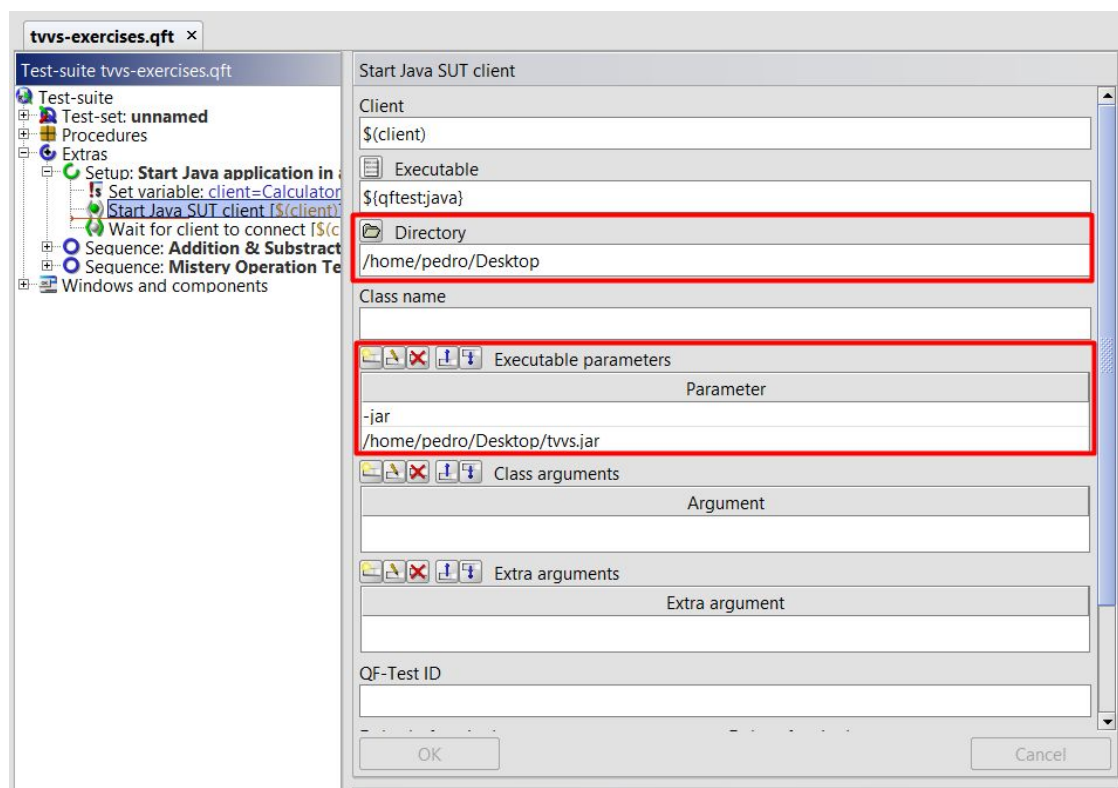


# Capture and Replay Exercises

## Setup

1. Install *QF-Test* (<https://www.qfs.de/en/qf-test/download.html>) if you haven't already. *Eclipse IDE* might be helpful.
2. Download files at <https://github.com/mariateresachaves/TVVS-CaptureReplay>
3. **Go offline!** This is very important for license reasons.
4. Select “*Activate license*” when prompted about a product license. Then click on “*Select file*” and choose the *license* file we supply. Click on “*Update*” and then on “*Yes*”.
5. Once *QF-Test* opens, go to *File -> Open...* and select the supplied *tvvs-exercises.qft* file.
6. Click on “*Start java SUT client*”. Then on the right side, update the *Directory* field to the one that contains the downloaded *JAR* file. Do the same under the *Parameter* tab.



