

EQS 6.2 for Mac Installation Guide

Multivariate Software, Inc.

(2013-11-12)

Download the Install Package

Go to <http://www.mvsoft.com/eqsdownload.htm>, click on [*installation file*] related to EQS 6.2 for Mac to download. You will see the Download window popup and the file *EQS62SetupMac.pkg.zip* starts to download. Once the install package is completely downloaded, it is converted into *EQS62SetupMac.pkg* automatically.

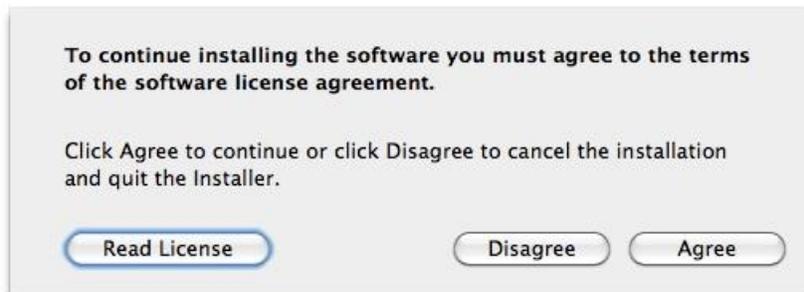
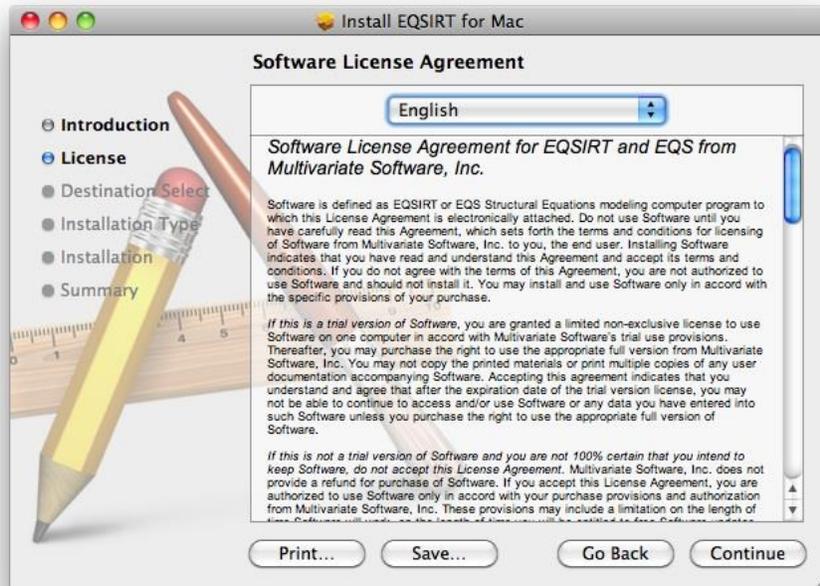
Install EQS 6.2 for Mac

Double click on *EQS62SetupMac.pkg* to initiate the install process. (note: pictures in this document are not correct and subject to be replaced in the future. Anything referring to EQSIRT in this document is meant to be EQS 6.2). You will see the startup screen as the one shown below.



Click the *Continue* button to continue. You will be prompted a license agreement screen. You should read through the agreement to make sure that you agree with terms and conditions before you proceed. If you determine that you cannot abide the conditions set forth by this agreement, you should quit this setup process and arrange a refund for your purchase.

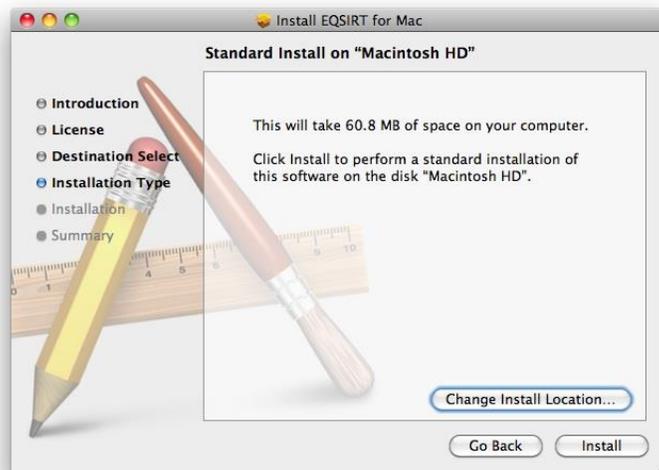
By proceeding with this installation process, you have implicit and explicit agreed with the license agreement. Next two screen shots are examples of what you will see on license issue.



