

Run/Debug Configuration: Jetty

Use this dialog to create or edit [run/debug configurations](#) for [Jetty](#).

- [Name field and Share option](#)
- [Server tab](#)
- [Deployment tab](#)
- [Logs tab](#)
- [Code Coverage tab](#)
- [Startup/Connection tab](#)
- [Before Launch options](#)
- [Toolbar](#)

Name field and Share option

Item	Description
Name	Use this field to edit the name of the run/debug configuration. This field is not available when editing the run/debug configuration defaults.
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.

Server tab

Item	Local/Remote	Description
Application server	Both	Select the server configuration to be used. If the run/debug configuration is intended for working with a remote server, the same server version should be configured locally and associated with the run/debug configuration. Click Configure to create a new server configuration or edit an existing one. (The Application Servers dialog will open.)
Start browser	Both	Select this check box to run the default Web browser to study your application output there.

Item	Local/Remote	Description
With JavaScript debugger	Both	<p>If this check box is selected, the Web browser is started with the JavaScript debugger enabled.</p> <div data-bbox="643 250 1396 450" style="border: 1px solid black; padding: 5px;"> <p>JavaScript debugging is available only for Firefox and Google Chrome. Note that when you debug your JavaScript in Firefox for the first time, the JetBrains Firefox extension will be installed.</p> </div>
Startup page	Both	<p>In this field, specify the URL the browser should go to when started. In most typical cases, this URL will correspond to the root of your Web application or its starting page.</p>
VM options	Local	<p>If necessary, specify the command-line options to be passed to the server JVM at the server start.</p> <p>If you need more room to type, click  next to the field to open the VM Options dialog where the text entry area is larger.</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>.

Item	Local/Remote	Description
On 'Update' action	Both	<p>Select the necessary option for the Update application action.</p> <p>The update options are different for exploded and packed artifacts.</p> <p>For exploded artifacts, the available options are:</p> <ul style="list-style-type: none"> ■ Update resources. All changed resources (that is, all application components other than the classes) will be updated. ■ Update classes and resources. All changed resources will be updated; changed classes will be recompiled. <p>In the debug mode, the updated classes will be hot-swapped. In the run mode, IntelliJ IDEA will just update the changed classes in the output folder. Whether such classes will actually be reloaded in the running application, depends on the capabilities of the runtime being used.</p> <ul style="list-style-type: none"> ■ Redeploy. The application will be updated and redeployed. ■ Restart server. The server will be restarted. The updated version of the application will be deployed at the server startup. <p>For packed artifacts, the available options are:</p> <ul style="list-style-type: none"> ■ Hot swap classes. Changed classes will be recompiled and reloaded at runtime. Note that this option will work only in the debug mode. ■ Redeploy. The overall application will be rebuilt and redeployed. ■ Restart server. The server will be restarted. The application will be rebuilt and deployed at the server startup. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>In the run/debug configurations for remote servers, the available application update options are limited to those for packed artifacts. Also, the Restart server option is not available.</p> </div>
Show dialog	Both	<p>Select this check box if you want to see the Update <application name> dialog every time you perform the Update application action.</p> <p>The Update <application name> dialog is used to view and change the current update option prior to actually updating the application.</p>

Item	Local/Remote	Description
On frame deactivation	Both	<p>Specify which application update actions should be performed when switching from IntelliJ IDEA to a different application (for example, a Web browser). (<i>Frame deactivation</i> means <i>switching to a different application.</i>)</p> <p>If no update actions are required, select Do nothing. Otherwise, select the necessary update option. Note that the Redeploy and the Restart server options are not available.</p>
JNDI port	Both	Specify the port to be used for exchanging the JNDI information with the server.

Item	Local/Remote	Description
Active	Local	<p>Use the check boxes next to the corresponding Jetty configuration files to select or deselect these files.</p> <p>The selected (active) configuration files are used to configure the server at its start.</p> <p>For Jetty versions before version 7, only the files that are active in the run configuration are taken into account. For Jetty 7 and later versions, the files that are active in the associated server configuration are used in addition to the files that are active in the run configuration.</p> <p>(In technical terms, the files that are active in the run configuration correspond to command-line arguments passed to <code><jetty_home>\start.jar</code> which is used to start the server. For Jetty 7 and later versions, additionally, the file <code><jetty_home>\start.ini</code> containing the arguments for <code>start.jar</code> is used. The files that are active in the server configuration correspond to the entries in <code>start.ini</code>.)</p> <p>For the run configuration to be functional, the configuration files <code>jetty.xml</code> and <code>jetty-jmx.xml</code> must be active.</p> <p>If you are using the Jetty version 7 or later, the configuration file <code>jetty.xml</code> may be set active either in the run configuration or in the associated server configuration.</p> <p>If the set of active configuration files seems problematic, IntelliJ IDEA will inform you about that and suggest a quick fix. Examples of problematic cases are:</p> <ul style="list-style-type: none"> ■ The configuration file <code>jetty.xml</code> or <code>jetty-jmx.xml</code> or both are inactive in the run configuration and the associated server configuration (for Jetty 7 and later versions). ■ One or more configuration files are active in the run configuration and, at the same time, in the associated server configuration (for Jetty 7 and later versions). ■ The configuration file <code>jetty.xml</code> or <code>jetty-jmx.xml</code> or both are inactive in the run configuration (for Jetty versions before version 7).
Path	Local	<p>The paths to the corresponding Jetty configuration files are shown (readonly).</p> <p>For the files located within the Jetty installation directory and its subdirectories, the paths are relative to Jetty home (that is, the installation directory). For all the rest of the configuration files, the absolute paths are shown.</p>

