**Installing Screamer on a Windows 10 PC**

# We need to download the MinGW64 environment. This will allow us to compile Fortran and C++ programs.

Download MinGW64 from https://sourceforge.net/projects/mingw-w64/files/latest/download

Run the downloaded executable to install MinGW64.

 In Installer, On Settings, ensure the following are selected (Where is Settings located?) Version: the latest version (this documentation was created with version 6.3.0) Architecture: x86\_64 Threads: posix Exception: seh Build revision: the latest version

Select desired destination folder then click install. (Program Files is default)

From this point forward in the documentation, INSTALLDIR refers to the location you selected above.

# Execute the batch script.

Execute the batch script located at INSTALLDIR\mingw-w64.bat.

# Go to the Directory containing your Screamer source files.

This location is up the user. It will typically be something like MyDocuments/Screamer/release\_4.2.2/src. This allows for multiple release versions of Screamer to be placed in their own directory. A run deck directory is usually placed below the release: MyDocuments/Screamer/release\_4.2.2/run\_desks. It is useful to separate the run decks from the sources.

Change directory (cd) to the screamer source code you want to compile. Another example of this is below:

cd \Users\username\Screamer\release\_4.2.2\src

# Open the Console environment in Windows 10.

Click on the terminal icon. Thjis will open a window that is a line command emulator (like a usual LINUX environment or the MacOS Terminal).

# Compile and Link Screamer in the Terminal Environment. The following lines can be copied and pasted into the line commands separately but you can create a .bat file that can be run as a unit.

del /F /S /Q \*.o del /F /S /Q \*.a gfortran.exe -c -O04 \*.f ar.exe crv screamer.a \*.o del /F /S /Q \*.o ranlib.exe screamer.a g++.exe -c cprog.cpp g++.exe -o screamer.exe cprog.o screamer.a “INSTALLDIR\mingw64\lib\gcc\x86\_64-w64-mingw32\6.3.0\libstdc++.dll.a”

-lgfortran

Note, you may need to adjust the version in the path to libstdc++.dll.a in the above command. In my installation, the gcc version was 6.3.0

# Place a copy of the executable in the working directory containing your run decks.

CD to the run deck directory. You can run Screamer at this point by typing:

./screamer64.exe

# Screamer will respond with a request to enter the file name of the run deck.

At this point everything is fully functional.