

Technologies Page

Select the technologies, frameworks and languages to be supported in your [module](#). If necessary, also select an application server that you want to use to deploy and run your application.

As a result, you'll be able to download and configure the necessary framework components (e.g. implementation libraries). You will also have various descriptors, configuration files and sample code generated automatically, and the [module dependencies](#) properly configured.

In IntelliJ IDEA terms, the necessary [facets](#) will be created along with an [artifact specification](#) and a [run/debug configuration](#), if appropriate.

The set of frameworks and technologies you can select from depends on which [plugins](#) are currently enabled in IntelliJ IDEA. For example, Ruby and Python appear on this page if the corresponding plugins are installed and enabled. For more information, see [Installing, Updating and Uninstalling Repository Plugins](#) and [Enabling and Disabling Plugins](#).

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Web Application

Select the check box to enable generic [Web application](#) development support. See also, [Enabling Web Application Support](#).

Item	Description
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Version	Select the version of the Servlet specification to be supported.
Create web.xml	For version 3.0: select this check box to have the deployment descriptor file web.xml created. (For earlier versions, this file is always created.)

Struts

Select the check box to enable [Apache Struts](#) 1.x support. See also, [Enabling Struts Support](#).

Item	Description
Version	<p>Select the Struts version to be supported.</p> <p>If you also choose to download the library files that implement Struts (the Download option), the selected version will define which files you will be able to download.</p>
Libraries	<p>Specify your intention in relation to a library that implements Struts. You can choose to use an existing library, create and use a new one, download the library files if they are not yet available on your computer, or postpone setting up the library until a later time.</p> <ul style="list-style-type: none"> ■ Use library. Select the library to be used from the list (if the corresponding library is already defined in IntelliJ IDEA). <p>Create. If the corresponding library files (.jar) are already available on your computer, you can arrange those files in a library and use that new library. To do that, click Create and select the necessary files in the dialog that opens. (Use the Ctrl key for multiple selections.)</p> <p>Optionally, click Configure to edit the selected library. (For an existing library the Edit Library dialog will open, for the library that you have just created - the Create Library dialog.)</p> ■ Download. Select this option to download the library files that implement the selected Struts version. (The downloaded files will be arranged in an IntelliJ IDEA library.) <p>Optionally, click Configure to edit the library settings and contents. (The Downloading Options dialog will open.)</p> ■ Set up library later. Select this option to postpone setting up the Struts library until a later time. <p>Configure. Click this button to edit the settings for the library selected next to Use library or the one that is about to be downloaded.</p>

WebServices

Select the check box to enable [Web Services](#) development support. See also, [Enabling Web Service Development Support](#).

Item	Description
Generate sample server code	Select this check box to have a sample HelloWorld class created in your source folder (e.g. src).
Configure	Click this link to specify the settings for WS engines that you want to use. (The Web Services dialog will open.)

JSF

Select the check box to enable [JavaServer Faces](#) (JSF) support. See also, [Preparing for JSF Application Development](#).

Item	Description
Version	Select the JSF version to be supported.
Libraries	<p>Specify your intention in relation to a library that implements JSF. You can choose to use an existing library, create and use a new one, download the library files if they are not yet available on your computer, or postpone setting up the library until a later time.</p> <ul style="list-style-type: none">■ Use library. Select the library to be used from the list (if the corresponding library is already defined in IntelliJ IDEA). Create. If the corresponding library files (.jar) are already available on your computer, you can arrange those files in a library and use that new library. To do that, click Create and select the necessary files in the dialog that opens. (Use the Ctrl key for multiple selections.) Optionally, click Configure to edit the selected library. (For an existing library the Edit Library dialog will open, for the library that you have just created - the Create Library dialog.)■ Download. Select this option to download the library files that implement JSF. (The downloaded files will be arranged in an IntelliJ IDEA library.) Optionally, click Configure to edit the library settings and contents. (The Downloading Options dialog will open.)■ Set up library later. Select this option to postpone setting up the JSF library until a later time. <p>Configure. Click this button to edit the settings for the library selected next to Use library or the one that is about to be downloaded.</p>

Primefaces, Richfaces, Openfaces, or Icefaces

Select the check box to be able to use the corresponding JSF component library ([PrimeFaces](#), [RichFaces](#), [OpenFaces](#), or [ICEfaces](#)). See also, [Preparing for JSF Application Development](#).

