Extract Property

In Maven projects, while editing `pom.xml`, one needs to define a property and replace the occurrences of some value - artifact version, for example, - with this property.

For these purposes, IntelliJ IDEA provides the *Extract Property* refactoring.

Extract Property refactoring creates a new property definition in the specified `pom.xml` file, finds all the occurrences of the selected string in the hierarchy of `pom.xml` files, and replaces them with the above property in the format: `${<property_name>}`

The *Extract Property* refactoring lets you move expressions and local declarations to properties.

Examples

Before	After
In this example, artifact version is replaced with a property, which is declared in the same `pom.xml` file:	

`<artifactId>submodule<artifactId>`	`<artifactId>${submodule}</artifactId>`
	`<properties>`
	`    <submodule>submodule</submodule>`
	`</properties>`

In this example, artifact version in a `pom.xml` file is replaced with a property, which is declared in its parent `pom.xml` file:	

`<parent>`
`    <artifactId>HelloWorld</artifactId>`
`    <version>1.0</version>`
`</parent>`
`<artifactId>submodule<artifactId>`
	Parent:
	`<artifactId>HelloWorld</artifactId>`
	`...`
	`<modules>`
	`    <module>${submodule}</module>`
	`</modules>`
	`...`
	`<properties>`
	`    <submodule>submodule</submodule>`
	`</properties>`
	Child:
	`<parent>`
	`    <artifactId>HelloWorld</artifactId>`
	`    <version>1.0</version>`
	`</parent>`
	`<artifactId>${submodule}</artifactId>`

To extract a property in a pom.XML file

1. Open the desired `pom.xml` file for editing, and place the caret somewhere inside the value you want to replace.

   > You can also select a certain substring; in this case the refactoring will apply to the selection.

2. Press `Ctrl+Alt+V`, or choose **Refactor | Extract | Property** on the context menu, or on the main menu. Note that selection will be automatically expanded up to the enclosing tags.

3. In the Extract Property dialog box, do the following:

   - In the **Name** field, specify the name you want to assign to the new property. IntelliJ IDEA suggests a number of suitable names. You can select one from the drop-down list, or type the desired name manually.

   - In the **Project** drop-down list, select the project where the new property will be declared.
   Click **OK**.

4. The subsequent workflow depends on the specific `pom.xml` file the refactoring has been invoked from.

   - The occurrence, for which the refactoring has been invoked, will be replaced silently. If the string occurs several times, the replace usage dialog will be displayed for these occurrences. You have to specify whether you want to replace each occurrence.

   - If the `pom.xml` is a parent file and the new property will be declared in it, IntelliJ IDEA replaces the values in the parent file silently, and displays the other occurrences in the Find tool window. You have to specify whether you want to replace each occurrence.

   - If the `pom.xml` is inherited from a parent file, IntelliJ IDEA replaces the occurrence in the child file silently. This change is not propagated to the parent `pom.xml`.

   In each case, IntelliJ IDEA adds new property declaration to the specified `pom.xml` file.

See Also

Language and Framework-Specific Guidelines:

- Maven

Reference:

- Extract Property Dialog

Web Resources:

- Developer Community