

jems distribution CD or USB Key

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1 Introduction

jems version 3.6322U2011¹ distribution USB key contains the files and folders shown in figure 1.

1.1 Linux, Mac OS X & Windows 7 versions

- **Documentation** contains the documentation files.
- **Linux64** version for ubuntu linux 64 bits.
- **MacOSX** version for Mac OS X 32 & 64 bits.
- **Windows7** version for Windows 7 (Vista & XP).

¹Present version is 3.6322U2011 corrects bugs since July 05 2010.

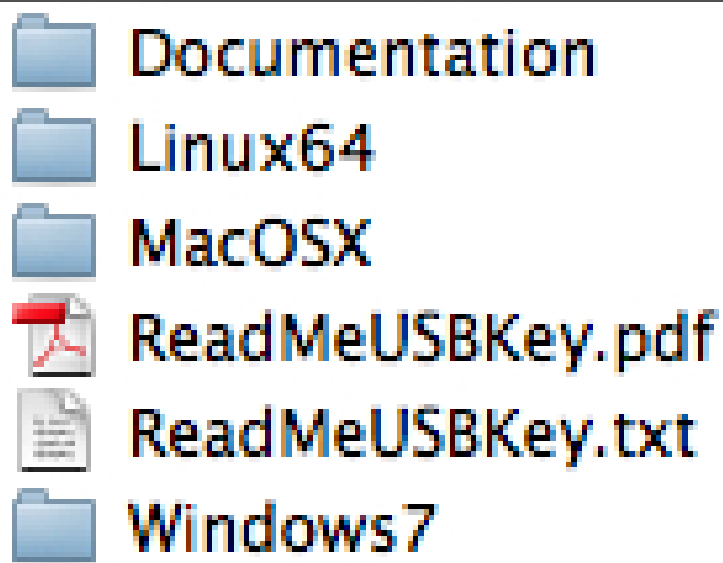


Figure 1: *The content of the distribution USB key.*

1.1.1 Linux ubuntu

1.1.2 Mac OS X

1.1.3 Windows 7

The simplest install (*recommended for non-java specialists*) consists in unzipping file **jemsWindowsddmmmyyyy.zip**. This .zip file contains complete java runtime environments, jre32 & jre64 bits (i.e. jre 1.6.0_22 + java3d + java advanced imaging + javamail) for 32 or 64 bits Windows 7 operating system. It has to be unzipped and moved to its destination folder that is usually Program Files(x86) (32 bits) or ProgramFiles (64 bits):

1. Unzip jemsWindowsddmmmyyyy.zip.
2. Copy folder jems to
 \Program Files

After moving the jems folder in

 \Program Files

have the folder permissions set to **read/write**.

jems can then be started using either *jems.bat* or *jems.exe*.

1.1.4 Mac OS X 10.5.xx or higher

In folder jemsMacOSX you will find jems for Mac OS Tiger 10.5.x or more recent . It is a zipped package. Unzip it and install the package (it requires admin rights).

1.2 Version requiring java installation

The java runtime 1.6.0_11 is in folder jre1.6.0_11 and associated files in javaVM_files. **When no java runtime is installed on your computer, this runtime (or**

a more recent one) must be installed first in order to run the jemsInstall.exe.

In folder jemsWindowsInstall, you will find a jems version without a java run time environment (java VM). This version requires the installation of a jre before execution (preferably version jre1.6.0_11 or more recent).

It is suggested to first try to install the bundled version (jemsVistaXP05Jul2010.zip). The version jemsInstall.exe in:

```
jemsWinsdowsInstall\NOVM\jemsInstall.exe
```

does not install a jre and requires separate installations of java3D, jai, activation and mail (see 1.3.2).

The full installation procedure is described in **jemsInstallation.pdf**.

1.3 License request, java3D

1.3.1 Mac OS X 10.5.xx or higher

Mac OS X 10.5 or higher comes with a complete java3D environment located in:

```
/System/Library/Java/Extensions
```

You still have to copy these 3 jar archives: activation.jar, mail.jar, mailapi.jar, found in:

```
/jemsMacOSX/jar
```

in:

```
/System/Library/Java/Extensions
```

(Copy requires admin rights).