- **Use library.** Select the library to be used from the list (if the corresponding library is already defined in IntelliJ IDEA).
Create. If the corresponding library files (.jar) are already available on your computer, you can arrange those files in a [library](#) and use that new library. To do that, click **Create** and select the necessary files in the [dialog that opens](#). (Use the Ctrl key for multiple selections.)
Optionally, click **Configure** to edit the selected library. (For an existing library the [Edit Library dialog](#) will open, for the library that you have just created - the [Create Library dialog](#).)
- **Download.** Select this option to download the corresponding JSF component library files. (The downloaded files will be arranged in an IntelliJ IDEA [library](#).)
Optionally, click **Configure** to edit the library settings and contents. (The [Downloading Options dialog](#) will open.)

Configure. Click this button to edit the settings for the library selected next to **Use library** or the one that is about to be downloaded.

Struts 2

Select the check box to enable [Apache Struts 2](#) support. See also, [Enabling Struts 2 Support](#).


Specify your intention in relation to a [library](#) that implements Struts 2. You can choose to use an existing library, create and use a new one, download the library files if they are not yet available on your computer, or postpone setting up the library until a later time.

- **Use library.** Select the library to be used from the list (if the corresponding library is already defined in IntelliJ IDEA).
Create. If the corresponding library files (.jar) are already available on your computer, you can arrange those files in a [library](#) and use that new library. To do that, click **Create** and select the necessary files in the [dialog that opens](#). (Use the Ctrl key for multiple selections.)
Optionally, click **Configure** to edit the selected library. (For an existing library the [Edit Library dialog](#) will open, for the library that you have just created - the [Create Library dialog](#).)
- **Download.** Select this option to download the library files that implement Struts 2. (The downloaded files will be arranged in an IntelliJ IDEA [library](#).)
Optionally, click **Configure** to edit the library settings and contents. (The [Downloading Options dialog](#) will open.)
- **Set up library later.** Select this option to postpone setting up the Struts 2 library until a later time.

Configure. Click this button to edit the settings for the library selected next to **Use library** or the one that is about to be downloaded.

Google App Engine

Select the check box to be able to use [Google App Engine](#). See also, [Creating Google App Engine Project](#).

Item	Description
Google App Engine SDK	Specify the path to the Google App Engine SDK for Java installation directory. You can click  and select the corresponding directory in the dialog that opens .
Persistence	If necessary, select the App Engine Datastore implementation to be supported (JDO or JPA).
Download	If the path to Google App Engine SDK is not specified, you can click this link to open the Google App Engine Downloads page . (This page lets you download the latest version of Google App Engine SDK for Java.)

WebServices Client


Select the check box to enable Web Services client development support. See also, [Enabling Web Service Client Development Support](#).

Item	Description
Generate sample client code	Select this check box to have sample client code generated in your source folder (e.g. src). To generate the code, IntelliJ IDEA will ask you to specify the corresponding WSDL file.

Configure	Click this link to specify the settings for WS engines that you want to use. (The Web Services dialog will open.)
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Application Server

Select the check box and specify the application server that you are going to use to deploy and run your application. As a result, IntelliJ IDEA will create a [run/debug configuration](#) for the specified server.

Item	Description
Application Server	<p>Select a server which IntelliJ IDEA is already aware of, or specify another "new" server.</p> <p>To specify a new server, select New <Server Name> from the list. Then, in the field or fields that appear underneath, specify the server settings:</p> <ul style="list-style-type: none"> ■ For a server installed locally, specify the path to the server installation directory in the <Server Name> Home field. (Click  to select the directory in the corresponding dialog.) ■ For a hosted server (Cloud Foundry or CloudBees), specify your user account details.

Enterprise JavaBeans

Select the check box to enable [Enterprise JavaBeans](#) (EJB) support. See also, [Enabling EJB Support](#).

