

In order to compile and build a binary version of Holodeck from its source code, you first need to have the following components installed on your machine:

- Tomcat: if you don't have Tomcat on your machine, download the latest one, and unzip it somewhere on your hard disk (say for example D:\Servers\Tomcat). Also, download tomcat native library to make it run faster. You can get the native library from <http://apache.sunsite.ualberta.ca/tomcat/tomcat-connectors/native/1.1.16/binaries/>. The dll file needs to be copied to Tomcat/bin directory.
- If you don't have Axis2 binaries on your hard disk, you need to download it. Download the war file (not the bin file). Holodeck has been tested with Axis2-1.4.0 and Axis2-1.4.1. The war file contains the folders "WEB-INF/modules", "WEB-INF/lib", "WEB-INF/services", "WEB-INF/conf", etc... You can get Axis2 war archive from http://ws.apache.org/axis2/download/1_4_1/download.cgi
- If you don't have Apache Rampart binaries on your hard disk, you need to download it. You can get it from <http://ws.apache.org/rampart/download.html>. Unpack the rampart zip file on your hard disk (say for example in D:/Servers/Rampart). Then copy all the jar files in "Rampart/lib" to "D:/Servers/axis2.war-1.4.1/WEB-INF/lib". Here we are assuming that you unpacked Axis2 war archive to "D:/Servers/axis2.war-1.4.1" directory.

After you have downloaded the required components, you need to edit the file "holodeck/modules/holodeck-distribution/pom.xml" to accomplish the following:

- Update the value of the property "tomcat-home" to point to the root directory of where you have tomcat installed on your machine.
- Update the value of the property "axis2-home" to reflect the full path where you have unzipped axis2 war archive (for example D:/Servers/axis2.war-1.4.1)

To build holodeck binaries, launch a DOS windows and go to Holodeck root directory, and then just run the following commands:

- **mvn package**
- **mvn site**

The first command builds holodeck and assembles everything, except for the documentation. The second command will generate the documentation (and also Javadocs) and will copy this documentation into the folder "holodeck/msh/docs/". When starting holodeck (by running the batch file "holodeck/server/bin/startup.bat"), the documentation can be accessed using the address: **http://localhost:8080/holodeck/docs**

If you run into "OutOfMemory" Exception while maven is running, just increase the heap space for maven, and it will work. You can do this by editing the file "D:/Java/maven/bin/mvn.bat" and add the this line at the beginning of the file: set MAVEN_OPTS="-Xmx512m"