ALMA Science

The OT instantly fails to startup (commonly EA-ARC issue, with 32-bit JAVA)

Imported User 56 - 2023-11-01 - Historical Articles

The symptom:
On windows machines (particularly it seems, in EA-ARC), the OT may not open - often it simply closes itself down, before even the basic startup procedure.
If the tarball version of the OT is run, the output of the /users/<username>/.almaot/ot.log file will say something like:

########
Error occurred during initialization of VM
Could not reserve enough space for 2097152KB object heap
########

The problem arises because the JAVA download site determines which install package to enable for download, based on the configuration of your browser - it seems that many people in East Asia use a 32-bit browser and consequently, download the 32-bit version of JAVA. This version doesn't have sufficient memory available to run JAVA that OT needs and it crashes.

This is not a problem with OT as such, but an incompatibility of the software requirements of the OT, and the functionality provided by the default JAVA download.

The solution is to force your browser to download the 64-bit version of JAVA, and the procedure is described below. Note: it's not necessary to remove Java 32-bit version if your machine already has it.

1. download and install Java 64-bit
1-1. download Java 64-bit installer
 [Japanese] https://www.java.com/ja/download/manual.jsp
 [English] https://www.java.com/en/download/manual.jsp

 download "Windows オフライン (64ビット)" [Japanese]
 "Windows Offline (64-bit)" [English]
 from the URL above.

The latest version (at the time of writing) is "Version 8 Update 101" at Sep. 6, 2016.

1-2. install instruction can be found in the following URL

[Japanese] https://www.java.com/ja/download/help/windows_manual_download.xml

[English] https://www.java.com/en/download/help/windows_manual_download.xml

After installation of the 64-bit JAVA is complete, you can restart the OT.