

# How to install jems V4 on Mac OSX

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June 19, 2020

## 1 Procedure

### 1.1 Download

Download jemsMacOSX from [http://www.jems-saas.ch/home/jemsV4\\_8830u2020.htm](http://www.jems-saas.ch/home/jemsV4_8830u2020.htm).

### 1.2 Unzip

Download and unzip **jemsMac.dmg.zip** in order to get the install .dmg. Open the dmg to access folder **jemsMacOSX** and copy it to /Applications. Administration rights may be required. Open folder /Applications/**jemsMacOSX** and drag the application **jemsMacOSX.app** to the desktop or the **Dock**. You will have to weaken the security the first time you start jemsMacOSX (System→Preferences→Security)

### 1.3 Setting jems preferences

Start jems and select menu **Parameters**, menu item **Preferences** to open **jems Preferences dialogue**. The preferences are described in file **jemsPreferencesSelection.pdf** of folder **/Applications/jemsMacOSX/pdfFiles**.

In order to send the license request it is necessary to set several preferences found in these tabs:

- **Debug**

- **Debug options:** in case of problems select checkbox **License** in order to have more info displayed in the console frame.
- **Number of cpu's:** this number should be set to 8 for Intel i7 4 cores hyperthreading, 4 to Intel i5 2 cores hyperthreading, etc. When hyperthreading is not available select the number of cores.

- **Mail**

- SMTP server: your company out going mail server.
- From: your email address.

- **Microscope**

- Preferred microscope.
- Transfer function range (0 to 20 will plot the transfer function, the aberrations figure, ... to 0.5 Å).

- **Miscellany**

- **Default crystal:** the crystal that is opened when jems starts. When not selected an error message is displayed<sup>1</sup>.

**Do not forget to save the selected preferences (checkbox **Save**).** The preferences are saved in folder  $\sim$  /*jems* and are loaded when jems is started again.

Close jems and start it again in order to verify the preferences.

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<sup>1</sup>When the license code and serial number are not yet provided only a cubic crystal can be set as default crystal.

## 1.4 Request the license code

When preferences are set, select menu **Help**, menu item **License**. Select tab **Request** and push **Request** button to display the license request dialogue (Fig. 1).

Very often you have to use **SSL** (Secure Sockets Layer or Transport Layer Security) in order to send the license request email. In case SSL doesn't not work as expected you can copy/paste the content of the dialogue in a regular mail (to be addressed to jems.stadelmann@gmail.com).

Secure mail

Use SSL

SSL login : Put your email login here

SSL password : Put your email password here

From : jems.stadelmann@gmail.com This should be set when Preferences "Mail" are set.

To : jems.Stadelmann@gmail.com

Cc : jems.stadelmann@gmail.com

Subject : jems license request

SMTP server : smtp.gmail.com SMTP port : 465

Name : Your family name  
First name : Your first name  
Title :  
Company :  
Street address :  
City :  
ZIP code :  
Country :  
E-mail :

Do not change this info

The serial and license code will be provided by jems-saas after receiving the license request

-----> jems license <-----  
Do not edit the following lines)  
date : Wed Jun 10 16:18:25 CEST 2015  
platform : Mac OS X  
hostname : iMac.local  
unique ID : DGKLN0HQF8JC  
version : 4.3010U2015  
serial : to be generated by jems-saas  
license : to be generated by jems-saas  
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Mail status

Close Send

Figure 1: The dialog used to request a serial and license code.

## 1.5 Setting the serial and license code

After receiving the serial and licence code (e-mail from jems.stadelmann@gmail.com) introduce these infos in the dialogue shown in Fig. 2. The license code can be copy/paste. Take care the license code is case sensitive and letters l (small caps "L") and I (large caps "i") looks very much identical. In case of doubt, change the font to "Courier".

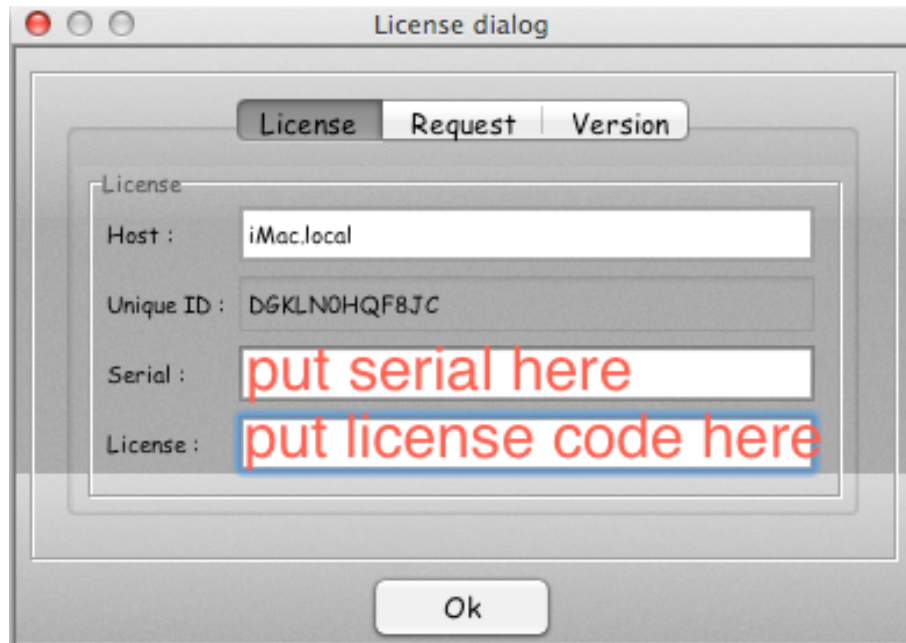


Figure 2: Inserting the serial and license code.

## 1.6 Set read/write access to jems files

Make sure that users have **read/write** access to the whole **jemsMacOSX** folders tree since jems writes info in particular in **/Applications/jemsMacOSX/license** (jemsLicense.txt and in **/Applications/jemsMacOSX/license/jemsData** (Fig. 3).

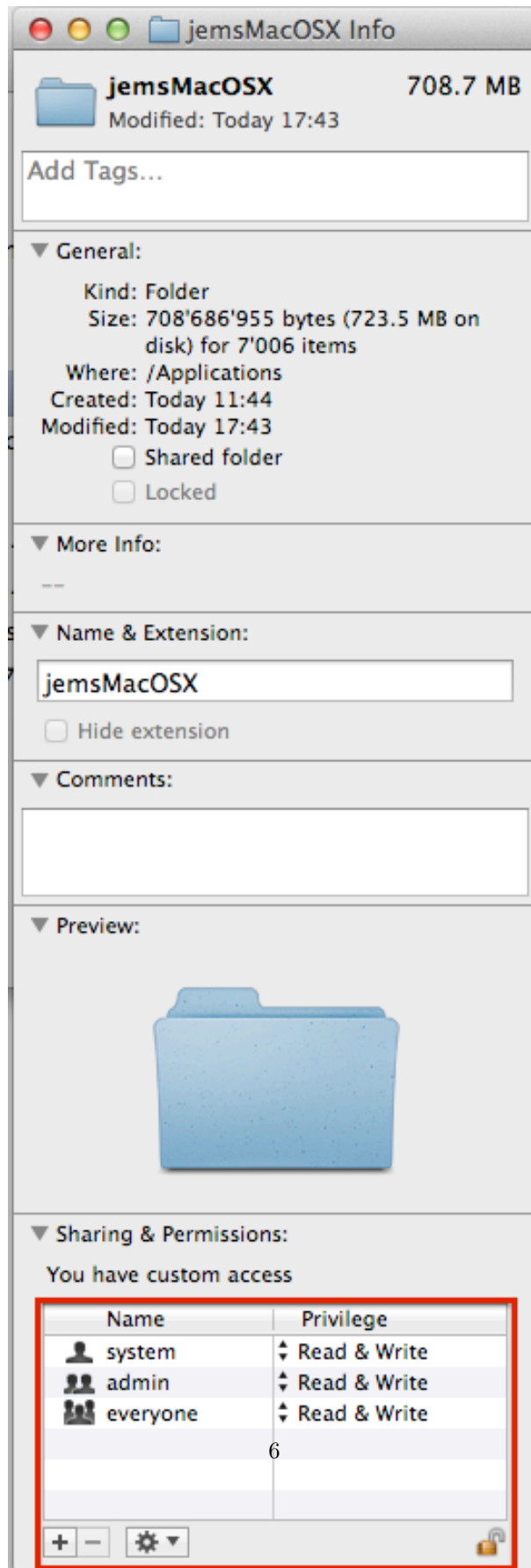


Figure 3: Setting the read/write access to jemsMacOSX folders tree.