Of course, you have to agree to continue. Next you will be asked to confirm where EQS 6.2 will be installed. By default, it will install into your hard drive. You will click on the **Continue** button on Select a Destination screen.



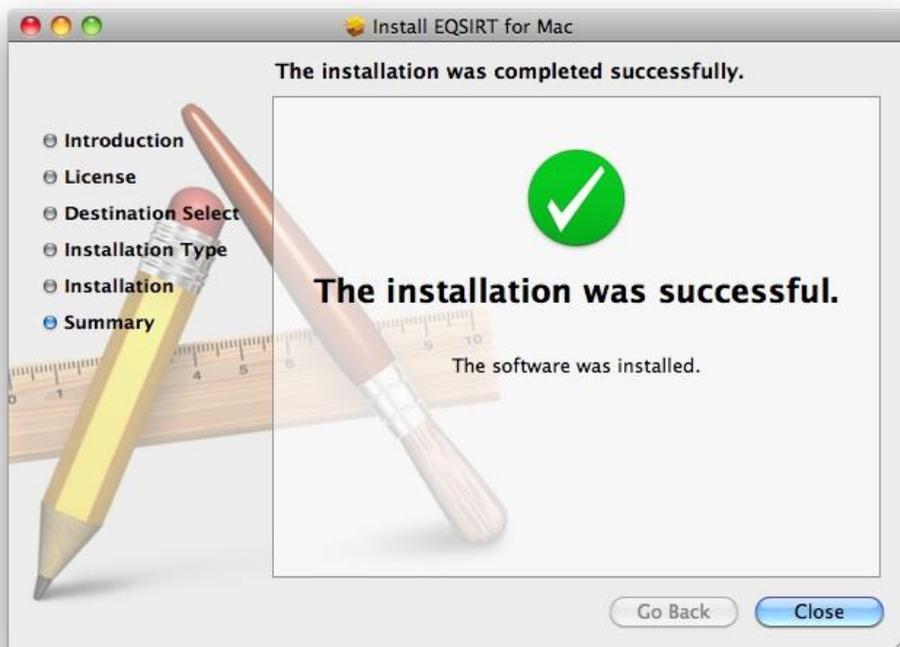
Subsequently, you have the chance to change the destination of the install files.



After the destination of all EQS 6.2 files is determined, you will be asked for the password of your computer. This is the security feature built into your Mac. Enter your password and click the OK button.



The EQS 6.2 installation package will start to unpack files and copy them to your hard drive. By default, all EQS 6.2 files are copied to **/Applications/EQS62** folder. *The installation was successful* screen will appear. This concludes the file preparatory stage of the installation. You are ready to enter your license number. You are given a license number when you purchase the program. The license number needs to enter into the program so that it becomes functional.



Configure EQS 6.2 for Mac License

EQS 6.2 for Mac installation procedure only copies program and examples to **/Applications/EQS62** folder. It does not enter appropriate license information into the

command file in order for the program to work. Here are the procedures how you enter the license number.

- 1) Go to UNIX command window and enter “cd /Applications/EQS62/pgm” and press the ENTER key. You will be taken to the target folder.
- 2) Enter the command “./EQS62MacLicense.app ser=xxxxx” then press the ENTER key. The “xxxxx” is the 18-digit license number that you received from Multivariate Software, Inc.
- 3) You will be notified “EQS 62 Setup Successfully” if the setup is complete. Two files are created as the result of this installation. The “runeqs” is the UNIX command script to simplify the running of EQS. The “runeqs.r” is the R script allows you to paste it to the R console to run EQS. Their details will be illustrated in next section.

Run EQS 6.2 for Mac as an Unix program

You are ready to run your EQS program from the system. This requires you to open a terminal window by clicking *Terminal* from **/Application/Utilities** folder. Once you are in the terminal mode (it is a unix command window, for those who does not familiar with unix commands, please ignore the “\$” since it is the unix system prompt and you don’t have to type it).