Item	Local/Remote	Description
Add / Edit / Remove / Move up/down	Local	<p>Initially, the configuration file list contains the configuration files located in the directory <jetty_home>\etc.</p> <p>Use the buttons to the right of the list to manage this list:</p> <ul style="list-style-type: none"> ■ Add. Click this button to add a configuration file to the list. In the dialog that opens, select the necessary Jetty configuration file and clickOK. ■ Edit. Click this button to replace the selected file with a different Jetty configuration file. In the dialog that opens, select the replacement configuration file and clickOK. ■ Remove. Click this button to remove the selected file from the list. Note that this operation does not delete the file physically. ■ Move up/down. Click this button to move the selected file one line up or down in the list. <p>Note that the order of files in the list is important because it corresponds to the order of arguments passed to start.jar when the server is started.</p>
Remote staging	Remote	<p>This section contains the settings related to staging. An example of remote staging settings for a mounted folder is provided after this table.</p>
Type	Remote	<p>Select the way the staging environment or host is accessed for transferring the application artifact or artifacts from your local computer. (In the user interface of IntelliJ IDEA this setting is also referred to as the <i>connection type</i>.)</p> <p>The available options are:</p> <ul style="list-style-type: none"> ■ Same file system. Select this option if the target server is installed on your local computer. The artifacts in this case are deployed locally and, thus, don't need to be transferred to a remote host. ■ ftp. The File Transfer Protocol or Secure FTP is used. ■ Local or mounted folder. The staging environment is a local folder or is accessed as a mounted folder. <p>If the list is empty, you have to enable the Remote Hosts Access plugin which supports the corresponding functionality.</p>

Item	Local/Remote	Description
Host	Remote	<p>If Same file system is selected for Type, the only available option for Host is also Same file system.</p> <p>In all other cases, the list contains the existing configurations of the selected type. So each configuration corresponds to an individual (S)FTP connection, or a local or mounted folder.</p> <p>Select an existing configuration or create a new one.</p> <p>To create a new configuration:</p> <ol style="list-style-type: none"> 1. Click  to the right of the list. 2. In the Deployment dialog, click +. 3. In the Add Server dialog, specify the configuration name, select the type, and click OK. 4. On the Connection tab, specify the settings in the Upload/download project files section. <p>Note that the rest of the settings don't matter in the context of a remote Jetty run/debug configuration.</p> <ol style="list-style-type: none"> 5. Click OK in the Deployment dialog.
contexts	Remote	<p>When deploying the application artifact, the deployment descriptor file is created and placed into the directory <code><jetty_home>\contexts</code>. The settings in this section define the location of this directory.</p>
Local path or Path from root	Remote	<p>If Same file system is selected for Type and Host, specify the absolute path to the folder <code>contexts</code>.</p> <p>In all other cases, specify the path to <code>contexts</code> relative to the local or mounted folder, or the root of the (S)FTP host.</p> <p>You can use  to select the folder in the Select Path or the Choose target path dialog.</p>
Staging	Remote	<p>When deploying to the remote host, the application artifact or artifacts are placed into a staging folder which should be accessible to Jetty. The settings in this section define the location of this staging folder.</p> <p>Note that if Same file system is selected for Type and Host, no settings in this section need to be specified.</p>
Path from root	Remote	<p>The path to the staging folder relative to the local or mounted folder, or the root of the (S)FTP host.</p> <p>You can use  to select the folder in the Choose target path dialog.</p>
Mapped as	Remote	<p>The absolute path to the staging folder in the local file system of the remote host.</p>

Item	Local/Remote	Description
Remote connection settings	Remote	The settings for accessing deployed applications. In Jetty run/debug configurations, these are used just to form the URL for the Startup Page field .
Host	Remote	The fully qualified domain name or the IP address of the Jetty host.
Port	Remote	The HTTP port of Jetty.

An example of remote staging settings for a mounted folder

Assuming that:

- C:\shared is a shared folder on the remote host which is mounted to the local computer as the drive X:.
- Jetty is installed in C:\shared\jetty-distribution-8.0.1.v20110908.
- The folder that you are going to use for staging is C:\shared\staging.