Item	Description
Version	<p>Select the EJB version to be supported.</p> <p>If you also choose to download the library files that implement EJB (the Download option), the selected version will define which files you will be able to download.</p>
Libraries	<p>Specify your intention in relation to a library that implements EJB. You can choose to use an existing library, create and use a new one, download the library files if they are not yet available on your computer, or postpone setting up the library until a later time.</p> <ul style="list-style-type: none"> ■ Use library. Select the library to be used from the list (if the corresponding library is already defined in IntelliJ IDEA). <p>Create. If the corresponding library files (.jar) are already available on your computer, you can arrange those files in a library and use that new library. To do that, click Create and select the necessary files in the dialog that opens. (Use the Ctrl key for multiple selections.)</p> <p>Optionally, click Configure to edit the selected library. (For an existing library the Edit Library dialog will open, for the library that you have just created - the Create Library dialog.)</p> ■ Download. Select this option to download the library files that implement the selected EJB version. (The downloaded files will be arranged in an IntelliJ IDEA library.) <p>Optionally, click Configure to edit the library settings and contents. (The Downloading Options dialog will open.)</p>

- **Set up library later.** Select this option to postpone setting up the EJB library until a later time.

Configure. Click this button to edit the settings for the library selected next to **Use library** or the one that is about to be downloaded.

JavaEE Application

Select the check box to enable [Java EE application](#) development support. See also, [Enabling Java EE Application Support](#).

Item	Description
Version	Select the Java EE version to be supported.

JavaEE Persistence

Select the check box to enable [Java Persistence API](#) (JPA) support. See also, [Enabling JPA Support](#).

Item	Description
persistence.xml version	Select the version of the persistence.xml file that you want to use. If you also choose to download the library files that implement JPA (the Download option), the selected version will define which files you will be able to download.
Import database schema	Select this check box to have a database schema imported automatically. Optionally, select the JPA implementation-specific database scheme to be imported from the list above the check box.
Libraries	Specify your intention in relation to a library that implements JPA. You can choose to use an existing library, create and use a new one, download the library files if they are not yet available on your computer, or postpone setting up the library until a later time. <ul style="list-style-type: none"> ■ Use library. Select the library to be used from the list (if the corresponding library is already defined in IntelliJ IDEA). Create. If the corresponding library files (.jar) are already available on your computer, you can arrange those files in a library and use that new library. To do that, click Create and select the necessary files in the dialog that opens. (Use the Ctrl key for multiple selections.) Optionally, click Configure to edit the selected library. (For an existing library the Edit Library dialog will open, for the library that you have just created - the Create Library dialog.) ■ Download. Select this option to download the library files that implement the selected JPA version. (The downloaded files will be arranged in an IntelliJ IDEA library.) Optionally, click Configure to edit the library settings and contents. (The Downloading Options dialog will open.) ■ Set up library later. Select this option to postpone setting up the JPA library until a later time.

Configure. Click this button to edit the settings for the library selected next to **Use library** or the one that is about to be downloaded.

CDI: Contexts and Dependency Injection

Select the check box to enable [Contexts and Dependency Injection](#) (CDI) support.

Specify your intention in relation to a [library](#) that implements CDI. You can choose to use an existing library, create and use a new one, or download the library files if they are not yet available on your computer.

- **Use library.** Select the library to be used from the list (if the corresponding library is already defined in IntelliJ IDEA).

Create. If the corresponding library files (.jar) are already available on your computer, you can arrange those files in a [library](#) and use that new library. To do that, click **Create** and select the necessary files in the [dialog that opens](#). (Use the Ctrl key for multiple selections.)

Optionally, click **Configure** to edit the selected library. (For an existing library the [Edit Library dialog](#) will open, for the library that you have just created - the [Create Library dialog](#).)

- **Download.** Select this option to download the library files that implement CDI. (The downloaded files will be arranged in an IntelliJ IDEA [library](#).)

Optionally, click **Configure** to edit the library settings and contents. (The [Downloading Options dialog](#) will open.)

