

# Building Scetris

*As of the end of our 3rd Iteration*

## First step: Do a clean check-out

```
$ svn co https://dev.spline.de/svn/score-myCourses/trunk scetris
```

## Second step: Setup a development environment

You are generally free on how to setup your development environment. However, our `build.xml` provides some useful targets to enhance the setting up of an environment. For example it can automatically download required libraries (they will be downloaded to the directory `lib` in `trunk`). The command is:

```
$ ant get-libs
```

Since 2010-W43 it is also possible to download a lightweight tomcat-bundle and have it setup for you. The command is:

```
$ ant get-tomcat
```

To start tomcat you can type:

```
$ tomcat/bin/startup.sh
```

or (on Windows)

```
$ tomcat/bin/startup.bat
```

Replace “startup” with “shutdown” to stop tomcat.

If you just want to restart tomcat, you may want to use tomcat for this (currently work with UNIX only):

```
$ ant reload
```

There is a shortcut for doing `get-libs` and `get-tomcat` at once (even in parallel):

```
$ ant setup
```

(Note that setup will also create folders like “bin” if they did not exist already)

## Third step: Start developing

To build the project you may now simply type:

```
$ ant
```

If you setup your development environment using step 2 it is also possible to have it installed into the automatically created tomcat installation using:

```
$ ant install
```

(Note that ant install does not automatically build the project, you have to do both).

Afterwards you will have to restart tomcat to see the effect. There is a shorthand for this:

```
$ ant reinstall
```

If you want to build, install and restart tomcat, there is a shorthand for this too:

```
$ ant rebuild
```

## Cleaning up

If you want to take back what ant has done for you you may simply clean your installation with one of the clean-commands. Most special targets do have a counter action; here's a list of them:

```
get-libs    ⇄    clean-libs
get-tomcat  ⇄    clean-tomcat
scetris     ⇄    clean
```

(scetris is the default target)

There is also a `purge` command which will also rollback any setup which has been done. In other words: `purge` will remove everything which has been created automatically using ant.

## Advanced build: Custom configuration

Since 2010-W43 it is possible to customize build configuration. The `build.xml` can be tweaked using various properties, to get a list of them you may simply type:

```
$ ant list-properties
```

To have them persistent type:

```
$ ant make-properties
```

which will create a file called “`build.properties`” in your trunk. It is set to be ignored by SVN, so you may customize it to your own needs (like specifying a local password for the database or a customized `web.xml`).