


# Maven environment variables (2.7)

A number of environment variables must be set for optimal Maven performance. For UNIX operating systems one typically modifies a startup file like `~/bash_login` to set and export shell variables while Mac users typically set and export environment variables in `.bash_profile`. For Windows, go to Start -> Control Panel -> System -> Advanced -> Environment Variables and set your Maven environment variables via the GUI.

Set the `MAVEN_HOME` environment variable to point to the base directory of your Maven installation and add the Maven `/bin` directory to your `PATH` variable:

Variable	Unix/Mac	Windows
<code>MAVEN_HOME</code>	<code>export MAVEN_HOME=/opt/maven/apache-maven-2.2.1</code>	<code>set MAVEN_HOME=C:\apache-maven-2.2.1</code>
<code>PATH</code>	<code>export PATH=\$PATH:\$MAVEN_HOME/bin</code>	<code>;C:\apache-maven-2.2.1\bin</code>

 Windows: append string to the end of the `Path` system variable

## MAVEN\_OPTS

Maven does not read `JAVA_OPTS` on start up, resulting occasionally in "Out of Memory" errors when building Sakai. To assure sufficient memory allocation during builds, you should add a `MAVEN_OPTS` environment variable as defined below. For UNIX operating systems one typically modifies a startup file like `~/bash_login` to set and export shell variables while Mac users typically set and export environment variables in `.bash_profile`. For Windows, go to Start -> Control Panel -> System -> Advanced -> Environment Variables and set `JAVA_HOME` via the GUI.

```
export MAVEN_OPTS='-Xms512m -Xmx1024m -XX:PermSize=64m -XX:MaxPermSize=128m'
```