Configure. Click this button to edit the settings for the library selected next to **Use library** or the one that is about to be downloaded.

DM Server

Select the check box to be able to use [SpringSource dm Server](#) and develop dm Server-targeted applications.

Item	Description
Server	<p>Select the server to be used from the list (if the corresponding server is already defined in IntelliJ IDEA).</p> <p>To define a server in IntelliJ IDEA, click Add and specify the server settings in the Spring dmServer dialog that opens.</p>
Facet	<p>Select the deployment artifact type that the module will implement (the Spring DM facet type in IntelliJ IDEA terms):</p> <ul style="list-style-type: none">■ Bundle, an OSGi bundle. IntelliJ IDEA will create:<ul style="list-style-type: none">■ The META-INF\MANIFEST.MF file for the bundle.■ A dm Bundle artifact specification.■ A project-level library for the dm Server API. This library will be added to the module dependencies.■ A dm Server-oriented run/debug configuration.If necessary, specify additional options.■ PAR or Plan, a dm Server PAR or plan. Specify the associated settings.■ Configuration, a configuration artifact. Specify the artifact name.

For more information on dm Server deployment artifacts, see "Deployment Architecture" and "Developing Applications" in [SpringSource dm Server Programmer Guide](#).

Bundle options

Spring DM Support

Select this check box to enable [Spring](#) support (to create a Spring facet in IntelliJ IDEA terms). As a result, IntelliJ IDEA will create the following files:

- META-INF\spring\module-context.xml
- META-INF\spring\osgi-context.xml

At this step you are not suggested to download the library files that implement Spring. However, you will be able to do that after the module has been created by using the corresponding quick fix in the **Project Structure** dialog. For more information, see [Adding a Spring facet to an existing module](#).

Web module

Select this check box to enable generic [Web application](#) development support (to create a Web facet in IntelliJ IDEA terms). Specify the associated settings:

- **Version.** Select the version of the Servlet specification to be supported.
- **Create web.xml.** For version 3.0: select this check box to have the [deployment descriptor](#) file web.xml created. (For earlier versions, this file is always created.)

As a result, IntelliJ IDEA will create web\WEB-INF\web.xml (for version 3.0 - if so specified).

PAR or Plan options

Name

For a PAR, this is the application identifier (Application-SymbolicName), for a plan - the plan name (the name attribute of the <plan> element).

Version

The application or the plan version (Application-Version or the version attribute of the <plan> element).

Plan

Select this option to create a plan. IntelliJ IDEA will create:

- A .plan XML file.
- A dm Plan artifact specification.

Platform Archive (PAR)

Select this option to create a PAR. IntelliJ IDEA will create:

- The META-INF\MANIFEST.MF file for the PAR.
- A dm Platform Archive artifact specification.

Scoped

For a plan: select this check box to make the plan scoped (corresponds to scoped="true" within the <plan> element).

Atomic

For a plan: select this check box to make the plan atomic (corresponds to atomic="true" within the <plan> element).

Nested bundles

Use the controls in this area to manage other dm Server deployment artifacts within the PAR or plan. (In IntelliJ IDEA, these are represented by other modules within the same project if those modules have suitable dm Server

facets. A PAR may include OSGi bundles and configuration artifacts; a plan - OSGi bundles, configuration artifacts, PARs and other plans).

- **Add.** Use this button to add the artifacts to the list. Select the necessary artifacts (IntelliJ IDEA modules) in the dialog that opens.
- **Remove.** Use this button to remove the selected artifacts from the list.
- **Up.** For a plan: use this button to move the selected artifact one line up in the list. (The order of artifacts defines their deployment order.)
- **Down.** For a plan: use this button to move the selected artifact one line down in the list.
- **Versions.** For a plan: use this button to specify the version or the range of versions for the selected artifact (corresponds to the `version` attribute of the `<artifact>` element).

Configuration option

Name	Specify the OSGi name of the artifact (at the deployment stage, corresponds to the name of the file).
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Google Web Toolkit

Select the check box to be able to use [Google Web Toolkit](#) (GWT). See also, [Enabling GWT Support](#).