1.3.2 Windows XP & Vista

In order to send the license request and to have java3D drawings, you have to make sure that the files:

- activation.jar
- j3dutils.jar
- j3dcore.jar
- mail.jar
- mailapi.jar
- vecmath.jar

are present on the classpath of the javaVM. The files are available in:

`\Program Files\jems\javaVM_files\copyTo_jems_jre_lib_ext`

When installing jems with the jems bundled java VM these 6 files must be copied to:

`\Program Files\jems\jre\lib\ext`

When you choose to install a particular java VM, the above 6 files must be copied to:

`\Program Files\Java\jre1.6.0_11\lib\ext`

Java3D makes also use of these 3 **.dll**:

- j3dcore-d3d.dll
- j3dcore-ogl.dll
- j3dcore-ogl-cg.dll

These **.dll** are found in:

`\Program Files\jems\javaVM_files\copyTo_jems_jre_lib_ext`

Copy these 3 **.dll** to:

`\Program Files\jems\jre\lib\bin`

or to (when installing a particular javaVM):

`\Program Files\Java\jre1.6.0_11\lib\bin`

This will enable java3D when java3D is activated (i.e. start jems, select menu *Parameters*, menu item *Preferences*, Tab *Imaging*, checkbox *java3D*).

Very often opengl drivers are not installed on Windows XP/Vista graphics board (see installation instructions).

1.4 Configuration of java3D, mailing and other jems settings

1.4.1 java3D

jems preferences are configured using menu item *Preferences* of menu *Parameters*. java3D is not activated by default. In order to activate it open *Preferences dialogue* → *Imaging* tab and check the java3 box (Fig. 2).

1.4.2 Mailing

The mailing system is configure using tab *Preferences dialogue* → *Mail*. Define the *SMTP* address and put your e-mail address (Fig. 3). For e-mailing new crystal files and/or errorlogs have the *Enable mail* checked. This feature is not unavailable in case of firewall protection.

1.4.3 Display

Tab *Preferences dialogue* → *Display* shows typical settings for the 3-D drawings (Fig. 4).

1.4.4 Dual, Quad, ... core and debugging

When jems is installed on a many core computer, the number of cores can be specified using the *Preferences dialogue* → *Debug* tab (5) that also allows to have several debug functions activated (more printout in jems console).

