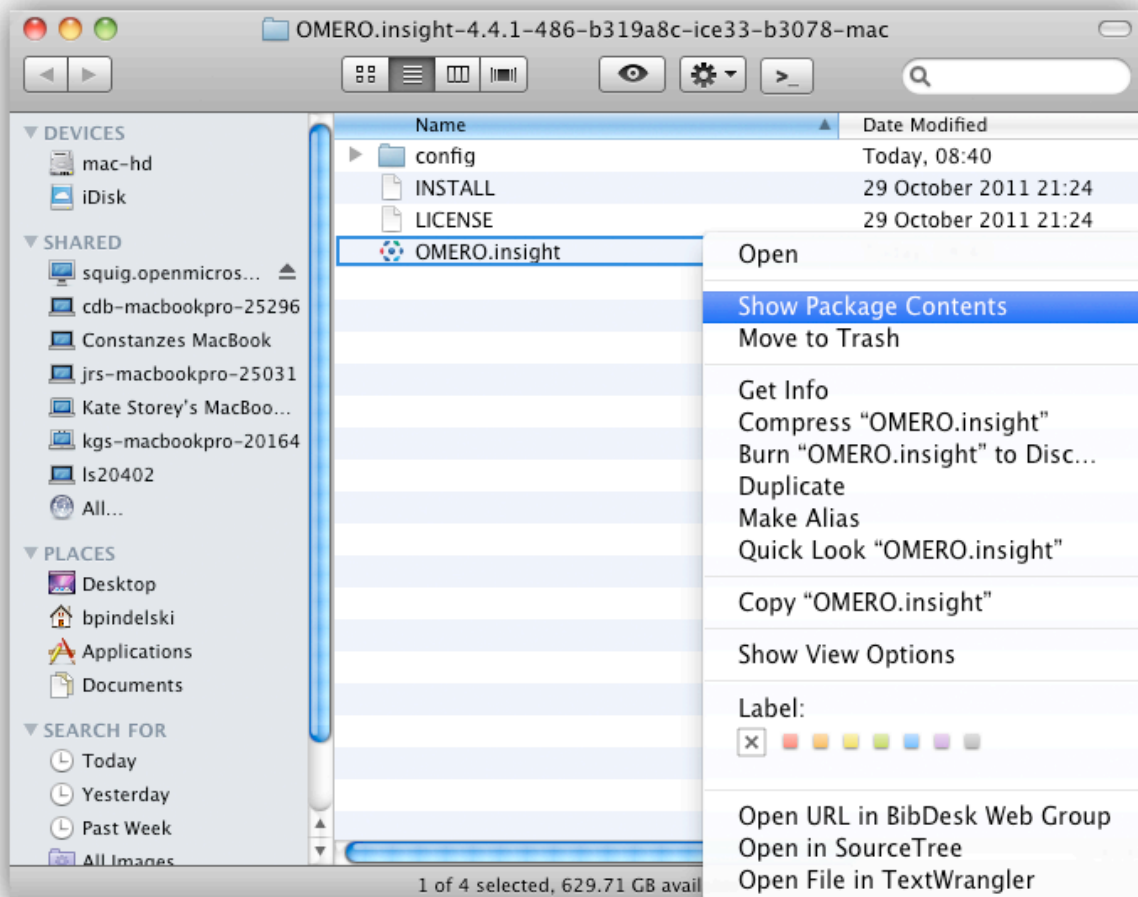# Adjusting client memory requirements

By default, the OMERO clients allocate a certain amount of memory for themselves during the start-up process which should be sufficient for most uses. However, when dealing with very large images, you may encounter out of memory exceptions while trying to import or display these large images. In these situations, it is