


Creating a Parameterized Unit Test

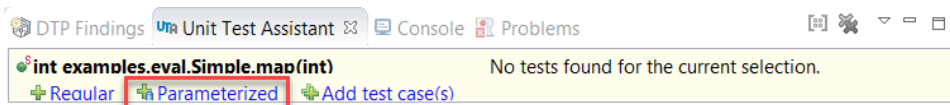
Unit Test Assistant can help you create parameterized test cases to test methods against different arguments. Test cases can be added with the following UTA options:

- **Parameterized** - Available in the UTA interface. This option allows you to add test templates for individual methods selected in the editor. The generated templates need to be manually modified and completed with parameterization data.
- **Add test case(s)** - Available in the UTA interface and the Eclipse context menu. This option allows you to add multiple test cases for methods selected in the editor or for items selected in the Eclipse Project Explorer. You can configure input data that will be used when test cases are generated using this option; see [Configuring Preferences](#) for details.

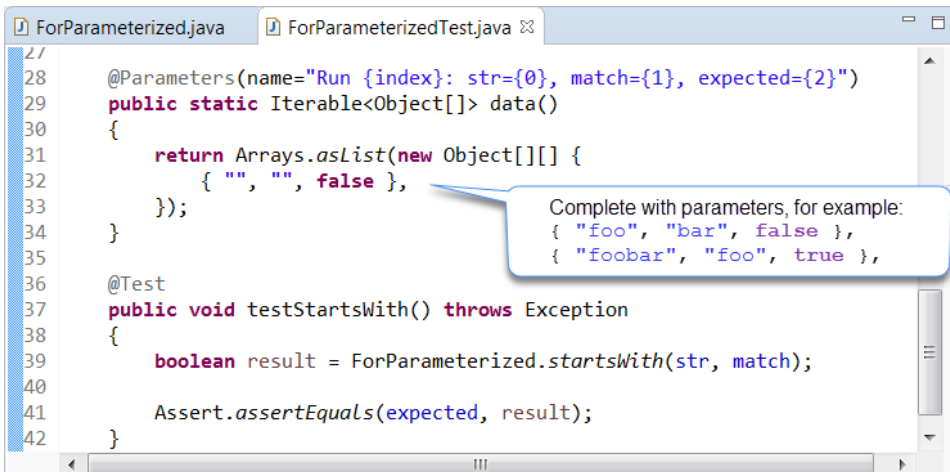
 Ensure that the desired framework for creating parameterized tests is configured (see [Configuring Preferences](#)).

Using the Parameterized Option

1. If the Unit Test Assistant View is not already open, choose **Parasoft> Show View> Unit Test Assistant** from the Eclipse menu bar.
2. Select the method in the editor.
3. Click the **Parameterized** action link.



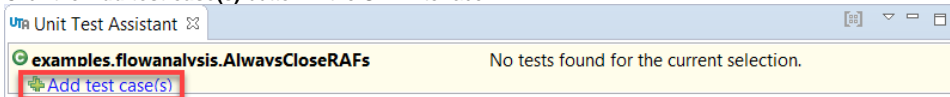
4. Complete the test template with parameters and modify the default UTA values.



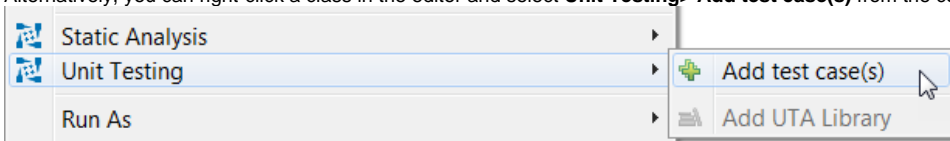
5. Run the test with Unit Test Assistant to collect coverage information and recommendations for possible improvements (see [Executing Unit Tests with Unit Test Assistant](#)).

Using the Add test case(s) Option

1. If the Unit Test Assistant View is not already open, choose **Parasoft> Show View> Unit Test Assistant** from the Eclipse menu bar.
2. Select the method in the editor.
3. Click the **Add test case(s)** button in the UTA interface.

