Sculptor Installation Guide

This instruction describes what you need to install and configure to be able to use Sculptor as normal developer, e.g. for getting started with the Hello World Tutorial.

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JDK

Install JDK 6.

Maven

Maven is used for generating source code and building the system.
1. Install Maven 3.0.x.
   It is also possible to use Maven 2.2.x.
2. Define JAVA_HOME environment variable.

I often put JAVA_HOME and MAVEN_OPTS directly in mvn.bat. I increase the heap size for better performance and avoiding out of memory.
Windows:

```bash
set JAVA_HOME=c:\devtools\jdk1.6.0_03
set MAVEN_OPTS=-Xms128m -Xmx1024m
```

Mac OS X:

```bash
JAVA_HOME=/System/Library/Frameworks/JavaVM.framework/Versions/1.6.0/Home
MAVEN_OPTS="-Xms128m -Xmx1024m"
```

Eclipse and Plugins

Sculptor can be used with a text editor or any IDE, but if you are an Eclipse user it is recommended that you install the following Eclipse plugins to be able to use DSL editor with error highlight, code completion, and outline.
1. Install Eclipse 3.6 Helios, Eclipse IDE for Java EE Developers.

- Modeling > MWE 2 runtime SDK 1.0.1
- Modeling > Xpand SDK 1.0.1
- Modeling > Xtext SDK 1.0.1

3. Sculptor Plugins

Sculptor version 2.0.0.x is available at update Site: http://fornax-platform.org/updatesite/site.xml.
Install Sculptor DSL Feature 2.0.0.x.
If you are going to develop rich clients you should also install Sculptor Rich Client Feature 2.0.0.x.

**Configuration in Eclipse**

Add 'Classpath Variable' in Eclipse for M2_REPO=<your local repository location>
You find this setting in Window -> Preferences -> Java -> Build Path -> Classpath Variables
The local repository location is by default in .m2/repository in your home directory (Document and Settings in Windows)

Add 'String Substitution Variable' in Eclipse for MAVEN_EXEC=<MAVEN_HOME>/bin/mvn.bat

- If you are using Mac OS X you should change the default file encoding in Eclipse to ISO-8859-1. Preferences -> General -> Workspace

**Maven Launcher**

Maven can be executed from the command prompt, but when developing a better alternative is to run it inside Eclipse as an external tool. You can checkout some preconfigured launchers from Fornax Subversion repository. The menu items for this are available in the external tools menu.

Checkout https://fornax.svn.sourceforge.net/svnroot/fornax/trunk/maven-launcher/

Use the subversive plugin, open view SVN Repositories. Connect to the Subversion repository root: https://fornax.svn.sourceforge.net/svnroot/fornax/

- If you don't see the list of fornax maven commands under the 'External tools' menu in Eclipse, try closing the 'Maven Launcher' project and open it again.

**m2eclipse**

If you like you can use the m2eclipse plugin instead of the combination of the eclipse:eclipse plugin and Maven Launcher.

There are two things to have in mind.

1. For the plugin to know about all different sources folders you need to configure it to run the goal generate-sources at import moment. This is done in the Maven configuration at workspace level:
2. When running web projects (like the library-web example), you need to set Maven configuration (at project level) to NOT resolve dependencies from workspace projects:

![Maven Configuration Settings](image)

Probably you would also like to turn off the maven auto-builder, which is triggered when resources (such as model.btdesign) is saved.

Some people have reported problems with m2eclipse and the fornax-checksum-m2-plugin. Content of the src/main/resources folder is deleted when the generation fails. You can remove the fornax-checksum-m2-plugin from pom.xml if it causes trouble together with m2eclipse.

**Continue**

Now you are ready to continue with the 2. Hello World Tutorial (CSC).