

HammockMaker 2.1 User Guide

Test Doubles for Java ME

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June 2009

1 HammockMaker

The HammockMaker utility is used to create test double source files. The tool can be run:

- From the command line.
- From an Ant script as part of your build.
- As an Eclipse plug-in if you're using Eclipse as your IDE.

The simplest method is to use the Eclipse plug-in; the most complex is the Ant task. The use of the Ant task, though, ensures that your test doubles remain synchronized with the classes that they are mocking.

1.1 Running HammockMaker from the Command Line

HammockMaker can be run from the command line provided that the `hammockmaker.jar` is on your class path. For example, type

```
java -cp hammockmaker.jar com.hammingweight.hammockmaker.Maker
```

to see how to use it. You can specify whether to build for CLDC 1.0 or 1.1, a fully qualified name for the test double and a directory where to write the test double's source code.

For example, go into the `examples` directory of the distribution and type (all on one line)

```
java -cp ..\hammockmaker\dist\hammockmaker.jar;build_src
      com.hammingweight.hammockmaker.Maker 0
      com.hammingweight.hammockexamples.example2.Persistence
      com.hammingweight.hammockexamples.mocks.MockPersistence
      test
```

A CLDC 1.0 test double of the `Persistence` class will be created in the `com.hammingweight.hammockexamples.mocks` package of the `test` directory. Notice that we included both the `hammockmaker.jar` and the classes (`build_src`) that we need to mock in our class path. We might potentially need to add other third-party libraries.

It's obvious that running the tool from the command line is tedious and error-prone (there are over 200 characters in the above command) unless you create shell or batch scripts. However using the Ant task might be only slightly more effort and has the advantage that it can be incorporated into the build.

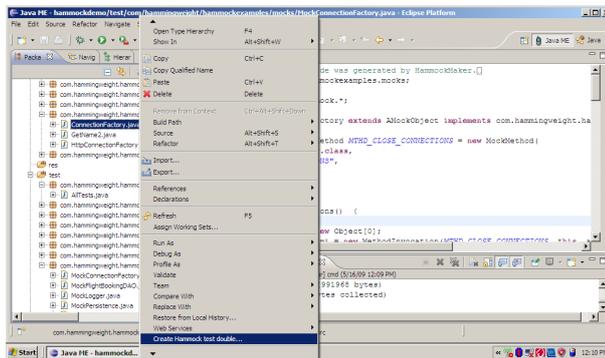


Figure 1: Eclipse Menu

1.2 Running HammockMaker from Ant

The `<hammockmaker>` task supports the following attributes:

- `useClc11`, which must be `true` or `false`.
- `dir`, which specifies a path where to write the generated test double source code.
- `package`, which specifies the package for the test double class.
- `failonerror`, which must be `true` or `false` (the default is `true`).
- `classpath`, which specifies classes that need to be included. This can be an attribute or a child element of the `<hammockmaker>` task.

1.3 HammockMaker as an Eclipse Plug-in

The HammockMaker plug-in for Eclipse has been tested with Eclipse 3.4 (Ganymede); it may work with Europa (3.3) and it almost certainly won't work with Eclipse 3.2 or earlier.

To use the Eclipse plug-in, copy the JAR file from the `eclipse/plugins` directory to the `plugins` directory of your Eclipse installation. Start Eclipse (or restart it if it's already running).

To create a test double of a class, right-click on a Java source file or a class file located in a library. The context-sensitive menu should have an item "Create Hammock test double..." as shown in figure 1.

On selecting the option, you should be asked to specify (figure 2):

- Whether your test double is targeting CLDC 1.1.
- The package where the test double will be created.
- The output directory for the test double's generated source code.

If the plug-in was successfully created, you'll see the dialog of figure 3. You'll need to refresh the project to see the generated source file.

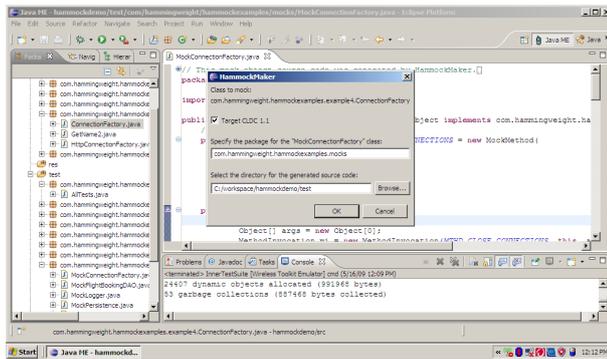


Figure 2: Plug-in Dialog

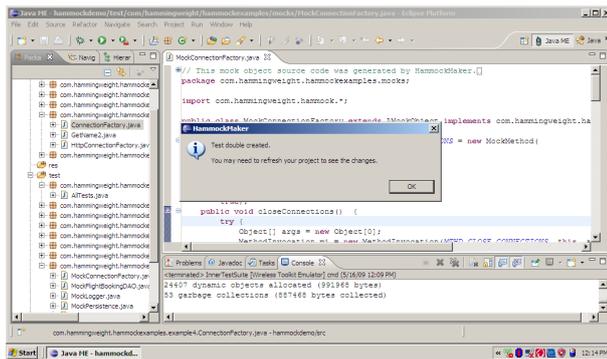


Figure 3: Success Message