Here are the corresponding remote staging settings:

- **Type:** Local or mounted folder.
- **Host:** The configuration should be selected in which the value in the **Folder** field is X:\ (the **Upload/download project files** section on the **Connection** tab of the **Deployment** dialog).
- **contexts/Path from root:** jetty-distribution-8.0.1.v20110908\contexts
- **Staging/Path from root:** staging
- **Staging/Mapped as:** C:\shared\staging

Deployment tab

Use this tab to specify which [artifacts](#) and/or external resources should be deployed onto the server. (An external resource means a deployable Web component such as a .war file which is not represented by a project artifact. Usually, such components are stored outside of the project scope.)

To add items to the deployment list (shown under **Deploy at the server startup**), use **+**. To edit the settings for an artifact or external resource, select the corresponding item in the list and use the controls in the right-hand part of the tab. For more information, see the table below.

Item	Tooltip and Shortcut	Description
+	Add Alt+Insert	Use this icon or shortcut to add an artifact or an external resource to the list. <ul style="list-style-type: none"> ■ To add an artifact, select Artifact and choose the desired artifact in the dialog that opens. ■ To add an external resource, select External Source and choose the location of the desired resource in the dialog that opens.

Item	Tooltip and Shortcut	Description
	Remove Alt+Delete	Use this icon or shortcut to remove the selected artifacts and external resources from the list.
	Edit Artifact F4	Use this icon or shortcut to configure the selected artifact. (The Artifacts page of the Project Structure dialog will open.)
Use custom context root		If you want to assign a particular context root  to an artifact or external resource, select the artifact or the resource, select the check box and specify the desired context root in the field underneath the check box.

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 .
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.

Item	Description
	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 #ccc; padding: 5px; margin-top: 10px;">The button is available only when an entry is selected.</div>

Code Coverage tab

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

Note that this tab is not available for remote servers.

Item	Description
Choose code coverage runner	Select the desired code coverage runner.
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.
Packages and classes to record code coverage data	If necessary, specify the classes and packages to be measured. Use  or  to add classes or packages to the list. To remove the classes or packages from the list, select the corresponding list items and click  .
Enable coverage in test folders.	Select this check box to include the test source folders in code coverage analysis.

Startup/Connection tab

Item	Local/Remote	Description
 Run  Debug	Remote	Select Run or Debug to show settings either for the run or the debug mode.
 Run with Coverage	Local	Select Run with Coverage to show settings for run with coverage mode.

Item	Local/Remote	Description
Transport	Remote	<p>Specify the "transport" settings for the connection with the debugger. In technical terms, these are the parameters for the <code>-Xrunjdpw</code> command-line option:</p> <ul style="list-style-type: none"> ■ Socket. Specify the debugger port in the Port field. The combination of these two settings translates into <code>-Xrunjdpw:transport=dt_socket,address=<port>,suspend=n,server=y</code> ■ Shared memory. Specify the shared memory address in the corresponding field. The combination of these two settings translates into <code>-Xrunjdpw:transport=dt_shmem,address=<address>,suspend=n,server=y</code> <p>Note that as you change the transport settings, what follows <code>transport=</code> within <code>-Xrunjdpw</code> in the area above also changes. In this way you control the corresponding command-line debugger parameters which you cannot edit directly.</p>

Before Launch options

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.

Item	Shortcut	Description
------	----------	-------------

Item	Shortcut	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. If an error occurs during the compilation, IntelliJ IDEA won't attempt to start the run/debug configuration. ■ 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. ■ 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. See also, Configuring Artifacts. ■ Run Another Configuration. Select this option to have another run/debug configuration executed. In the dialog that opens, select the configuration to be run. ■ 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. For more information, see Maven. ■ Run Remote External Tool. Select this option to run a remote application which is external to IntelliJ IDEA. In the dialog that opens, select one or more remote applications to be run. If the necessary applications are not defined in IntelliJ IDEA yet, add definitions. For more information, see Configuring Third-Party Tools and External Tools.
	Alt+Delete	Click this icon to remove the selected task from the list.
	Enter	Click this icon to edit the selected task. Make the necessary changes in the dialog that opens.

Item	Shortcut	Description
	Alt+Up/Alt+Down	Click these icons to move the selected task one line up or down in the list.
Show this page		Select this check box to have the run/debug configuration settings shown prior to actually starting the run/debug configuration.

Toolbar

Item	Shortcut	Description
	Alt+Insert	Use this icon or shortcut to create a new run/debug configuration.
	Alt+Delete	Use this icon or shortcut to delete the selected run/debug configuration.
	Ctrl+D	Use this icon or shortcut to create a copy of the selected run/debug configuration.
		Click this button to edit the default settings of the selected run/debug configuration. This button is disabled for defaults.
	Alt+Up/Alt+Down	Use these buttons to move the selected run/debug configuration up and down in the list. The order of configurations in the list defines the order in which the configurations appear in the corresponding list on the main toolbar. These buttons are disabled for defaults.
		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.

See Also

Concepts:

- [Run/Debug Configuration](#)

Procedures:

- [Creating and Editing Run/Debug Configurations](#)

Reference:

- [Debugger](#)

Web Resources:

