

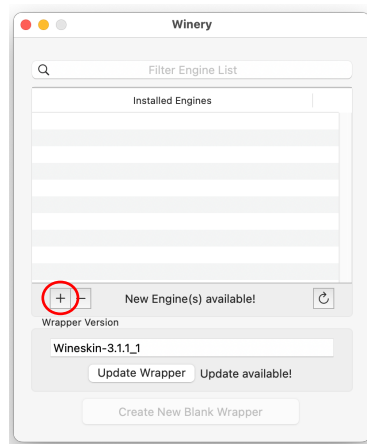
The ExHAMiner software is designed to run on Microsoft Windows. There is not a version available for the Mac. However, using a program called “Kegworks*” you can run some Windows programs on a Mac†. ExHAMiner works well on a Mac when using “Kegworks”.

Follow these instructions on your Mac if you want to run ExHAMiner on a Mac. It seems like a large number of steps, but it is not difficult if you follow them carefully:

1. Download the latest ExHAMiner from Radio Amateurs of Canada.

ExHAMiner comes as a zipped MS-Windows executable. Unzip it to a temporary folder, which will yield the ExHAMiner.exe file. Be sure to also download a zipped question bank for ExHAMiner and unzip it to the same folder.

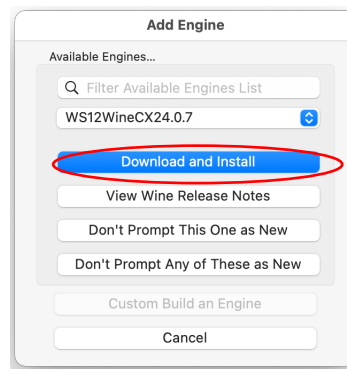
2. Install “Kegworks”. See <https://github.com/Kegworks-App/Kegworks>. Follow the instructions there to install the program on you Mac.
3. Run the Kegworks application. This app allows you to create "Wrappers", which will allow you to run your Windows software via a Mac-style package. But first, a dialogue box like this will appear:



* There was a program called “Wineskin Winery” that was used in the past. It has been replaced by Kegworks.

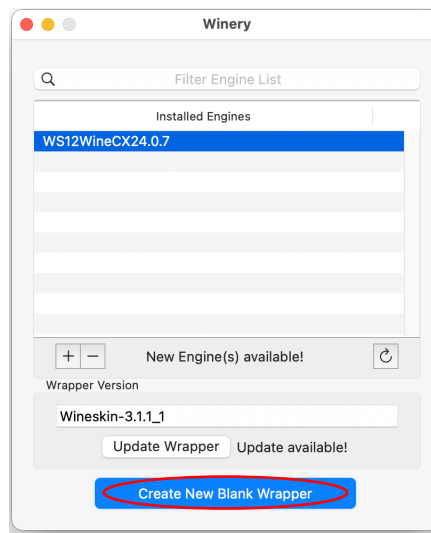
† This will work on both Intel-based Macs and Apple-silicon-based Macs.

You will need to install an “engine” – which is essentially the set of programs which will allow a Windows program to run on a Mac. Click on the plus-sign (circled in red above) under the area entitled “Installed Engines”. The following “Add Engine” dialogue box appears.

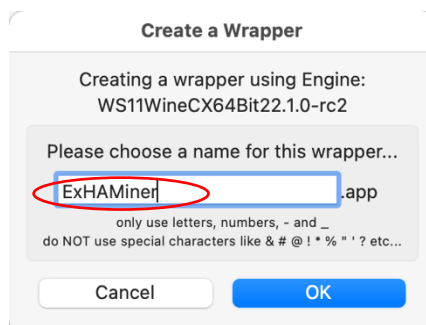


Simply press the “Download and Install” button and press OK when the “File Downloader” dialogue box appears. Doing so will download and install the engine.

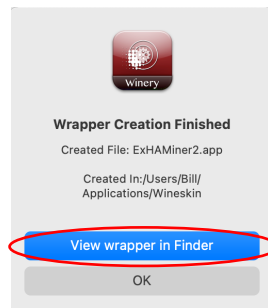
4. After the engine is downloaded and installed, Kegworks will look like this:



Press the “Create New Blank Wrapper” button (circled above). A dialogue will appear where you should give your wrapper a name (e.g. “ExHAMiner”), and press the “OK” button:



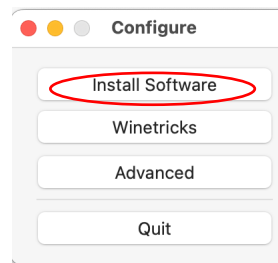
- When Kegworks is finished creating the wrapper (which could take a few minutes), the following dialogue box will appear.