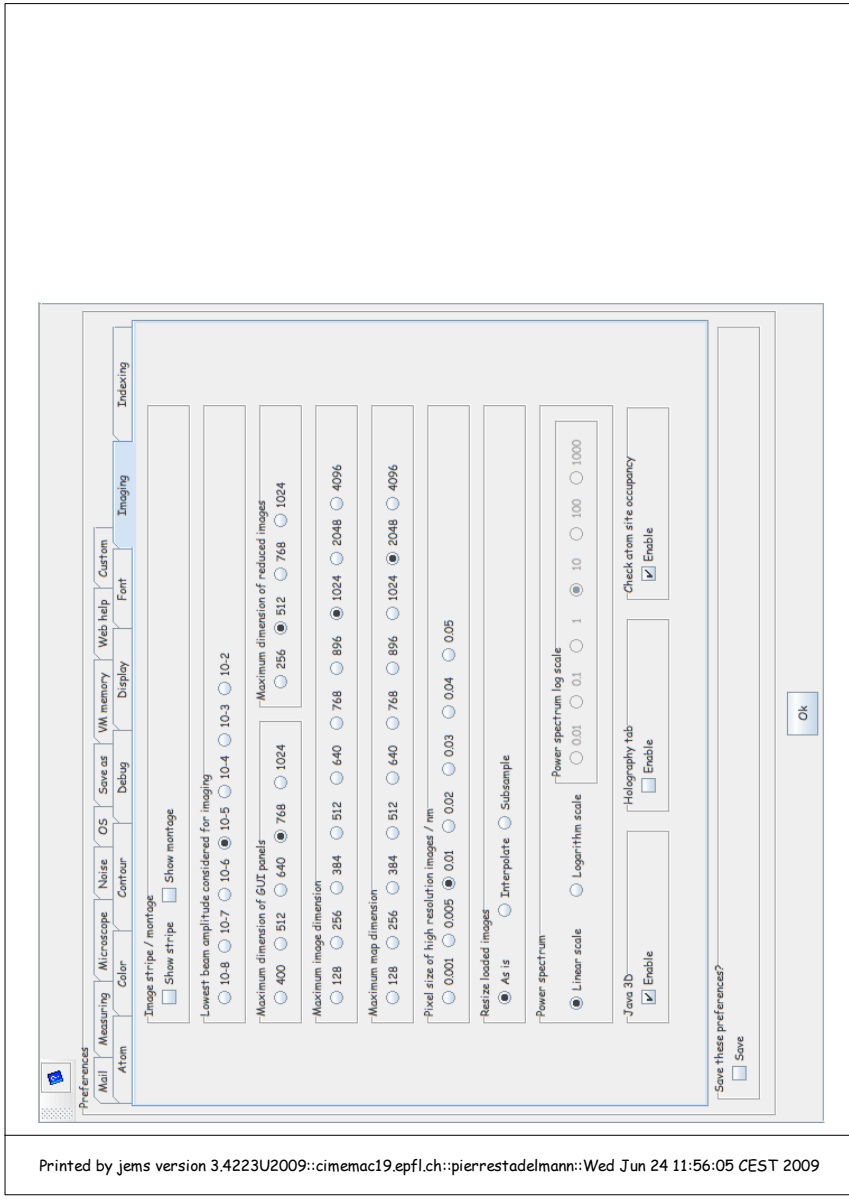


Figure 2: *java3D* activation.



Figure 3: Mail activation.

