Installing MRI Cell Image Analyzer

The procedure describes how to download and install the image analysis software MRI Cell Image Analyzer on Windows, Mac and Linux operating systems. MRI Cell Image Analyzer is written in Java and based on ImageJ. All components are included in the provided download.

Download

The current version can always be downloaded from http://www.mri.cnrs.fr/telecharge.php.
In the section Download of the page "About MRI Cell Image Analyzer" is a list of published versions with a short text about the changes between versions.

Installing on Windows Operating Systems

Log-in to the machine, as a user with administrator permissions. Create a base folder for the installation. In this instruction we will use the folder: C:\Programme\MRI Cell Image Analyzer. Unzip the downloaded zip-archive into the installation base folder.

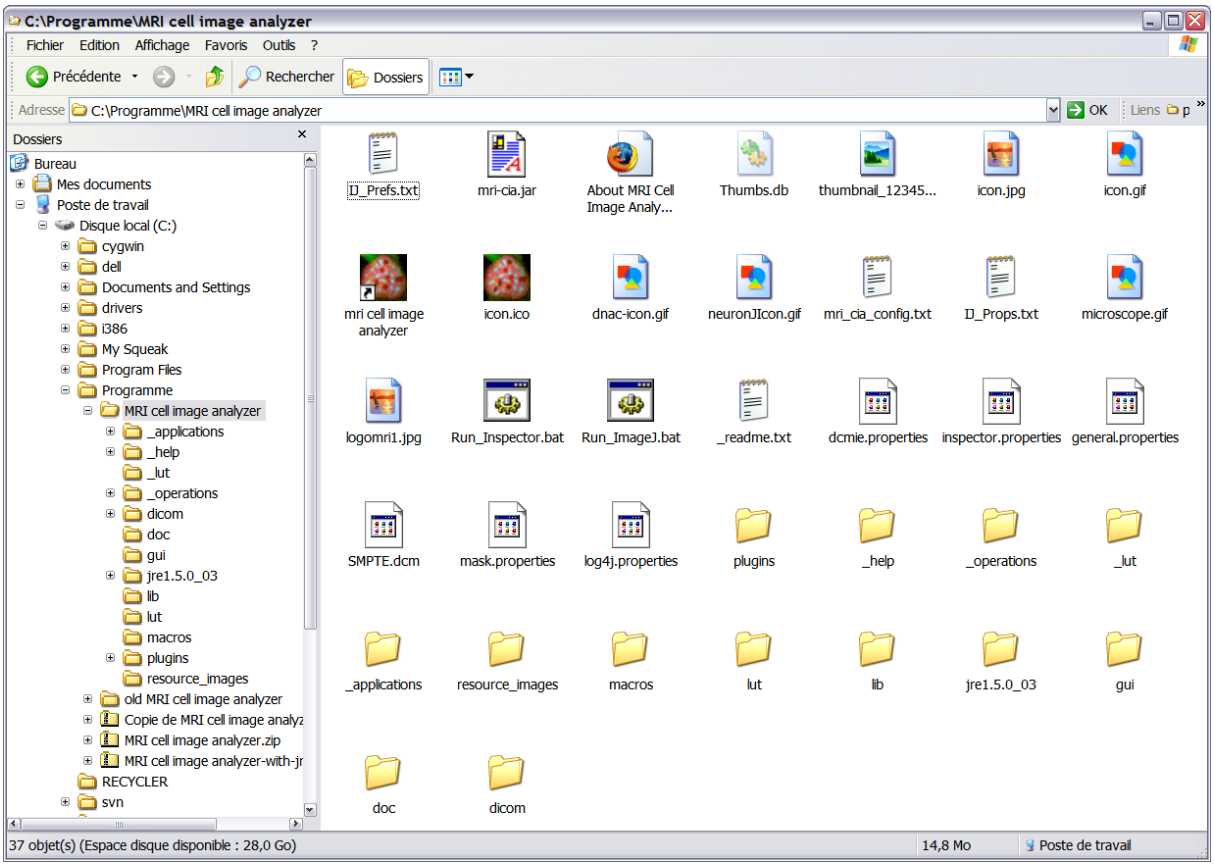

Figure 1 - The content of the MRI-CIA base folder.

Right-click on the shortcut "mri cell image analyzer". The icon of the shortcut is the one with the little arrow in the lower left corner. Open the properties dialog of the shortcut.