7. Click on “*Setup*” and then on the green arrow button. The calculator *GUI* shall appear. You are now ready to go.

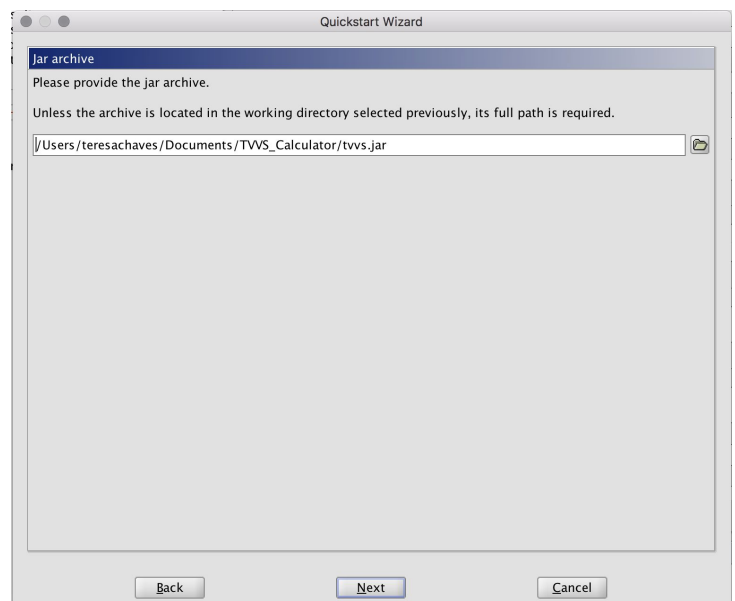
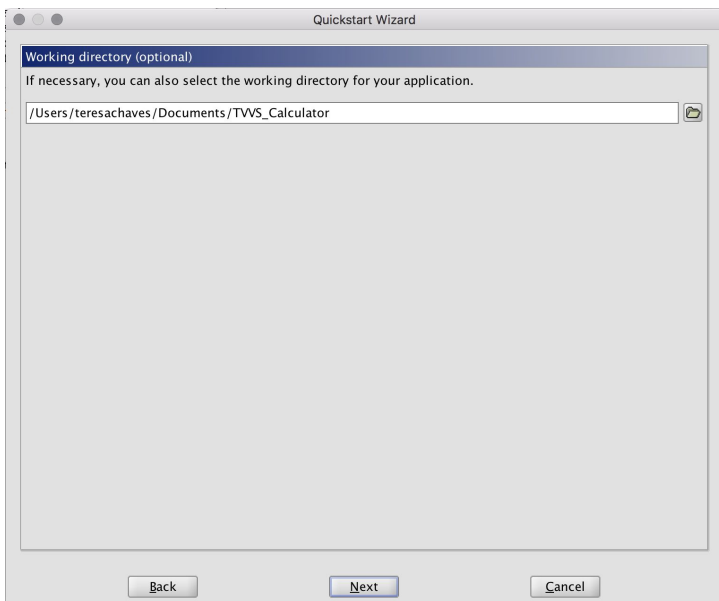
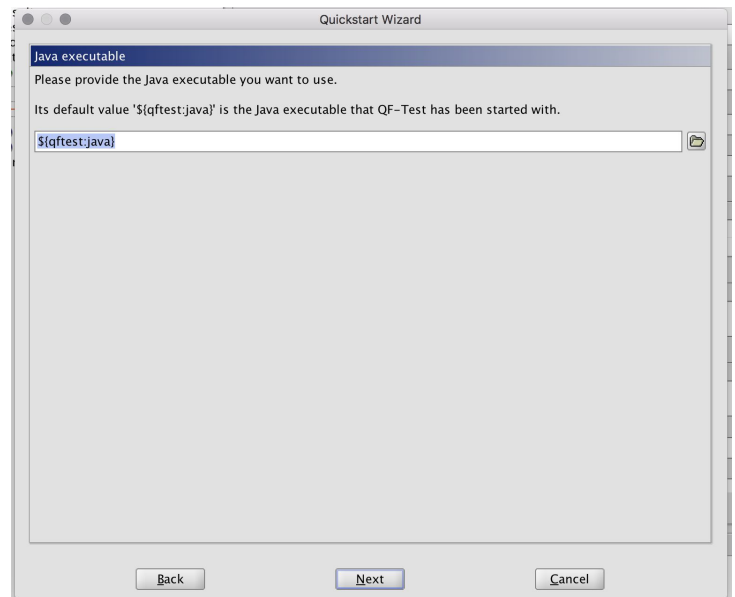
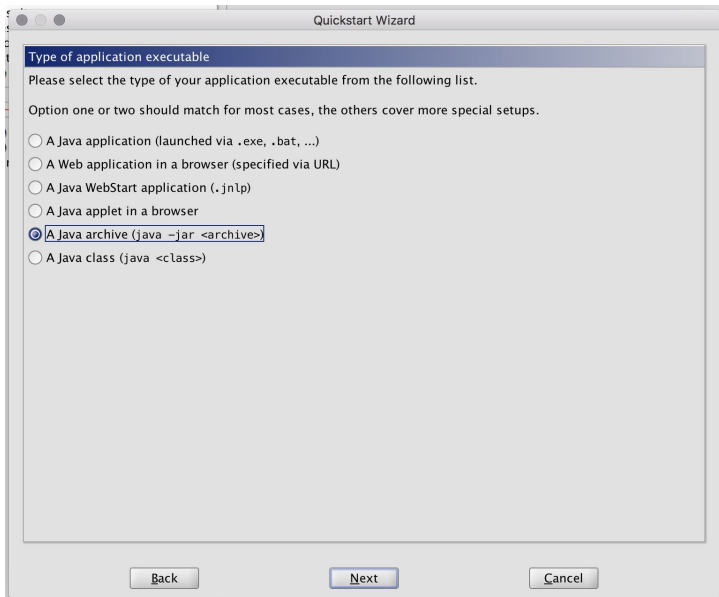
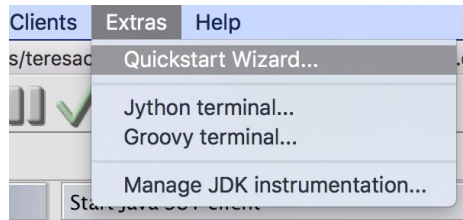
## Exercises