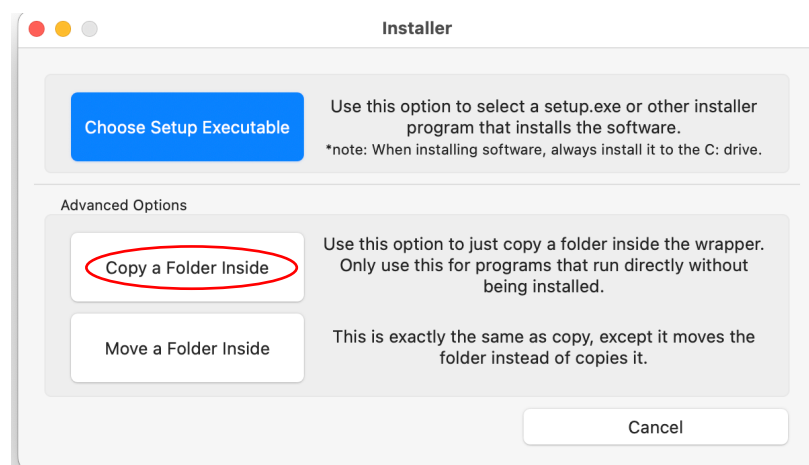
Choose "View wrapper in finder". A finder window will open to reveal a Mac app with the wrapper name you have chosen, e.g. "ExHAMiner". (The folder will be in the "Applications/Kegworks" subfolder of your user directory.)

Note: You can close the "Kegworks" program at this point. You'll now need to configure the wrapper to use the "ExHAMiner.exe" Windows program.

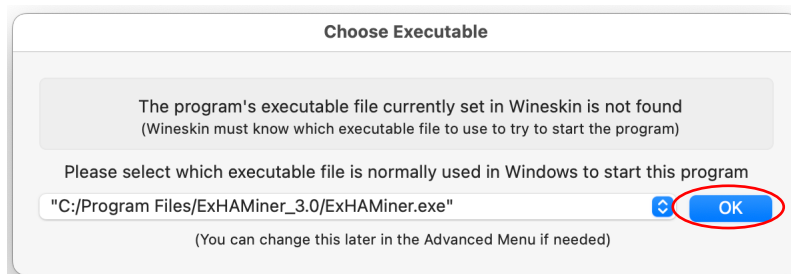
- Double click on the wrapper program (e.g. "ExHAMiner", or whatever you named it two steps ago). The following dialog box will appear.



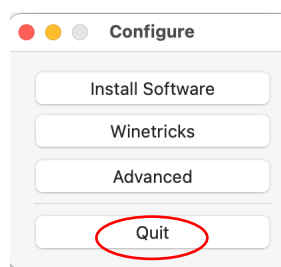
- Press the "Install Software" button. The following dialogue box will appear, and you should press the "Copy a Folder Inside" button:



You should browse to the folder from step #1 above (i.e. where the “ExHAMiner.exe” file exists). A dialogue box appears as follows:

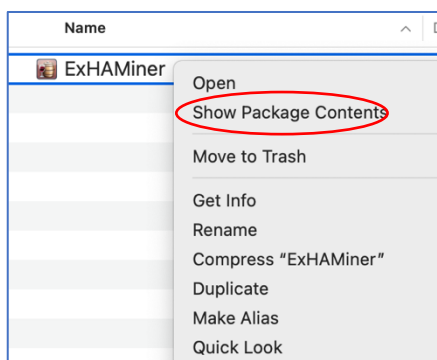


This is a confusing dialogue box. But just press the OK button. You’ll be brought back to the following dialogue box:



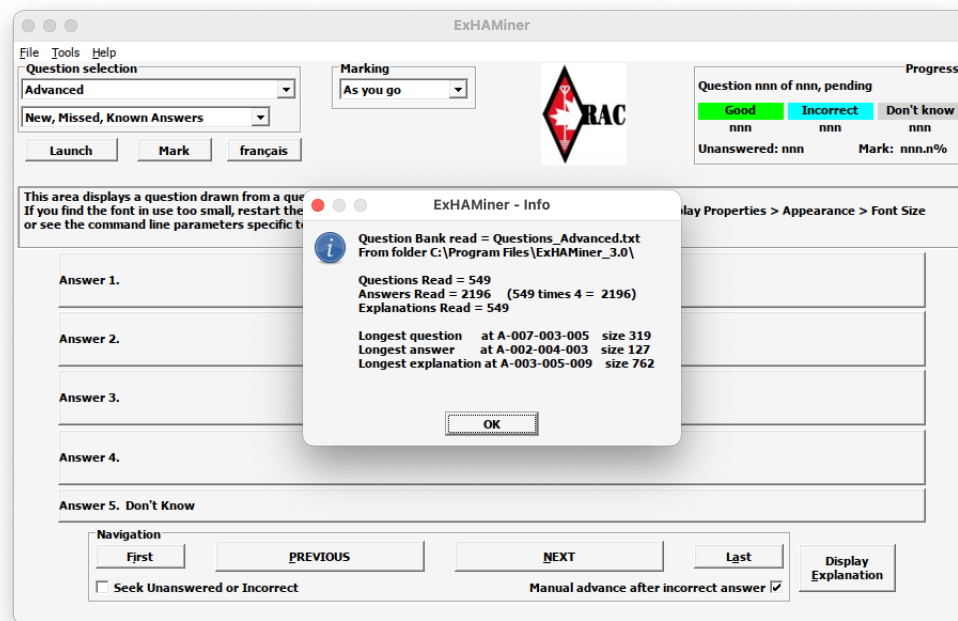
8. Now just exit Kegworks by pressing the Quit button.
9. You will need a “question bank”, i.e. a list of questions, when using ExHAMiner. There are two question banks that you may want to use: “Questions_Basic.txt” (for the Basic certification) and “Questions_Advanced.txt” (for the Advanced certification). Once you obtain one or both of those, they need to be added to the directory where you installed the ExHAMiner program within the Kegworks wrapper. It sounds confusing, but it is not:

You should already be in the Applications/Kegworks subdirectory of your user folder – i.e. where the “ExHAMiner” Mac Application (wrapper) is located. Right click on the ExHAMiner Mac application and choose “Show Package Contents”. Then click down to the “Contents / drive_c / Program Files / ExHAMiner_3.0 directory. You should see a copy of the “ExHAMiner.exe” Windows program there.



Put the “Questions_Basic.txt” (for the Basic certification) and/or the “Questions_Advanced.txt” (for the Advanced certification) into that directory beside the ExHAMiner.exe Windows program.

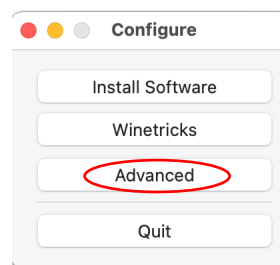
10. Return to the “Applications / Kegworks” subdirectory of your user folder. You can now run ExHAMiner by simply double-clicking on the ExHAMiner wrapper program in the “Applications/Kegworks” subdirectory of your user folder to start the program. It takes 5-10 seconds to start up:



INCREASING THE FONT SIZE:

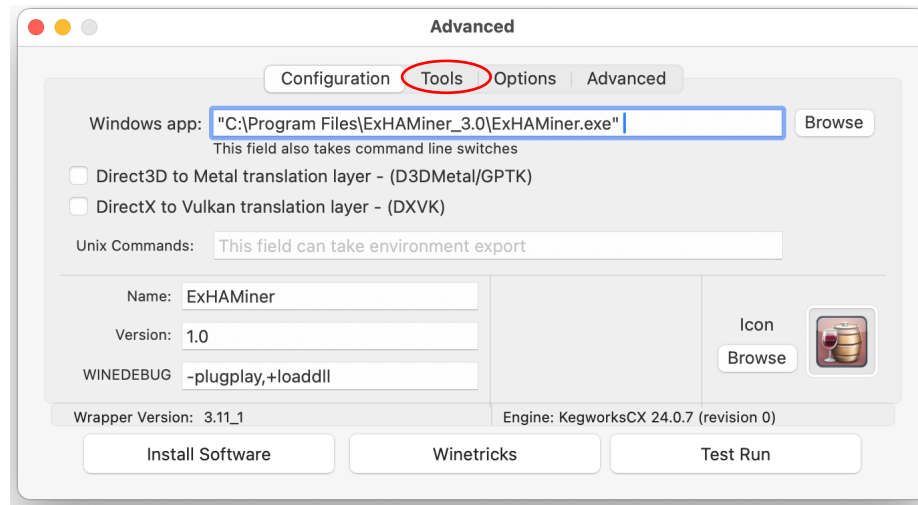
One minor problem with running ExHAMiner on a Mac is that the font may appear too small. If that is an issue for you, just do the following after installing and getting ExHAMiner working:

1. Go to the “Applications/Kegworks” subfolder of your user directory (as mentioned above).
2. Right click on the ExHAMiner wrapper program and choose “Show Package Contents”.
3. Apps on a Mac are really contained within a directory tree. The previous step opens that directory in the Finder. Go to the “Kegworks” subdirectory and you’ll see a “KegworksConfig” executable. Double click on it.
4. You’ll see the dialogue box as follows:



Press the “Advanced” button.

