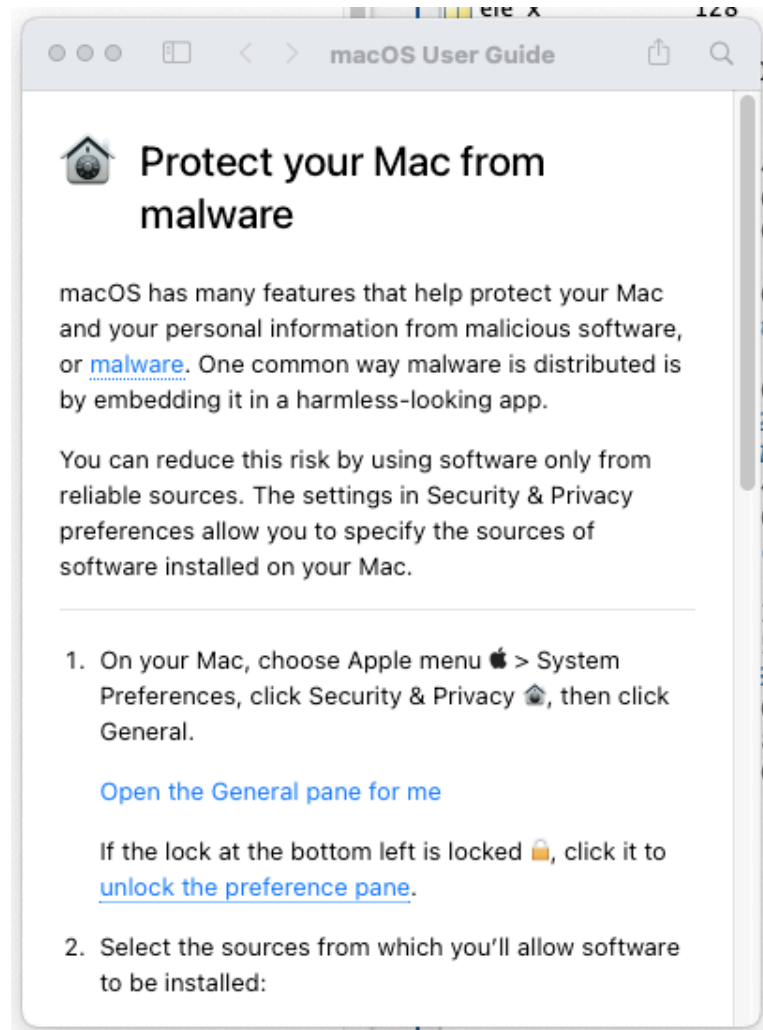
This removes all "quarantine" attributes on FOCUS Mex files, and any Mex file can now be run without warning.

2. The second approach is more tedious. We recommend the first approach due to its simplicity, but if a user prefers increased control, and only wants to allow Mex files that they are using to run, the below approach works.