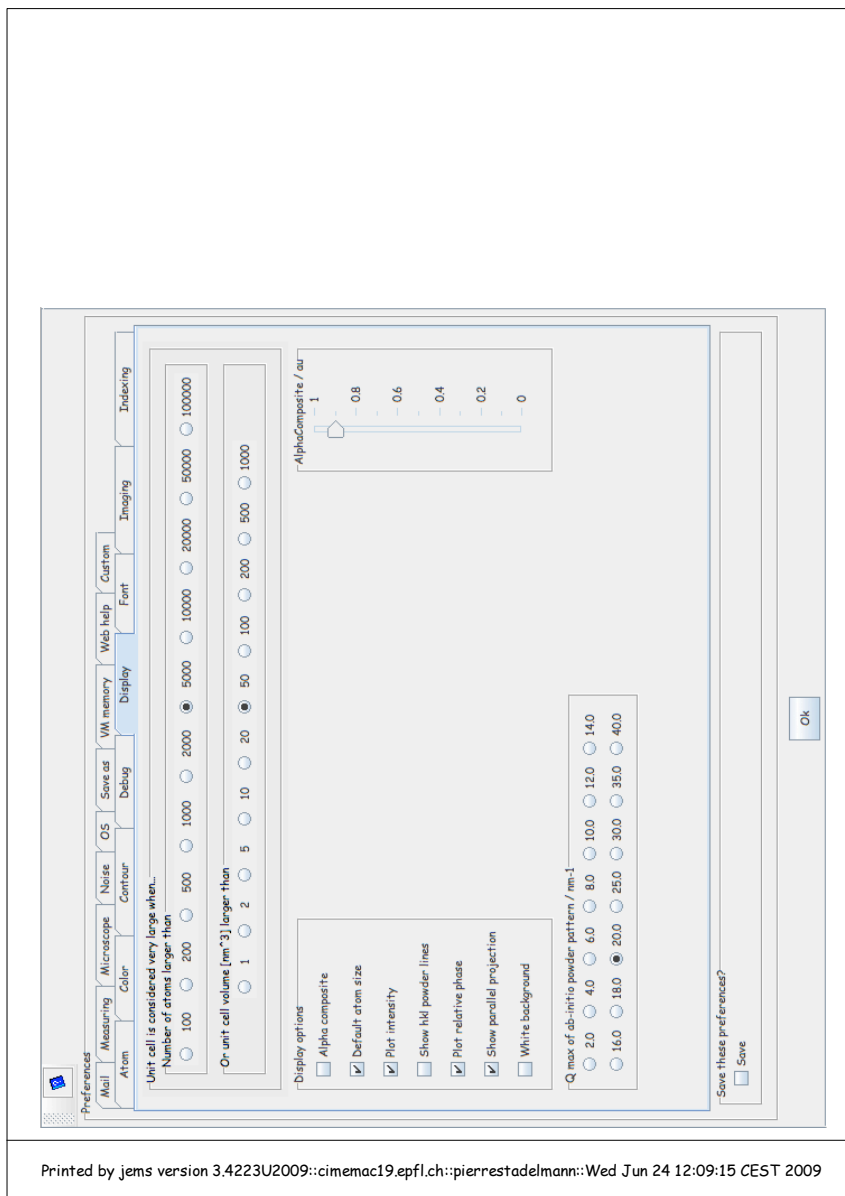
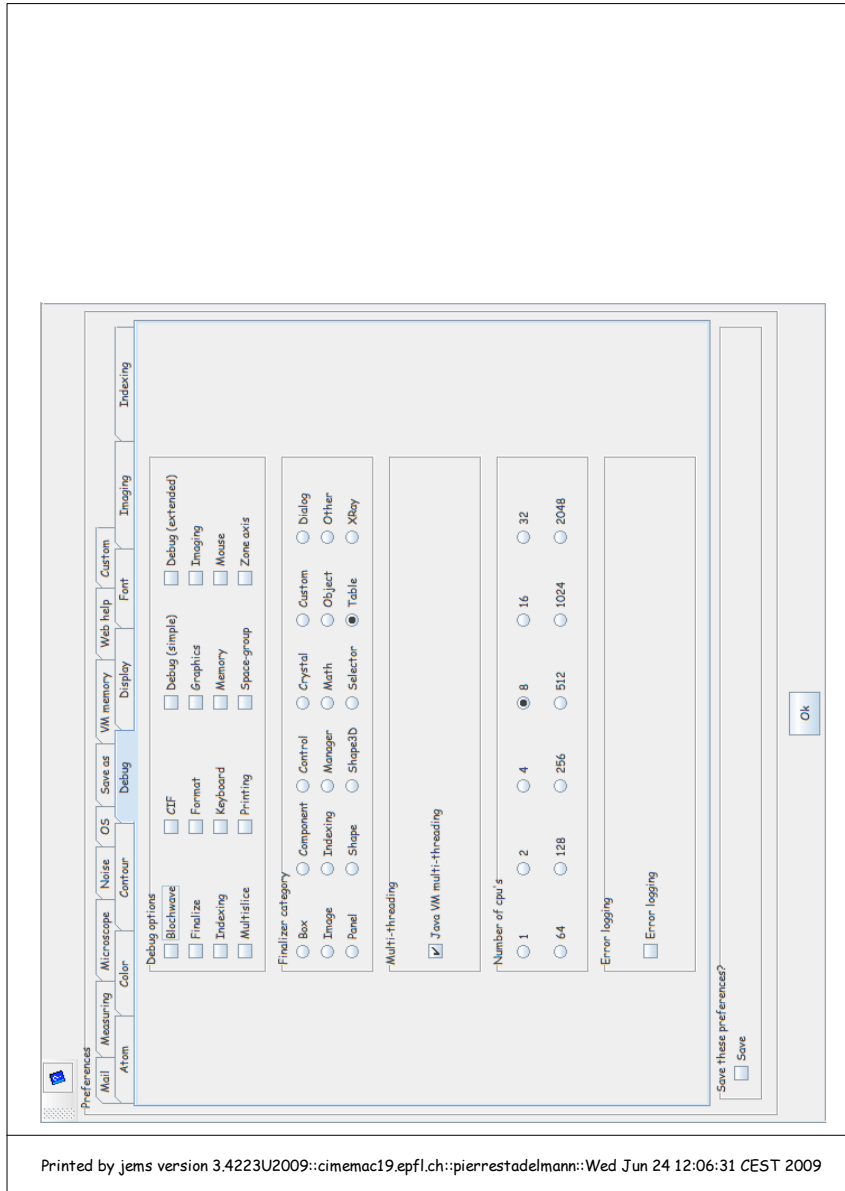


