

Run/Debug Configuration: TestNG

The TestNG run/debug configuration is used to launch the tests that comply with the TestNG framework. The dialog consists of the following tabs:

- [Configuration tab](#)
- [Code Coverage tab](#)
- [Logs tab](#)

This section provides descriptions of the [configuration-specific items](#), as well as the [toolbar](#) and [options](#) that are common for all run/debug configurations.

Configuration tab

The composition of this tab depends on the selected testing scope - package, project, etc.

Item	Description						
All in package	Click this radio button to perform all tests in a certain package.						
	<table border="1"><thead><tr><th>Item</th><th>Description</th></tr></thead><tbody><tr><td>Search for tests</td><td>Specify where in your project IntelliJ IDEA should search for the test classes related to the current package:<ul style="list-style-type: none">■ In whole project: IntelliJ IDEA searches for test classes of the current package in all project modules.■ In single module: IntelliJ IDEA searches for test classes of the current package only in the module currently selected in the Use classpath or JDK of module.■ Across module dependencies: IntelliJ IDEA searches for test classes of the current package only in the module currently selected in the Use classpath or JDK of module and modules depending on the currently selected module.</td></tr><tr><td>Package</td><td>Specify the fully qualified name of the package to run. Type the package name, or click the browse button and find the desired package in the Choose Package dialog. All tests in this package and below will be included.</td></tr></tbody></table>	Item	Description	Search for tests	Specify where in your project IntelliJ IDEA should search for the test classes related to the current package: <ul style="list-style-type: none">■ In whole project: IntelliJ IDEA searches for test classes of the current package in all project modules.■ In single module: IntelliJ IDEA searches for test classes of the current package only in the module currently selected in the Use classpath or JDK of module.■ Across module dependencies: IntelliJ IDEA searches for test classes of the current package only in the module currently selected in the Use classpath or JDK of module and modules depending on the currently selected module.	Package	Specify the fully qualified name of the package to run. Type the package name, or click the browse button and find the desired package in the Choose Package dialog. All tests in this package and below will be included.
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Suite	Click this radio button to perform all tests in a certain test suite.						
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Group	Click this radio button to perform all tests in a certain group.						
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Method	Click this radio button to launch a single test method. <table border="1"> <thead> <tr> <th>Item</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Class</td> <td>Specify the fully qualified name of the class to be launched (passed to the JRE). Type the class name, or click the browse button and find the desired class in the Choose Main Class dialog. You can opt to find the desired class by name, or search through the project.</td> </tr> <tr> <td>Method</td> <td>Specify the name of the method to be launched (passed to the JRE). Type the method name, or click the browse button and find the desired class in the Choose Test Method dialog. You can opt to find the desired class by name, or search through the project.</td> </tr> </tbody> </table>	Item	Description	Class	Specify the fully qualified name of the class to be launched (passed to the JRE). Type the class name, or click the browse button and find the desired class in the Choose Main Class dialog. You can opt to find the desired class by name, or search through the project.	Method	Specify the name of the method to be launched (passed to the JRE). Type the method name, or click the browse button and find the desired class in the Choose Test Method dialog. You can opt to find the desired class by name, or search through the project.
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Pattern	Click this radio button to launch all test method conforming to a certain pattern. <table border="1"> <thead> <tr> <th>Item</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Pattern</td> <td>Click  to open the file chooser, select one or more TestNG test classes, and thus form a pattern. Alternatively, it is possible to click  and write a pattern in the dialog box that opens.</td> </tr> </tbody> </table>	Item	Description	Pattern	Click  to open the file chooser, select one or more TestNG test classes, and thus form a pattern. Alternatively, it is possible to click  and write a pattern in the dialog box that opens.		
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Common parameters

These parameters should be defined regardless of the testing type.