During the following exercises you'll use *QF-Test* to test the *GUI* of a very basic *Java* calculator. Remember that you will need to regenerate the *JAR* file everytime you change the source code, overwriting the existing one. Also, don't forget to be offline while using *QF-Test*!

1. The “*Addition & Subtraction*” test is not passing by default. Correct the calculator code and regenerate the *JAR* file in order to pass the test.
2. Use *QF-Test* to check which steps are being done during the “*Mystery Operation*” test in order to unveil the mystery. Complete the “*Mystery Operation*” code and regenerate the *JAR* file in order to pass the test. Don't cheat and change the button label.
3. Create a *Capture/Replay* test for the division button. Start the calculator and click on the *capture* button. Then interact with the *GUI* to perform a division. Use the *assert* button to store the value at the screen when you are done. Close the application and click on the *stop* button. If you now select the test and click play, *QF-Test* will repeat every step you previously made.  
Now, create a test that checks if the calculator screen gets the value *ERROR* when trying to divide a number by 0. Complete the calculator code accordingly.

## Extras

To create a new project with a runnable .jar, follow these steps:



Quickstart Wizard

**SWT instrumentation (optional)**

If your application is SWT based (including Eclipse plugins or RCP based applications) it is necessary to perform an instrumentation of the SWT library for enabling automated testing. Do you want to add a respective procedure call to your setup sequence?

☐ [Add SWT instrumentation procedure call](#)

Please check the given directory is the base directory of your application delivery you want to search in for the SWT library.

Quickstart Wizard

**Client name**

Please provide a name for your application.

This name serves as central reference to identify your client.

Quickstart Wizard

**Final information**

When pressing the "Finish" button, the setup sequence for your application will be created within your test-suite. If not deactivated by using the checkbox below, the setup sequence will be executed automatically to start your SUT.

Please preventively open the [Troubleshooting](#) section in the "Quickstart" chapter of the manual. In case something goes wrong (e.g application does not come up properly or QF-Test is not able to connect) you will find valuable hints there.

☐ [Start automatically](#)