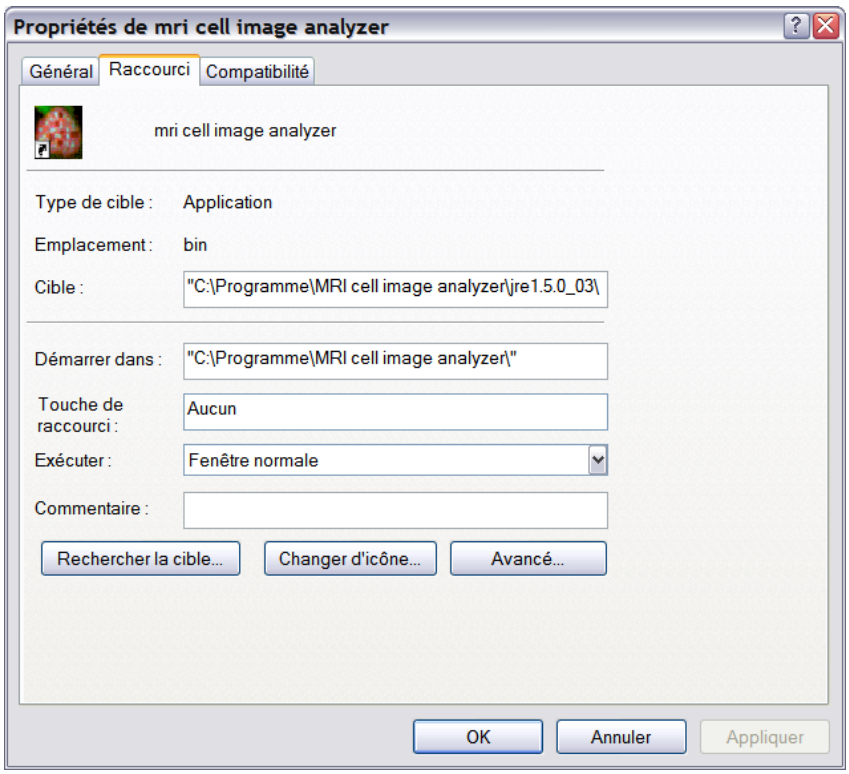

Figure 2 - the properties dialog of the MRI-CIA shortcut.

Change the path and memory settings in the target field.

"C:\Programme\MRI cell image analyzer\jre1.5.0_03\bin\javaw.exe" -Xms65m -Xmx1400m -jar "C:\Programme\MRI cell image analyzer\mri-cia.jar"

Replace "C;\Programme\" with the path to the base folder you created. Change the upper memory limit, i.e. the number behind Xmx to 2/3 of the RAM-memory available on your system. If you don't know how much memory is available on the system, look at the properties dialog of the workplace.

Copy the shortcut to all places from which you want to start the application. For example:

C:\Documents and Settings\All Users\Desktop\
C:\Documents and Settings\All Users\Startmenu\Programmes\mri

Installing on Linux/Unix Operating Systems

Log-in as root. Copy the zip to the place where you want to install the MRI-CIA.

```
cp MRI_CellImageAnalyzerV1_2_1.zip /usr/
```

Unzip the archive.

```
cd /usr
unzip MRI_CellImageAnalyzerV1_2_1.zip
```

This will create a folder named MRI Cell Image Analyzer. In order to make the help system work you should rename the folder, so that it doesn't contain any spaces.

```
mv MRI\ cell\ image\ analyzer mri_cell_image_analyzer
```

At the moment there is no dedicated linux version, however the java program can run on any system for which a java environment exists. Copy the extension modules from the downloaded version into your java installation:

```
cp -ir mri_cell_image_analyzer/jre1.5.0_03/lib/ext/*
      /usr/java/jre1.5.0_06/lib/ext
```

You will be asked if you want to overwrite the extension modules already existing. Answer no each time.
You can delete the windows java environment that comes with the download.

```
rm -rf mri_cell_image_analyzer/jre1.5.0_03/
```

Create a shell script to start the MRI-CIA with the required memory options. Replace the 1400 with ¾ of your physical RAM memory.

```
emacs run-mri-cia.sh
```

```
#!/bin/sh
cd /usr/mri_cell_image_analyzer/
/usr/java/jre1.5.0_06/bin/java -Xms65m -Xmx1400m -jar ./mri-cia.jar &
exit 0
```

Make the script executable for all users.

```
chmod a+x run-mri-cia.sh
```

You can move the script to /usr/bin/ to make it executable from everywhere.

```
mv run-mri-cia.sh /usr/bin
```

MRI-CIA can now be started by all users, by typing run-mri-cia.sh in a shell window.
To create a graphical shortcut in your desktop environment, please consult the documentation of your desktop environment.

Installing on Mac/OSX

On Max/OSX the MRI-CIA can be installed in the same way as on linux (see 1.3). To create a graphical shortcut in the desktop environment an apple-script that calls the shell script has to be created. The apple-script can then be started from the graphical-shortcut.