Item	Description
Output directory	Specify the test output directory where the reports will be generated.
JDK settings	

Item	Description
VM options	<p>Specify the string passed to the VM for launching the tests. Usually this string contains the options such as <code>-mx</code>, <code>-verbose</code>, etc.</p> <p>When specifying the options, follow these rules:</p> <ul style="list-style-type: none"> ■ Use spaces to separate individual options, for example, <code>-client -ea -Xmx1024m</code>. ■ If an option includes spaces, enclose the spaces or the argument that contains the spaces in double quotes, for example, <code>some "arg or some arg"</code>. ■ If an option includes double quotes (e.g. as part of the argument), escape the double quotes by means of the backslashes, for example, <code>-Dmy.prop=\"quoted_value\"</code>. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>The <code>-classpath</code> option specified in this field overrides the classpath of the module.</p> </div>
Test runner parameters	<p>Type the list of arguments to be passed to the test runner, same way as if you were entering these parameters in the command line.</p> <p>Use the same rules as for specifying the VM options.</p>
Working directory	<p>Specify the current directory to be used by the running test. This directory defined the starting point for all relative input and output paths. By default, the directory where the project file resides is used as a working directory.</p>
Environment Variables	<p>Click the Browse button  to open the Environment Variables dialog box, where you can create variables and specify their values.</p>
Use classpath and JDK of the module	<p>Select a module from the list of modules configured in your project. The classpath and JDK of this module will be used to run your application with the current run configuration.</p>
Use alternative JRE	<p>Check this option to enable defining a JRE other than the one used by the project / module.</p>
Parameters	
Properties file	<p>Specify the <code>.properties</code> file, that will be passed to TestNG.</p>
Add/Remove	<p>Use this buttons to create or remove properties.</p>
Listeners	
Add/Remove	<p>Use these buttons to make up a list of listeners.</p>

Code Coverage tab

Use this tab to configure [code coverage](#) monitoring options.

Item	Description
Choose code coverage runner	Select the desired code coverage runner. By default, IntelliJ IDEA uses its own coverage engine with the Sampling mode. You can also choose JaCoCo or Emma for calculating coverage.
Sampling	Select this option to measure code coverage with minimal slow-down.
Tracing	Select this option to collect accurate branch coverage. This mode is available for the IntelliJ IDEA code coverage runner only.
Track per test coverage	Select this check box to detect lines covered by one test and all tests covering line. If this check box is selected,  becomes available on the toolbar of the coverage statistic pop-up window. <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">This option is only available for the <i>Tracing mode</i> of code coverage measurement for the testing run/debug configurations.</div> Refer to the section Viewing Code Coverage Results .
Merge data with previous results	When you run your unit testing or application configuration several times, use this item to calculate statistics in the Project View , taking into account the statistics of each time you have run the configuration. <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">Finally, the line is considered <i>covered</i> if it is covered at least once.</div>
Packages and classes to record code coverage data	Click  and  buttons to specify classes and packages to be measured. You can also remove classes and packages from the list by selecting them in the list and clicking the  button.
Enable coverage in test folders.	If this check box is selected, the folders marked as test  are included in the code coverage analysis.

Logs tab

Use this tab to specify which log files generated while running or debugging should be displayed in the console, that is, on the dedicated tabs of the [Run](#) or [Debug tool window](#).

Item	Description
Is Active	Select check boxes in this column to have the log entries displayed in the corresponding tabs in the Run tool window or Debug tool window .

Item	Description
Log File Entry	<p>The read-only fields in this column list the log files to show. The list can contain:</p> <ul style="list-style-type: none"> ■ Full paths to specific files. ■ Ant patterns that define the range of files to be displayed. ■ Aliases to substitute for full paths or patterns. These aliases are also displayed in the headers of the tabs where the corresponding log files are shown. <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>If a log entry pattern defines more than one file, the tab header shows the name of the file instead of the log entry alias.</p> </div>
Skip Content	Select this check box to have the previous content of the selected log skipped.
Save console output to file	Select this check box to save the console output to the specified location. Type the path manually, or click the browse button and point to the desired location in the dialog that opens .
Show console when standard out changes	Select this check box to activate output console and bring it forward, if associated process writes to Standard.out.
Show console when standard error changes	Select this check box to activate output console and bring it forward, if associated process writes to Standard.err.
	Click this button to open the Edit Log Files Aliases dialog where you can select a new log entry and specify an alias for it.
	Click this button to edit the properties of the selected log file entry in the Edit Log Files Aliases dialog .
	Click this button to remove the selected log entry from the list.
	Click this button to edit the select log file entry.
	<div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>The button is available only when an entry is selected.</p> </div>

Toolbar

Item	Shortcut	Description
	Alt+Insert	Click this button to add new configuration to the list.
	Alt+Delete	Click this button to remove the selected configuration from the list.