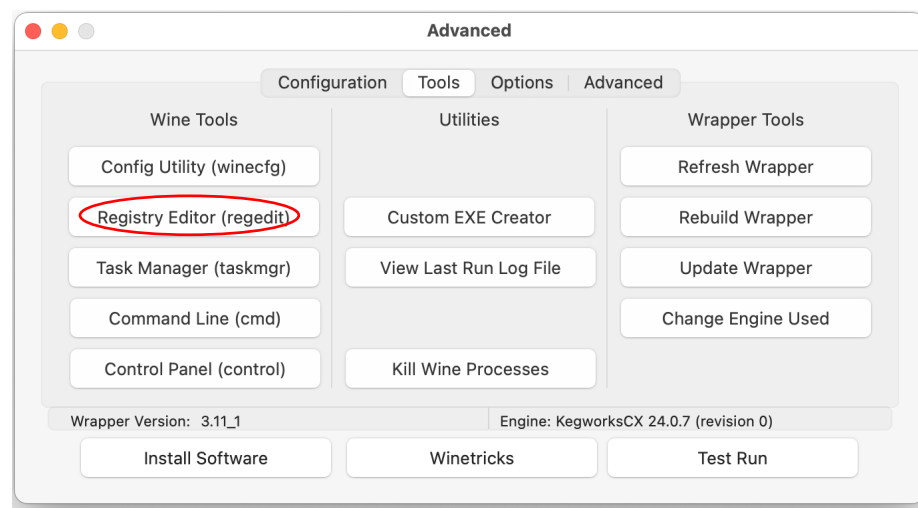
5. A window like the following will appear:



Press the “Tools” tab at the top.

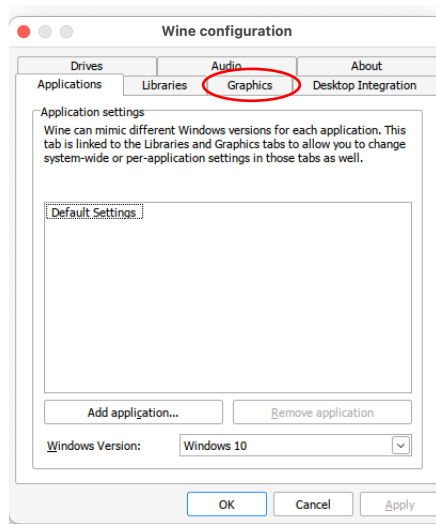
6. The window will now look like this:

7.



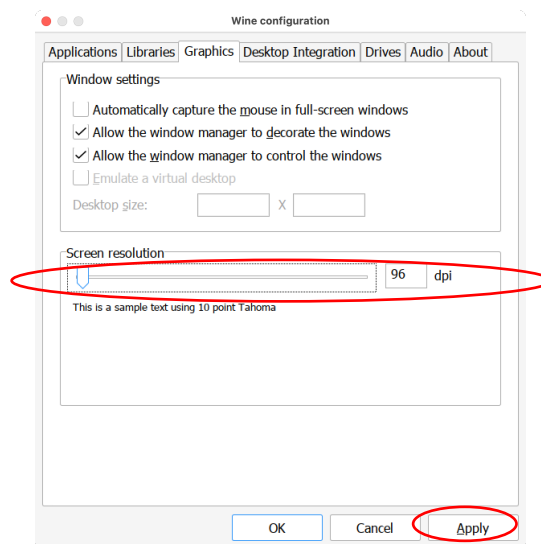
Press the “Config Utility (winecfg)” button.

8. It takes a moment, but eventually the following window will appear:



Click the “Graphics” tab at the top.

9. The window will now look like this:



Pull the “Screen resolution” slider so that it shows as 144 dpi (that is the resolution that works well for me, but you can choose any screen resolution that you are comfortable with).

10. Press the “Apply” button and press the red dot at the top of the screen to close it.
11. The window from step #7 above still exists. Close it by pressing the red dot at the top of the screen.

Now when you double click on the “ExHAMiner” wrapper program the font will appear larger.