Item	Description
GWT SDK	Specify the path to the GWT SDK installation directory. You can click <input type="button" value="..."/> and select the corresponding directory in the dialog that opens .
Create sample application	Select this check box to have a sample application created. Specify the package for the application classes in the field underneath.
Download GWT	If the path to GWT SDK is not specified: you can click this link to open the Google Web Toolkit Downloads page . (This page lets you download a GWT SDK.)

Groovy

Select the check box to enable [Groovy](#) support. See also, [Creating Modules with Groovy and Groovy-Based Frameworks Support](#).

Select an existing Groovy library or create a new [library](#) for Groovy:

- **Use library.** Select the Groovy library to be used from the list (if the corresponding library is already defined in IntelliJ IDEA).
- **Create.** If Groovy is already installed on your computer, you create a Groovy [library](#) and use that new library. To do that, click **Create** and select the Groovy installation directory in the [dialog that opens](#).

Optionally, click **Configure** to edit the selected library. (For an existing library the [Edit Library dialog](#) will open, for the library that you have just created - the [Create Library dialog](#).)

Hibernate

Select the check box to enable [Hibernate](#) support. See also, [Enabling Hibernate Support](#).

Item	Description
Create default hibernate configuration and main class	Select this check box to have a Hibernate configuration file <code>hibernate.cfg.xml</code> and a class with the <code>main()</code> method created.
Import database schema	Select this check box to have a database schema imported automatically.
Libraries	<p>Specify your intention in relation to a library that implements Hibernate. You can choose to use an existing library, create and use a new one, download the library files if they are not yet available on your computer, or postpone setting up the library until a later time.</p> <ul style="list-style-type: none"> ■ Use library. Select the library to be used from the list (if the corresponding library is already defined in IntelliJ IDEA). Create. If the corresponding library files (<code>.jar</code>) are already available on your computer, you can arrange those files in a library and use that new library. To do that, click Create and select the necessary files in the dialog that opens. (Use the <code>Ctrl</code> key for multiple selections.) Optionally, click Configure to edit the selected library. (For an existing library the Edit Library dialog will open, for the library that you have just created - the Create Library dialog.) ■ Download. Select this option to download the library files that implement Hibernate. (The downloaded files will be arranged in an IntelliJ IDEA library.) Optionally, click Configure to edit the library settings and contents. (The Downloading Options dialog will open.) ■ Set up library later. Select this option to postpone setting up the Hibernate library until a later time. <p>Configure. Click this button to edit the settings for the library selected next to Use library or the one that is about to be downloaded.</p>

RESTful WebServices

Select the check box to enable [RESTful](#) Web Services (client and server) development support. See also, [RESTful WebServices](#).

Item	Description
Generate server code	Select this check box to have a sample <code>HelloWorld</code> server class created in your source folder (e.g. <code>src</code>).
Generate client code	Select this check box to have a sample <code>HelloWorldClient</code> class created in your source folder (e.g. <code>src</code>).
Libraries	Specify your intention in relation to a library that implements RESTful WebServices. You can choose to use an existing library, create and use a new one, download the library files if they are not yet available on your computer, or postpone setting up the library until a later time.

- **Use library.** Select the library to be used from the list (if the corresponding library is already defined in IntelliJ IDEA).
Create. If the corresponding library files (.jar) are already available on your computer, you can arrange those files in a [library](#) and use that new library. To do that, click **Create** and select the necessary files in the [dialog that opens](#). (Use the Ctrl key for multiple selections.)
Optionally, click **Configure** to edit the selected library. (For an existing library the [Edit Library dialog](#) will open, for the library that you have just created - the [Create Library dialog](#).)
 - **Download.** Select this option to download the library files that implement RESTful WebServices. (The downloaded files will be arranged in an IntelliJ IDEA [library](#).)
Optionally, click **Configure** to edit the library settings and contents. (The [Downloading Options dialog](#) will open.)
 - **Set up library later.** Select this option to postpone setting up the RESTful WebServices library until a later time.
- Configure.** Click this button to edit the settings for the library selected next to **Use library** or the one that is about to be downloaded.

