

ASReml 4 Mac Installation Guide

This implementation was produced under Mac OS X version 10.7 Lion (Darwin 11.0.0) and should be compatible with other similar Mac OS X version.

- This software is not suitable for the PowerPC architecture.

Files Included in the Installation

The program is provided as a disk image (dmg) file, comprising binary executable images of the latest version of ASReml, along with documentation and examples.

The files are distributed between 3 folders and include among others:

bin\asreml.sh	shell script to invoke the program
bin\asremlv.vxx-32	32-bit exe file, version v.v, build xx (e.g. asreml4.1lr-32)
bin\asremlv.vxx-64	64-bit exe file, version v.v, build xx
bin\myowngdg.f90	example Fortran source for OWN variance structure
doc\ASReml.htm	HTML Help files (view in normal browser)
doc\UserGuide.pdf	Principal source of reference
doc\UpdateR4.pdf	Description of changes from previous versions
doc\pedigree.pdf	Description of pedigree options
examples*.*	Data and input files for examples contained within the User Guide

1. To download ASReml, go to the ASReml Knowledge Base <https://asreml.kb.vsnr.co.uk/knowledge-base/asreml-download>
2. Download ASReml 4 for MacOSX.



Mac installations

1. Download the Mac installation notes are [here](#).

Download	Version Number	Date published	Support Version	File Size
MacOS	v4.1.0.2132mx	30 September 2018	1809	17.9 MB

Installing ASReml 4

1. By default the downloaded file will be stored in your Downloads folder and will have the extension .dmg. Double-click `asrem1_4x.x.x.dmg` to launch the interactive welcome screen.



2. Drag the ASReml folder icon over the Applications folder icon then wait a few seconds for the Applications folder on your Mac to open. Drop the ASReml folder into the Applications folder to copy the files to this location.

Installing to Another Location

If you do not have permissions to save ASReml into the Applications folder you can save the ASReml folder to an alternative location.

1. Right-click the ASReml folder on the welcome screen and select Copy.
 2. In Finder, paste the ASReml folder into your Home directory or personal Applications folder.
 3. Open the ASReml folder and navigate to `/current/bin/` then open and edit the `asrem1.sh` file so that `ASREML_DIR` is set to the location of your installation.
 4. Create an alias (as described in the next topic) but set the custom location as appropriate.
 5. After you have requested and received your ASReml license key (`asrem1.lic`) you will need to save this in your custom location.
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Setting up an Alias

ASReml is currently provided with a command line interface for use in Terminal. It is intended to be used as a batch program running pre-prepared command files. ASReml should be invoked via the shell script supplied in /Applications/asrem1/current/bin/asrem1.sh. A convenient way of setting this up is via an alias.

The `alias` command creates an alias for the ASReml launch script. This enables you to run the application from any location by typing the command `asrem1` rather than typing the full file path.

1. Open a Terminal window. You can do this by navigating to Applications/Utilities and double-clicking Terminal.
2. In the Terminal window type the following command (replace <your_user_name> with the appropriate directory name):

```
alias
asrem1=/Users/<your_user_name>/Applications/asrem1/current/bin/asrem1.sh
```

You will need to add this alias instruction to your profile script so that it runs each time you startup ASReml.

Requesting a License Key

If you have a valid existing license key you can ignore this section and skip to the next topic, *Verifying the License*.

1. In the Terminal window type the following command:

```
asrem1
```

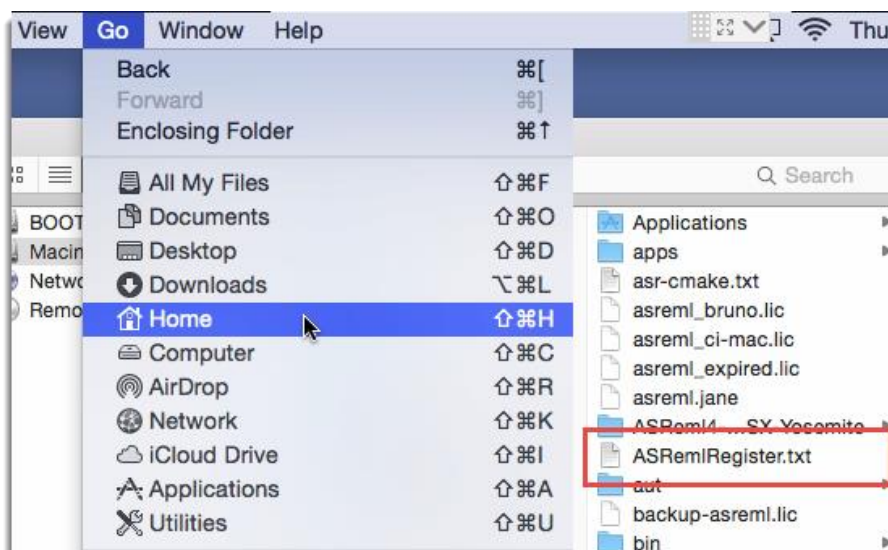
This launches the ASReml application, which will then attempt to find a license key file. When it does not find one it will create a file called ASRemlRegister.txt in your current location.