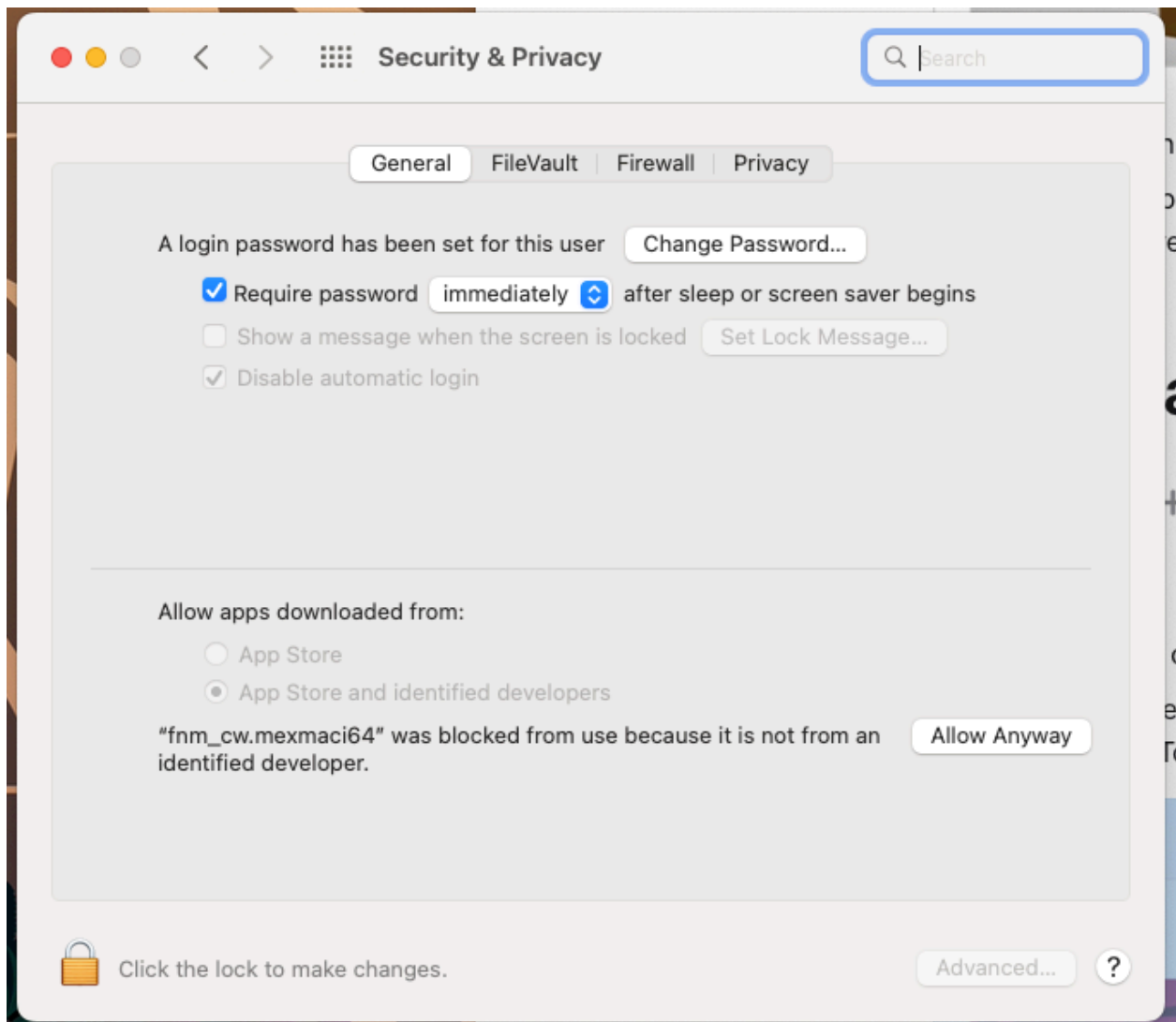
Click the question mark:



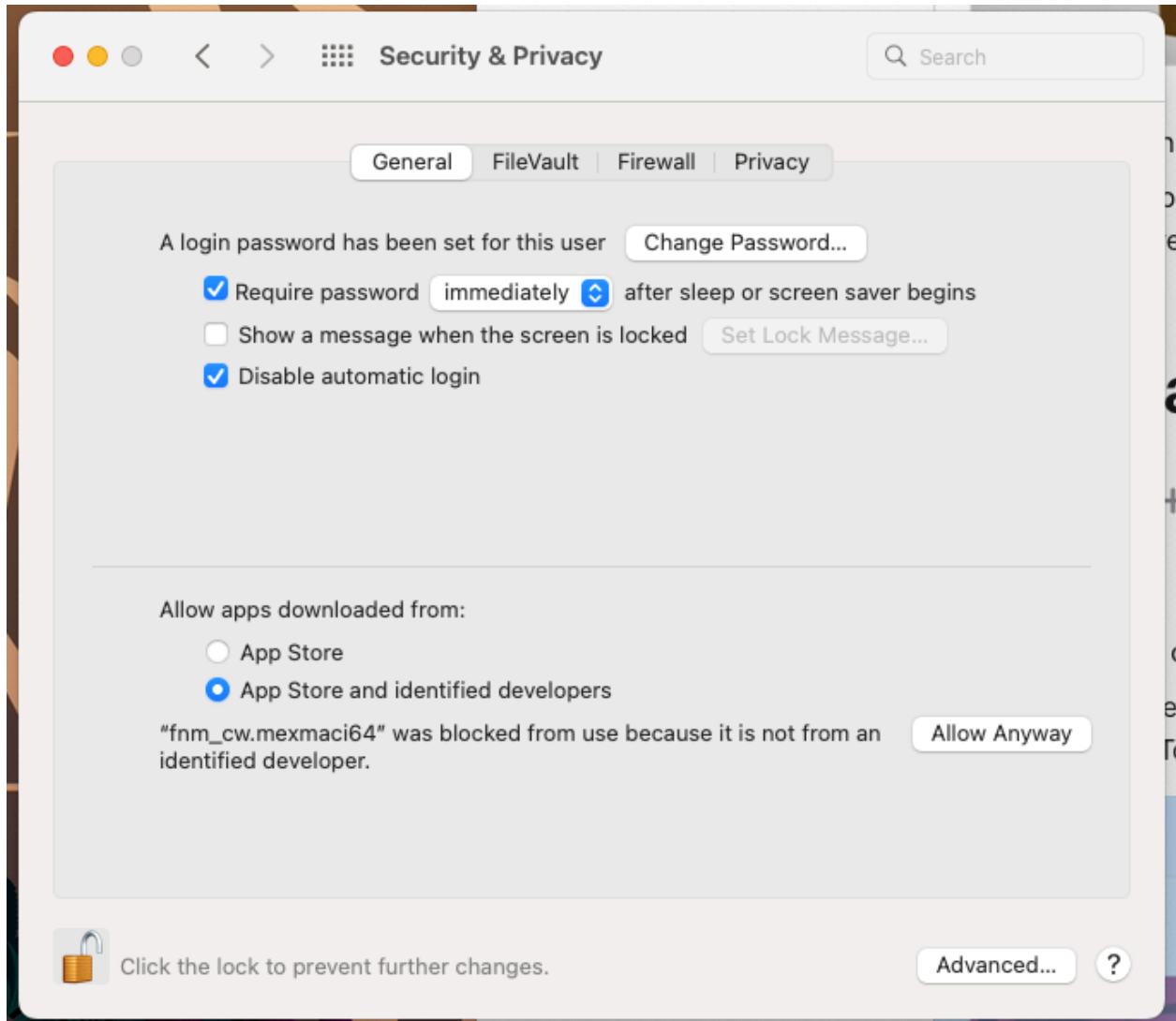
The following window will appear:



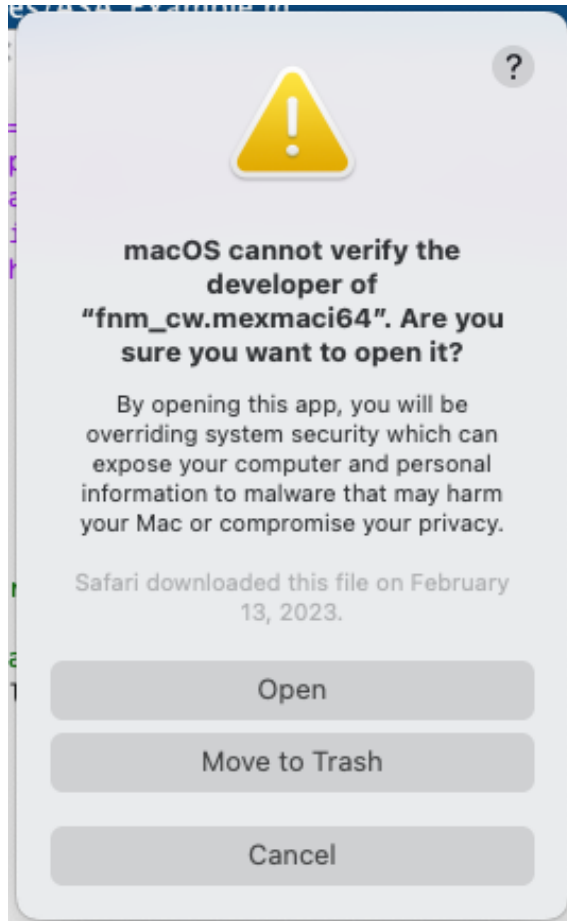
Click [Open the General pane for me](#) for me. The General pane will open for you:



Click the lock to make changes. This will require you to input your Mac credentials (login information). Then, click Allow Anyway:



Then, return to MATLAB and run your script again. When the following window appears, select Open:



After this, that Mex file should run without issue. This process would need to be repeated for all Mex files that you want to run.

Running FOCUS on Mac still requires users to set the file path in MATLAB to FOCUS. See other documentation on this.