Option 1: Using Native UNIX commands

Enter the following two commands

```
$ cd /Applications/EQS62/Examples
$ /Applications/EQS62/pgm/eqs62mac.app in=manul3.eqs out=manul3.out len=2000000
ser=xxxxxxx
```

Please note the “xxxxxxx” is your 18-digit license number (without spaces). On finishing the command, you will have to press the **ENTER** key to launch the program.

If you are not familiar with the Unix system, the first command “cd /Applications/EQS62/Examples” will take you to “/Applications/EQS62/Examples” folder. Please note that the “cd” command (stands for Change Directory) and the folder “/Application/EQS62/Examples” has a space character in between them. We do this because all the EQS examples files are installed in the “/Applications/EQS62/Examples” folder. We just make this folder as the default folder for easier to work with. If your data and model files are stored in “/users/myaccount/eqs_project” folder, you will issue

```
$ cd /users/myaccount/eqs_project
```

Note: the dollar sign “\$” is the system prompt and you do not need to enter it in your command.

The second command “/Applications/EQS62/pgm/eqs62mac.app in=manul1.eqs out=manul1.out len=2000000 ser=xxxxxxxxxxxxxxxxxxxxx” is to run the EQS program (eqs62mac.app, and it is stored in /Applications/EQS62/pgm folder) with the following input arguments

IN= the input model file name. This input file is usually created with .eqs extension.
OUT= the output file name
LEN= internal working space. You start with 2000000 and can be increased if needed
SER= a 18-digit license number without spaces.

You have to enter this command every time you run the EQS program. Of course, you should specify the appropriate input model and output file names.

Option 2: Using UNIX Shell Script

An UNIX command file “runeqs” is installed in /Applications/EQS62/pgm folder. The command file has following lines

```
#  
# Command to run EQS 6.2 for mac  
#  
/Applications/EQS62/pgm/eqs62mac.app in=$1.eqs out=$1.out len=2000000 ser=xxxxxx
```

As you can see, the license number has been inserted when this file is created during license initialization process. To run EQS, you first go the folder where your EQS model and data file reside and enter the command

```
$ /Applications/EQS62/pgm/runeqs manul3
```

where “manul3.eqs” is your EQS input model file. The program will run and the output file is stored in manul3.out.

Option 3: Using R Package

The R statistical computing project (i.e. <http://www.r-project.org/>) provides a rich set of environment for statistical computing. One of the benefit of R is it can launch any program from its console window. We take advantage of this capability and use it to run EQS 6.2 for Mac. Unlike previous two options, this method allows us to work with EQS input model files, output files and running the program without the need of using any native UNIX commands. This method is not for everyone. For those who are more technical savvy and/or knows R, this is a good alternative.

First of all, you have to download and install R for Mac. Using its built editor, you can open a R script run_eqs.r (this R file is also installed with your EQS 6.2 for Mac in the program folder). It has following lines:

```
##  
## R SCRIPT FOR RUNNING EQS 6.2 FOR MAC  
##  
## SET DEFAULT WORKING FOLDER  
setwd("/Applications/EQS62/pgm")  
##  
## SYSTEM COMMAND TO LAUNCH EQS 6.2 FOR MAC
```

```
system("./eqs62mac.app in=/Applications/EQS62/Examples/manul3.eqs  
out=/Applications/EQS62/Examples/manul3.out len=3000000 ser=xxxxxxx")
```

As you can see, the license number has been inserted in position during license initialization process. This R script shows you how to

- 1) change your default working folder to /Applications/EQS62/pgm where the EQS 6.2 for Mac program (i.e. eqs62mac.app) is installed.
- 2) It also shows you how to specify the R system command to launch EQS as well as how to specify the input model file and the output file.
- 3) What you need to do is to copy this script entirely and paste it to the R console and press the enter key, You will see EQS iterative information displayed on the console until the model is done. You can use the R program to open the output file.

Let's say, if you want to run an EQS model from a different folder, how you customize the R script? Let's assume your target EQS folder is /users/myaccount/eqs_project, the R script would be

```
setwd("/users/myaccount/eqs_project")  
##  
## SYSTEM COMMAND TO LAUNCH EQS 6.2 FOR MAC  
system("/Applications/EQS62/pgm/eqs62mac.app in=model.eqs out=model.out len=3000000  
ser=xxxxxxxxxxxxxxxxxxxxxx")
```

Please note that the serial number has been replaced with a correct one. Paste the entire script to the R console and press the enter key. Your model will be estimated.