## 1.7 WiFi connection

Depending on the WiFi settings, a dynamic **hostname** is attributed to the Mac when connected using WiFi. In such a case when starting, jems will display a **Wrong license code** error message. Your local IT manager can fix the problem (DHCP protocol). Another solution (a bit cumbersome) consists in:

- Stopping jems (when running).
- Disconnecting WiFi.
- Starting jems.
- Connecting WiFi.

You can also try to use DHCP with a manual address (usually possible at home) as shown on Fig. 4.

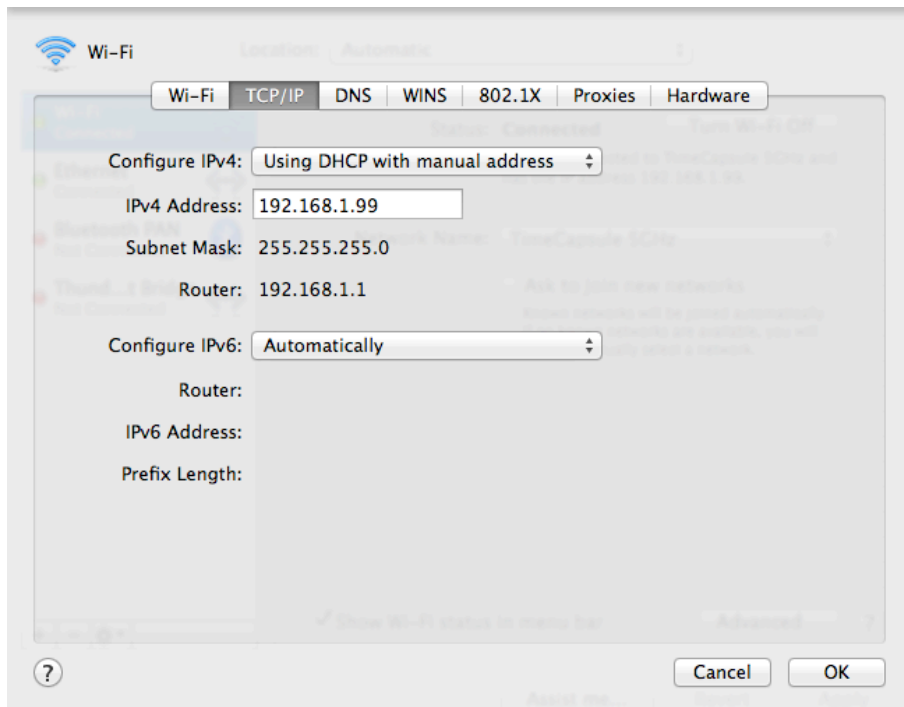


Figure 4: WiFi settings.

## 1.8 Data files

jems contains a few hundreds crystal structures stored either as jems .txt format (loaded using *Open*) or as .cif format (loaded using *Import*). On MacOSX these structures can be found in folder `/Applications/jemsMacOSX.app/jemsData` (Fig. 5).

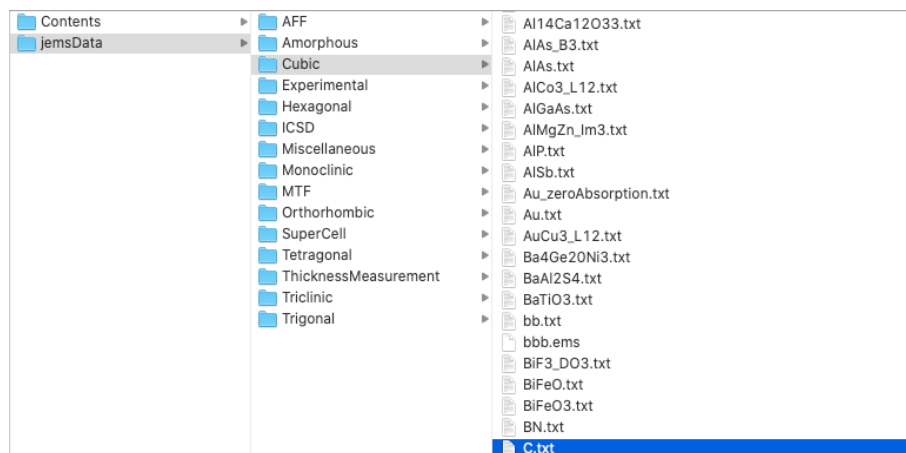


Figure 5: jems data files on MacOSX.