Spring

Select the check box to enable [Spring](#) support. See also, [Enabling Spring Support](#).

Specify your intention in relation to a [library](#) that implements Spring. You can choose to use an existing library, create and use a new one, download the library files if they are not yet available on your computer, or postpone setting up the library until a later time.

- **Use library.** Select the library to be used from the list (if the corresponding library is already defined in IntelliJ IDEA).
Create. If the corresponding library files (.jar) are already available on your computer, you can arrange those files in a [library](#) and use that new library. To do that, click **Create** and select the necessary files in the [dialog that opens](#). (Use the Ctrl key for multiple selections.)
Optionally, click **Configure** to edit the selected library. (For an existing library the [Edit Library dialog](#) will open, for the library that you have just created - the [Create Library dialog](#).)
- **Download.** Select this option to download the library files that implement Spring. (The downloaded files will be arranged in an IntelliJ IDEA [library](#).)
Optionally, click **Configure** to edit the library settings and contents. (The [Downloading Options dialog](#) will open.)
- **Set up library later.** Select this option to postpone setting up the Spring library until a later time.

Configure. Click this button to edit the settings for the library selected next to **Use library** or the one that is about to be downloaded.

Spring MVC, Spring Batch, or other Spring framework

Select a check box to add support for a particular Spring framework (e.g. [Spring MVC](#), [Spring Batch](#), etc.). See also, [Enabling Spring Support](#).

Specify your intention in relation to a [library](#) that implements the selected framework. You can choose to use an existing library, create and use a new one, or download the library files if they are not yet available on your computer.

- **Use library.** Select the library to be used from the list (if the corresponding library is already defined in IntelliJ IDEA).

Create. If the corresponding library files (.jar) are already available on your computer, you can arrange those files in a [library](#) and use that new library. To do that, click **Create** and select the necessary files in the [dialog that opens](#). (Use the Ctrl key for multiple selections.)

Optionally, click **Configure** to edit the selected library. (For an existing library the [Edit Library dialog](#) will open, for the library that you have just created - the [Create Library dialog](#).)

- **Download.** Select this option to download the library files that implement the selected Spring framework. (The downloaded files will be arranged in an IntelliJ IDEA [library](#).)

Optionally, click **Configure** to edit the library settings and contents. (The [Downloading Options dialog](#) will open.)

Configure. Click this button to edit the settings for the library selected next to **Use library** or the one that is about to be downloaded.

SQL Support

Select the check box to enable [SQL](#) support.

Item	Description
Default Dialect	Select the SQL dialect to be used by default for the module. Select Project Default to use the default project SQL dialect.

Tapestry

Select the check box to enable [Apache Tapestry](#) support. See also, [Enabling Tapestry Support](#).

Specify your intention in relation to a [library](#) that implements Tapestry. You can choose to use an existing library, create and use a new one, download the library files if they are not yet available on your computer, or postpone setting up the library until a later time.

- **Use library.** Select the library to be used from the list (if the corresponding library is already defined in IntelliJ IDEA).

Create. If the corresponding library files (.jar) are already available on your computer, you can arrange those files in a [library](#) and use that new library. To do that, click **Create** and select the necessary files in the [dialog that opens](#). (Use the Ctrl key for multiple selections.)

Optionally, click **Configure** to edit the selected library. (For an existing library the [Edit Library dialog](#) will open, for the library that you have just created - the [Create Library dialog](#).)

- **Download.** Select this option to download the library files that implement Tapestry. (The downloaded files will be arranged in an IntelliJ IDEA [library](#).)

Optionally, click **Configure** to edit the library settings and contents. (The [Downloading Options dialog](#) will open.)

- **Set up library later.** Select this option to postpone setting up the Tapestry library until a later time.

Configure. Click this button to edit the settings for the library selected next to **Use library** or the one that is about to be downloaded.

See Also

Concepts:

- [Facet](#)

Procedures:

- [Creating a Project from Scratch](#)
- [Adding Frameworks Support](#)

Web Resources:

- [Developer Community](#)