Figure 4: Typical 3-D display settings.



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Figure 5: *Dual core support and debugging.*

1.4.5 VM memory

Tab *Preferences dialogue* → *VM memory* shows a typical memory setting (Fig. 6). Do **not** set a too large initial memory size since Java VM will start using the hard disk. More info in the installation instructions.

1.4.6 User interface *Look and Feel*

On Mac OS-X the *Mac OS X Look and Feel* generates too large windows. It is better to use the *Metal Look and Feel* (Fig. 7).

After configuring jems, check the *Save* check box and quit the *Preferences* dialogue.

1.5 License request

1. Start jems, select menu *Parameters*, menu item *Preferences*, tab *Mail* to specify the SMTP mail server and your e-mail address.
2. Activate menu item *License* of menu *Help*, tab *Request* to open the form to fill with your personal data and to e-mail to *Pierre.Stadelmann@epfl.ch*. You can copy/paste this form content into your regular e-mail program in case of unsuccessful mail (figure 8).

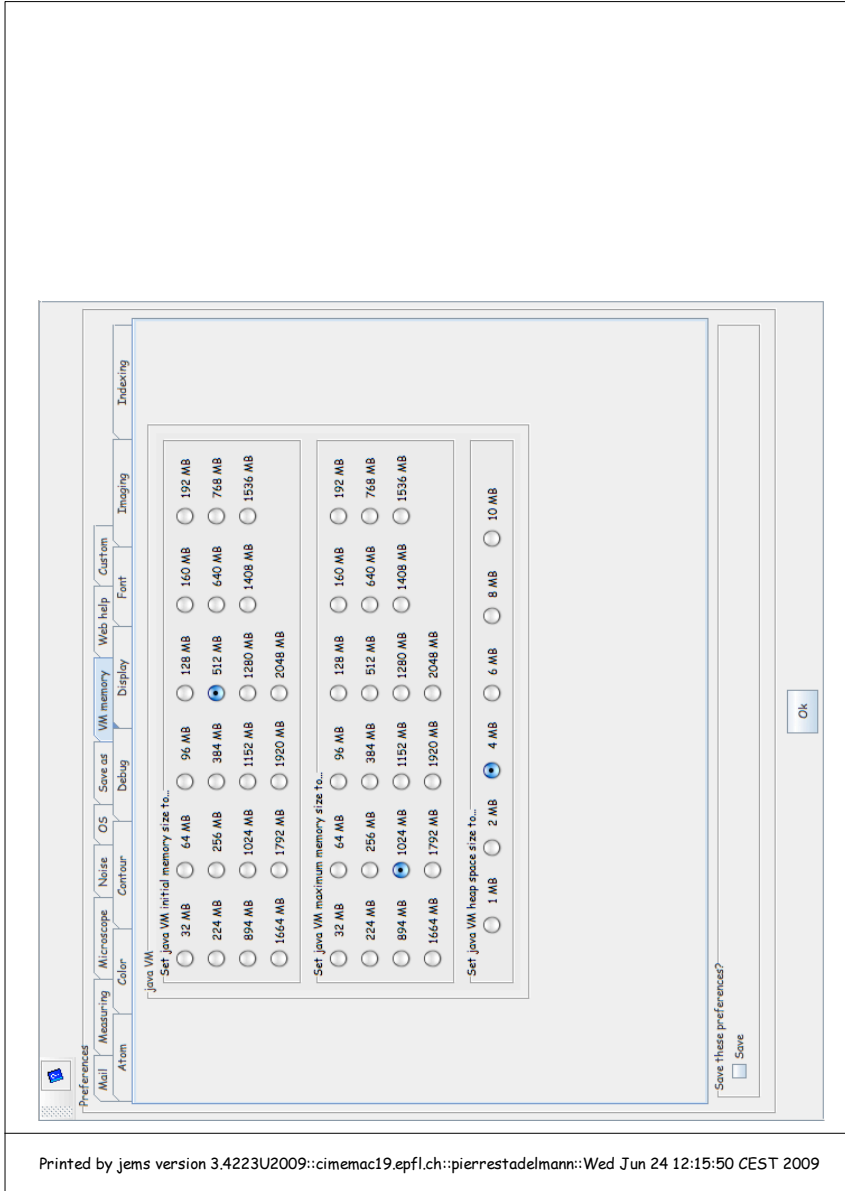
1.6 Batch files

You will find one batch file in:

`/Program Files/jems`

- **jems.bat** that starts jems with the java runtime installed in jems folder.

It is employed to start jems using the DOS shell. This allows to fine tune the RAM that javaVM reserved to run jems.



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Figure 6: *VM memory settings.*

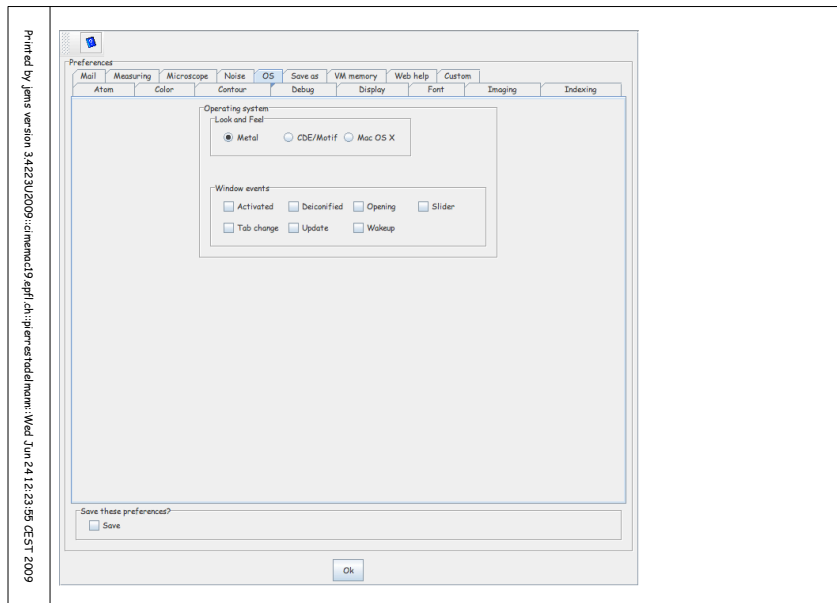


Figure 7: *Look and Feel.*

Web page:

http://cimewww.epfl.ch/people/stadelmann/jemsv3_5505u2010.htm

<http://cimewww.epfl.ch/people/stadelmann/jemsnt/pdf/files/manual.pdf>

<http://cimewww.epfl.ch/people/stadelmann/jemsnt/pdf/files/jemsInstallation.pdf>

Mail::request license

From : pierre.stadelmann@epfl.ch
To : Pierre.Stadelmann@epfl.ch
Cc :
Subject : jems license request
SMTP server : mail.epfl.ch

J E M S L I C E N S E C O D E required end-user information

Please provide the following information :

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

-----> jems license <-----
Date : Mon Apr 20 15:25:09 CEST 2009
Platform : Mac OS X
Host :
Version : 3.4008U2009
Serial :
License : |

Mail status

Close Send

Figure 8: *The form asking for the license code.*