The output will be similar to the following:

```
ASReml 4.1 [28 Dec 2014] mv [29 Nov 2017] 24 Jan 2018 14:49:53
Generating a registration file...

Please complete your details in ASRemlRegister.txt and
submit by email to the address below.
```

2. Open and edit the ASRemlRegister.txt file, updating any empty fields, then send it to support@vsni.co.uk. We will then send you a license key.



3. The license email will look similar to the following:



4. Right-click the `asreml.lic` file attached to the email and **Save As** a `.lic` file in your Home directory.

Verifying the License

1. To verify that the `asreml.lic` file is in the correct location, open a Terminal window and type the following command (replace `<your_user_name>` with the appropriate directory name):

```
file /Users/<your_user_name>/asreml.lic
```

```
[ci-mac:~ ci]$ file /Users/ci/asreml.lic
/Users/ci/asreml.lic: ASCII text
```

If the license file is not in this location you will see a response like "No such file or directory". Put the file in your Home directory before continuing.

2. Now verify that the license is accepted. Type the following command:

```
/Users/<your_user_name>/Applications/asreml/current/bin/asreml.sh
```

```
[ci-mac:~ ci]$ /Users/<your_user_name>/Applications/asreml/current/bin/asreml.sh
ASReml 4.1 [28 Dec 2014] mv [29 Nov 2017] 26 Jan 2018 11:57:01
Registered to: VSN International Ltd.
Serial Number: [REDACTED] expiry: 30-sep-2018
Working Folder is: /Applications
ls: *.as: No such file or directory
ASReml Command prompt: -[options] [path/]AS_file [arguments]
```

The output will show who the license is registered to and the serial number.

Running ASReml

1. You can now test the installation by running an example. Type the following command to navigate to the functional folder:

```
[ci-mac:~ci$ cd /Users/ci/Applications/asreml/current/examples/functional
```

2. Now run the barley example by typing the following:

```
asreml barley
```

```
ci-mac:functional ci$ asreml barley
```

```
ASReml 4.1 [28 Dec 2014] mv [29 Nov 2017] 26 Jan 2018 12:58:23
```

```
Registered to: VSN International Ltd.
```

```
Serial Number: 402084402, expiry: 30-sep-2018
```

```
>>>> >>>> >>>> >>>> ASReml Started U+S=T 0.03
```

```
ASReml 4.1 [28 Dec 2014] Slate Hall example
```

```
Build mv [29 Nov 2017] 64 bit Macintosh 64-bit
```

```
mv [29 Nov 2017] 32 Mbyte barley1
```

```
Univariate analysis of yield
```

```
Summary of 150 records retained of 150 read
```

```
Forming 26 equations: 26 dense.
```

```
Notice: Specify !SIGMAP to allow the Sigma parameterization
```

```
Predict Design Done
```

```
1 125 -739.68 36034.
```

```
LWAGR
```

```
>>>> >>>> >>>> >>>> Iteration complete U+S=T 0.02
```

```
1 LogL=-739.681 S2= 36034. 125 df : 1 components restrained
```

```
>>>> >>>> >>>> >>>> Iteration complete U+S=T -0.01
```

```
2 LogL=-712.438 S2= 27792. 125 df
```

```
3 LogL=-702.868 S2= 30117. 125 df
```

```
4 LogL=-700.601 S2= 35000. 125 df
```

```
5 LogL=-700.327 S2= 38372. 125 df
```

```
6 LogL=-700.323 S2= 38713. 125 df
```

```
PVALS 1258. 1501. 1405. 1413. 1514.
```

```
1553. 1379. 1476. 1275. 1213. 1343.
```

```
1455. 1658. 1298. 1456. 1297. 1499.
```

```
1512. 1654. 1674. 1518. 1605. 1311.
```

```
1587. 1592.
```

```
7 LogL=-700.322 S2= 38751. 125 df
```

```
column AR_R 1 0.683770 0.683770 10.80
```

```
row AR_R 1 0.458575 0.458575 5.55 0 P
```

```
8 mu 1 12.8 851.12 <.001
```

```
6 variety 24 80.0 13.04 <.001
```

```
Finished: 26 Jan 2018 12:58:24.251 LogL Converged
```

```
Finished: barley1
```