Item	Shortcut	Description
	Ctrl+D	Click this button to create a copy of the selected configuration.
	Edit defaults	Click this button to edit the default configuration templates. The defaults are used for the newly created configurations.
	Alt+Up or Alt+Down	Use these buttons to move the selected configuration or group of configurations (folder) up and down in the list. The order of configurations or folders in the list defines the order, in which configurations appear in the Run/Debug drop-down list on the main toolbar.
		Use this button to create a new folder . If one or more run/debug configurations have the focus, then the selected run/debug configurations are automatically moved to the newly created folder. If only a category has the focus, then an empty folder is created. Move run/debug configurations to a folder using drag-and-drop, or  buttons.

Common options

Item	Description
Name	In this text box, specify the name of the current run/debug configuration. This field does not appear for the default run/debug configurations.
Defaults	This node in the left-hand pane of the dialog box contains the default run/debug configuration settings. Select the desired configuration to change its default settings in the right-hand pane. The defaults are applied to all newly created run/debug configurations.
Share	Select this check box to make the run/debug configuration available to other team members. If the directory-based project format is used, the settings for a run/debug configuration are stored in a separate xml file in the <code>.idea\runConfigurations</code> folder if the run/debug configuration is shared and in the <code>.idea\workspace.xml</code> file otherwise. If the file-based format is used, the settings are stored in the <code>.ipr</code> file for shared configurations or in the <code>.iws</code> file for the ones that are not shared. This check box is not available when editing the run/debug configuration defaults.

Item	Description			
Before launch	<p data-bbox="440 165 1370 264">Specify which tasks should be carried out before starting the run/debug configuration. The specified tasks are performed in the order that they appear in the list.</p> <table border="1" data-bbox="440 286 1398 392"><thead><tr><th data-bbox="440 286 544 392">Item</th><th data-bbox="544 286 715 392">Keyboard shortcut</th><th data-bbox="715 286 1398 392">Description</th></tr></thead><tbody></tbody></table>	Item	Keyboard shortcut	Description
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Item	Item	Keyboard shortcut	Description Description
	+	Alt+Insert	<p>Click this icon to add a task to the list. Select the task to be added:</p> <ul style="list-style-type: none"> ■ Run External tool. Select this option to run an application which is external to IntelliJ IDEA. In the dialog that opens, select the application or applications that should be run. If the necessary application is not defined in IntelliJ IDEA yet, add its definition. For more information, see Configuring Third-Party Tools and External Tools. ■ Make. Select this option to have the project or module compiled. The Make Module command will be carried out if a particular module is specified in the run/debug configuration, and the Make Project command otherwise. <p>If an error occurs during the compilation, IntelliJ IDEA won't attempt to start the run/debug configuration.</p> <ul style="list-style-type: none"> ■ Make, no error check. The same as the Make option but IntelliJ IDEA will try to start the run/debug configuration irrespective of the compilation result.
<p>See Also</p> <p>Concepts:</p> <ul style="list-style-type: none"> ■ Run/Debug Configuration <p>Procedures:</p> <ul style="list-style-type: none"> ■ Creating and Editing Run/Debug Configurations ■ Creating Run/Debug Configuration for Tests ■ Testing <p>Language and Framework-Specific Guidelines:</p> <ul style="list-style-type: none"> ■ Testing Frameworks <p>Reference:</p> <ul style="list-style-type: none"> ■ Debugger <p>Web Resources:</p> <ul style="list-style-type: none"> ■ Developer Community  			<ul style="list-style-type: none"> ■ Build Artifacts. Select this option to have an artifact or artifacts built. In the dialog that opens, select the artifact or artifacts that should be built. <p>See also, Configuring Artifacts.</p> <ul style="list-style-type: none"> ■ Run Ant target. Select this option to have an Ant target run. In the dialog that opens, select the target to be run. For more information, see Ant. ■ Generate CoffeeScript Source Maps. Select this option to have the source maps for your CoffeeScript sources generated. In the dialog that opens, specify where your CoffeeScript source files are located. For more information, see CoffeeScript Support. ■ Run Maven Goal. Select this option to have a Maven goal run. In the dialog that opens, select the goal to be run. <p>For more information, see Maven.</p> <ul style="list-style-type: none"> ■ Run Remote External tool: Add a remote SSH external tool. Refer to the section Remote SSH External Tools for details.
	-	Alt+Delete	<p>Click this icon to remove the selected task from the list.</p>