Debug Tool Window

View | Tool Windows | Debug

The **Debug** tool window becomes available, when you start debugging.

The Debug tool window displays output generated by the debugging session for your application. If you are debugging multiple applications, each one displays its output in a tab named after the corresponding run/debug configuration applied. The debug toolbar to the left and the stepping toolbar on top of the Debug tool window help you control the debugging session.

For each of the applications, there are two nested tabs:

- Console, that displays system information and error messages, and the console input and output of your application
- Debugger with the following toolbars:
  - Debug toolbar
  - Stepping toolbar

  The Debugger tab is divided into the areas:
  - Frames/Threads
  - Variables
  - Watches

Each of the tabs and areas can be hidden/restored, or moved to a location of your choice.

Debug toolbar

Item	Tooltip and Shortcut	Description
	Rerun `Ctrl+F5`	Click this button to stop the current application and run it again. When an application is stopped, this button toggles to  .
	Debug `Shift+F9`	When the current application is stopped, click this button to debug it again. When an application is running, this button toggles to  .
	Resume Program `F9`	When an application is paused, click this button to resume the program execution.
	Pause Program `Ctrl+Pause`	Click this button to pause execution.
	Stop `Ctrl+F2`	Click this button to terminate the current process externally by means of the standard `shutdown` script.
	View Breakpoints `Ctrl+Shift+F8`	Click this button to have the Breakpoints dialog box displayed where you can set the behavior of your breakpoints.
	Mute Breakpoints	Use this button to toggle the status of the breakpoints (enabled/disabled). You can temporarily disable all breakpoints in the project and thus have the program executed without stopping at breakpoints.

Item	Tooltip and Shortcut	Description
	Export Threads	Click this button to export the current threads to the specified text file.
	Restore Layout	Click this button to to have the changes to the current layout abandoned and return to the default state.
	Take a thread dump	Click this button to show Dump tab in the Debug tool window.
	Settings	Click this button to reveal the menu of available check commands: ■ *Method return value*: Select this check command to watch return values of the last executed method. ■ *Auto-variable mode*: If this check command is selected, the IntelliJ IDEA debugger automatically evaluates certain variables that might be of interest to the user. These variables are the ones at breakpoints plus several lines before and after the breakpoint. ■ *Value auto-tooltip*
	Pin	Use to pin or unpin the tab. If a tab is pinned, the results for the next command are shown on a new tab.
	Close `Ctrl+Shift+F4`	Click this button to close the selected tab of the **Run** tool window and terminate the current process.
	Help `F1`	Use this icon or shortcut to open the corresponding help page.

Stepping toolbar

Item	Tooltip and Shortcut	Description
	Show Execution Point `Alt+F10`	Click this button to have the current execution point highlighted in the editor and have the corresponding stack frame shown in the **Frames** pane.
	Step Over `F8`	Click this button to have execution run until the next line in the current method or file, skipping the methods referenced at the current execution point (if any). If the current line is the last one in the method, execution steps to the line executed right after this method.
	Step Into `F7`	Click this button to have the debugger step into the method called at the current execution point. If stepping into the called method is suppressed through the Debugger. Stepping page of the Settings dialog box (for example, if it is of a standard Java SDK class or a simple getter), the method will be skipped. Change the settings or use the *Force Step Into* command.

Item	Tooltip and Shortcut	Description
	Force Step Into Shift+Alt+F7	Click this button to have the debugger step into the method called in the current execution point even if this method is to be skipped.
	Step Out Shift+F8	Click this button to have the debugger step out of the current method, to the line executed right after it.
	Drop frame	Interrupts execution and returns to the initial point of method execution. In the process, it drops the current method frames from the stack.
	Run to Cursor Alt+F9	Click this button to resume the program execution and pause until the execution point reaches the line at the current cursor location in the editor. No breakpoint is required. Actually there is a temporary breakpoint set for the current line at the caret, which is removed once your program execution is paused. Thus, if the caret is positioned at the line which has already been executed, the program will be just resumed for further execution, because there is no way to roll back to the previous breakpoints. This action is especially useful when you have stepped deep into the methods sequence and need to step out of several methods at once. If there are breakpoints set for the lines that should be executed before bringing you to the specified line, the debugger will pause at the first encountered breakpoint. Use this action when you need a kind of a temporary breakpoint at a specific line, where the program execution should not be interrupted.
	Evaluate Expression Alt+F8	Click this button to open the Evaluate Expression dialog.

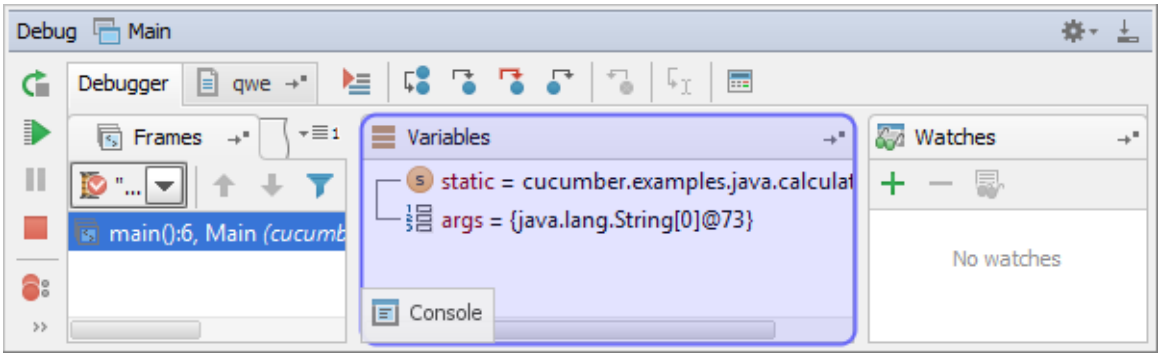
Hide/restore toolbar

Icon	Tooltip	Description
	Hide	Click this button located in the upper-right corner of the Debug Console, Watches, Treads, Frames, or Variables, to hide the corresponding area. When an area is hidden, its icon appears in upper-right corner of the Debugger.
	Restore 'Console' view	Click this button to make visible the Console area of the Debug tool window. This button becomes available after clicking .
	Restore 'Frames' view	Click this button to make visible the Frames area of the Debug tool window. This button becomes available after clicking .

Icon	Tooltip	Description
	Restore 'Watches' view	Click this button to make visible the Watches area of the Debug tool window. This button becomes available after clicking .
	Restore 'Threads' view	Click this button to make visible the Threads area of the Debug tool window. This button becomes available after clicking .
	Restore 'Variables' view	Click this button to make visible the Variables area of the Debug tool window. This button becomes available after clicking .

Moving tabs and area

If you are unhappy with the default layout of the Debug tool window, you can always move the tabs and areas. To to that, just drag a tab or an area to the desired location. The possible target gets highlight:



Drop the tab or area in the highlighted location.

To restore the default layout of tabs and area, click in the Debug toolbar.

See Also

Concepts:

- Running, Debugging and Testing

Procedures:

- Debugging

Reference:

- Debugger

Getting Started:

- IntelliJ IDEA Tool Windows

Web Resources:

- Developer Community