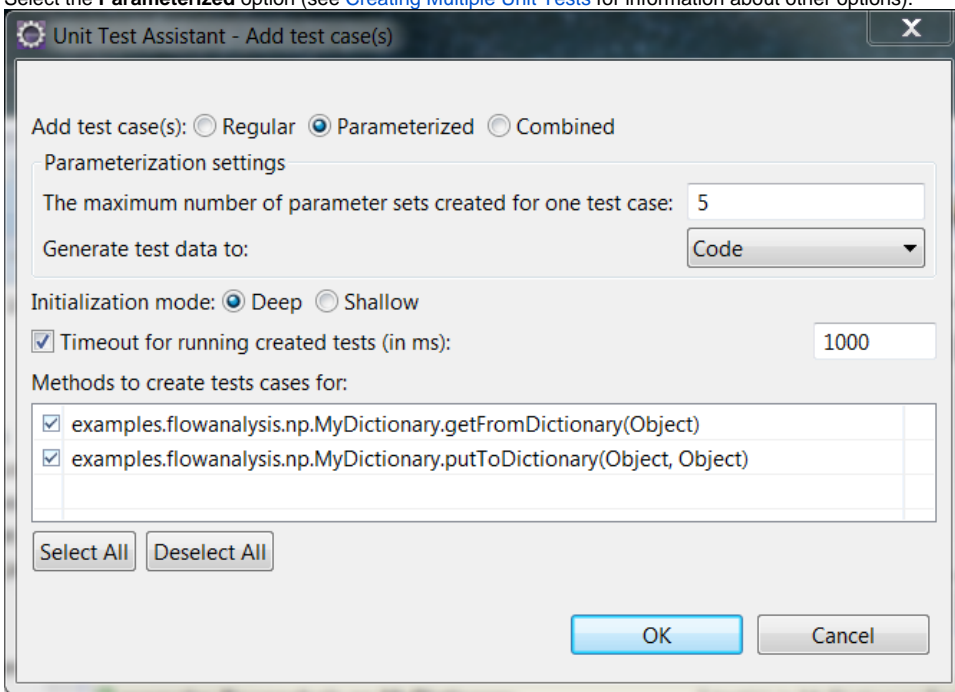


Alternatively, you can right-click a class in the editor and select **Unit Testing> Add test case(s)** from the context menu.



The **Unit Test Assistant - Add test case(s)** dialog will open.

- Select the **Parameterized** option (see [Creating Multiple Unit Tests](#) for information about other options).



- (JUnitParams only) If you use the JUnitParams framework, customize the following options:
 - **The maximum number of parameter sets created for one test case** specifies the maximum number of rows with parameter variants that will be created for one test case.
 - **Generate test data to** specifies where the test cases will be saved. Choose **Code** (default) or **CSV** from the drop-down menu.

About CSV

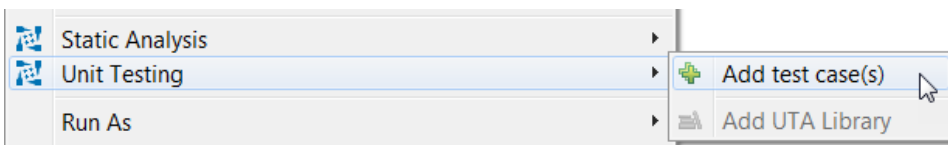
- CSV supports UTF-8 character encoding.
- The CSV files are saved in the same folder as your Java files. If the location does not match the resource folder specified by your build system, copy the CSV files to the appropriate location.

If you use the JUnitParams framework, ensure that the JUnitParams library is added to your Eclipse project.

- Specify the object initialization mode:
 - **Deep** - (default) Prepares objects and mocks using data collected from the tested method and other methods that are called when the test is executed.
 - **Shallow** - Prepares objects and mocks using data collected from the tested method.
- (Optional) Enable or disable the **Timeout for running created tests (in ms)** option and specify the time limit (in milliseconds) for executing this set of test. If the time limit is exceeded, the test execution will stop and the test will fail. The information about the error will be displayed as a Recommendation in the UTA interface. This option is enabled and set to 1000 by default.
- Select the methods you want to create test cases for.
- Click **OK**.
- View the tests to modify the values and uncomment sample assertions. If you use the JUnitParams framework, your test cases will include the preconfigured parametrization data (see [Configuring Preferences](#) to view and customize the settings).
- Run the test with UTA to collect coverage information and recommendations for possible improvements (see [Executing Unit Tests with Unit Test Assistant](#)).

Alternatively, you can add test cases using the Eclipse context menu in the Package Explorer.

- Right-click an item in the Project Explorer.
- Click **Unit Testing> Add test case(s)** to open the Unit Test Assistant dialog and follow the steps 4-10 described above.



If you select a scope larger than one file, the Unit Test Assistant dialog will not display individual methods. Test cases will be added to all testable files whose corresponding test classes have not been created. UTA will skip the files that are not testable or whose corresponding test classes already exist.



You can create test cases for individual methods selected in the Package Explorer if they are of the same class. If you select methods from different classes, or an individual method and a class or a package, test cases will not be generated.