## **Java Setup and Notes**

You will need the Java Software Development Kit aka SDK or JDK. (Note: Not only the Java Runtime Environment or JRE, you need the full JDK)

If you are running Linux, you can choose to use the OpenJDK. On either Linux or MS-Windows, you can choose to use the Oracle JDK.

The following environment variable settings have proven valuable.

Implement these as appropriate for your platform. What is shown here is Linux Bash syntax. MS-Windows users will use the environment variables setting dialog available in the control panel.

```
export JAVA_OPTS="-Dsun.io.serialization.extendedDebugInfo=true -Xmx5G -Xms2m"
export SBT_OPTS="$JAVA_OPTS"
export DAFFODIL_JAVA_OPTS="$JAVA_OPTS"
export TMP=/tmp # only needed on linux, only if neither TMP nor TEMP_DIR is defined already
```

The -Xms2m increases the stack size - the scala compiler is highly recursive and uses deeper stacks than conventional Java programs generally use.

The -Xmx5G allows the JVM to use as much as 10 Gig of RAM - adjust this depending on your RAM size. 5Gig is probably minimum (as of release 2.0.0 of Daffodil)

The JAVA\_OPTS, SBT\_OPTS, and DAFFODIL\_JAVA\_OPTS respectively set these flags for the java command, the sbt command, and the daffodil command (aka daffodil CLI).

On MS-Windows it may be necessary to add the java JDK "bin" directory to the PATH. Find where the Java JDK is installed (usually under C:\Program Files\Java\jdk...\bin), and put the bin directory on PATH.

On MS-Windows TMP is generally defined automatically. It is only on some linux systems that there may be no default definition for TMP or TEMP\_DIR.