beneficial to increase the memory allocation to the clients as outlined below.
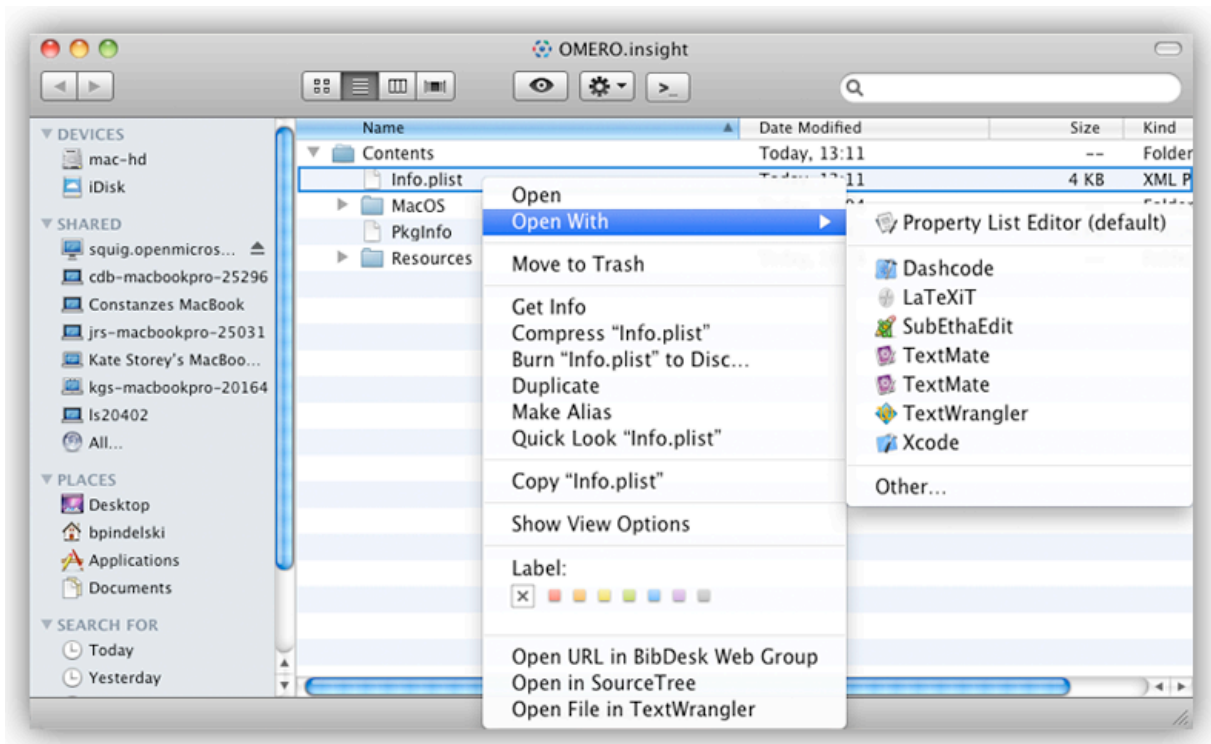
Note:
Increasing the memory of your client applications depends on the operating system and the client used. Also note that this guide does not cover OMERO.web, which uses a different server-based configuration set-up.
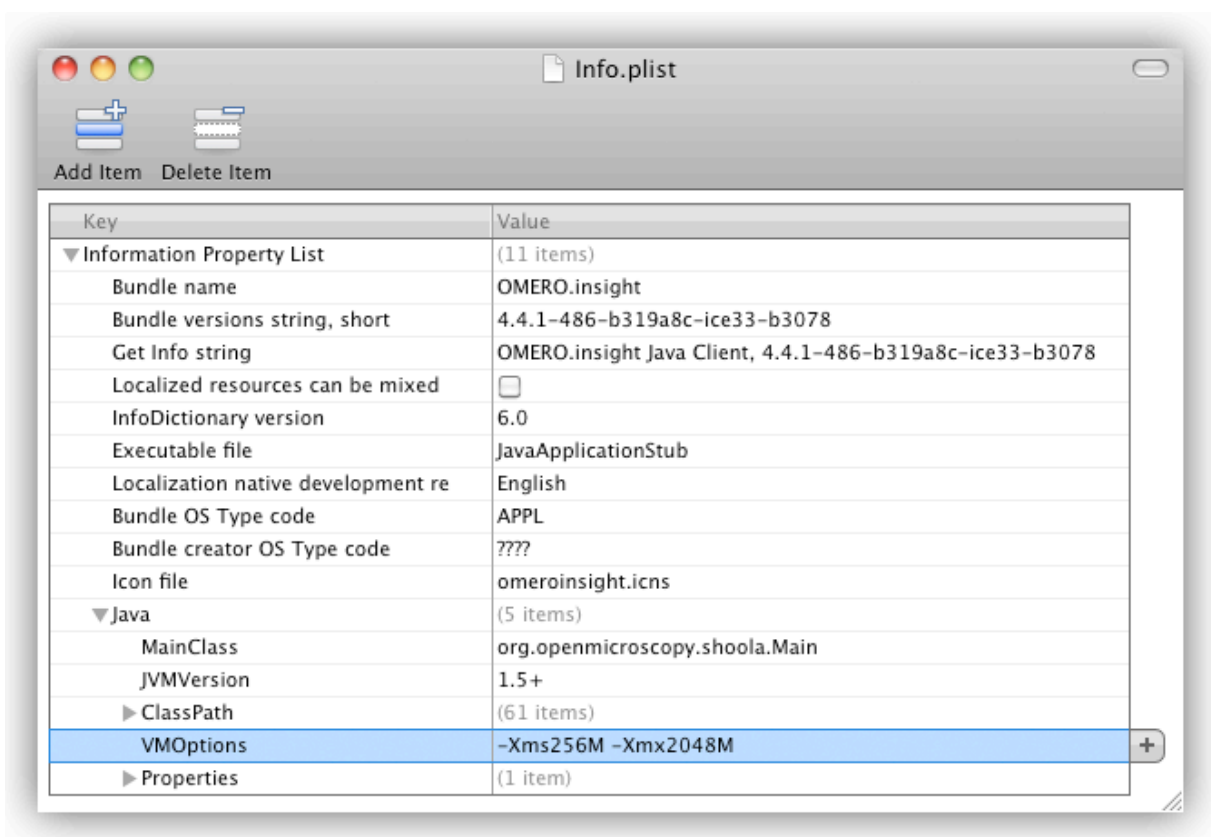
OMERO.insight on OS X

