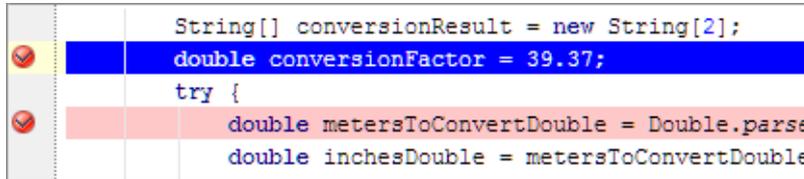# Types of Breakpoints

IntelliJ IDEA lets you create breakpoints of several types. Each of the breakpoint types supported by IntelliJ IDEA addresses different debugging needs and has its own individual settings.

Breakpoints are triggered when the program reaches the specified line of source code, before it is executed. The line of code that contains a set breakpoint, is marked with a red stripe; once such line of code is reached, the marking stripe changes to blue.

Once set, a breakpoint remains in project until removed. Breakpoints can only be set on executable lines of code. Comments, declarations of fields or methods, and empty lines are not valid locations for breakpoints.

> If a file with breakpoints has been modified externally, for example, updated from a version control repository, or changed in an external editor, so that line numbers are changed, then the breakpoints will be moved accordingly.
>
> It is important to note that IntelliJ IDEA should be running at the moment of such modification; otherwise, such changes will pass unnoticed.

In this section:

- Line Breakpoint
- Temporary Line Breakpoints
- Method Breakpoint
- Exception Breakpoint
- Field Watchpoint
- JavaScript / Flex /PHP Breakpoints

Line Breakpoint

These breakpoints are assigned to the lines of source code and are used to target a particular section for debugging.

Temporary line breakpoints

These breakpoints are assigned to the lines of source code and are used to target a particular section for debugging. When hit, such breakpoints are immediately removed.

Method Breakpoint

Method breakpoints act in response to the program entering or exiting a particular method. They let you target your debugging sessions by method you wish to investigate, rather than by line number. Method breakpoints let you follow the program flow at the method level as well as check entry and exit conditions. Note that using method breakpoints can slow down the application you are debugging.

Exception Breakpoint

IntelliJ IDEA provides exception breakpoints for Java and JavaScript.

Exception breakpoints are triggered when the specified exception is thrown. Unlike the line breakpoints, which require specific source references, exception breakpoints apply globally to the exception condition, rather than to a particular code reference.

Field Watchpoint

Field watchpoints allow you to react to any access or modification of specific instance variables. For example, if at the end of a complicated process you are ending up with an obviously wrong value on one of your fields, then setting up a field watchpoint may be the quickest way to determine the origin of the fault.

JavaScript / Flex /PHP Breakpoints

JavaScript, Flex, and PHP breakpoints are identical to line breakpoints in Java.

These breakpoints are assigned to particular lines of JavaScript or PHP source code. They can be set in `*.html` files as well as in `*.js` or `*.php` files and are used to target a particular section of code for debugging.

See Also

Procedures:

- Using Breakpoints

Reference:

- Debug Tool Window
- Breakpoints

Web Resources:

- Developer Community ⬀