- Locate the **OMERO.insight.app** in Finder and right click (or control+click) on it, choose **Show Package Contents**
- Navigate to the **Contents** folder
- Right-click on the **Info.plist** file, and select to open it in either Xcode (if installed) or the Property List Editor
- Within Xcode/Property List Editor, click and open the **Java** node.
- Under **VMOptions**, you will see a line such as **-Xmx1024M**. This means you currently have 1024 Megabytes reserved for the application to use. Increase this to something like **-Xmx2048M** if you wish to increase the allocated size to 2048 Megabytes

Opening the package contents on OS X

Opening the .plist file

Client memory adjustment on OS X

OMERO.insight on Windows

To alter the memory allocation of the Windows clients, you must add an optional parameter file to the same folder as the application.

For the **OMERO.insight.exe** application this file should be named **OMERO.insight.vmoptions**.

The easiest way to get this file is to download **OMERO.insight.vmoptions** and copy it into the same directory as your **OMERO.insight.exe** file.

The default file increases the memory allocation to 2048 Megabytes, however you may if you choose, open the file in any text editor (such as **notepad.exe**) and change the value as described in **OMERO.insight on OS X**.

OMERO.insight on Unix/Linux

Changing OMERO.insight memory allocation under Unix requires you to edit the start-up script located with the clients, the **OMEROinsight_unix.sh** file.

For the OMERO.insight GUI, you will need to edit the **OMEROinsight_unix.sh** file and change the java -Xms256000000 -Xmx1024000000 -jar omero.insight.jar line with new minimum and preferred memory options (see the Java online documentation for a full description of these options).