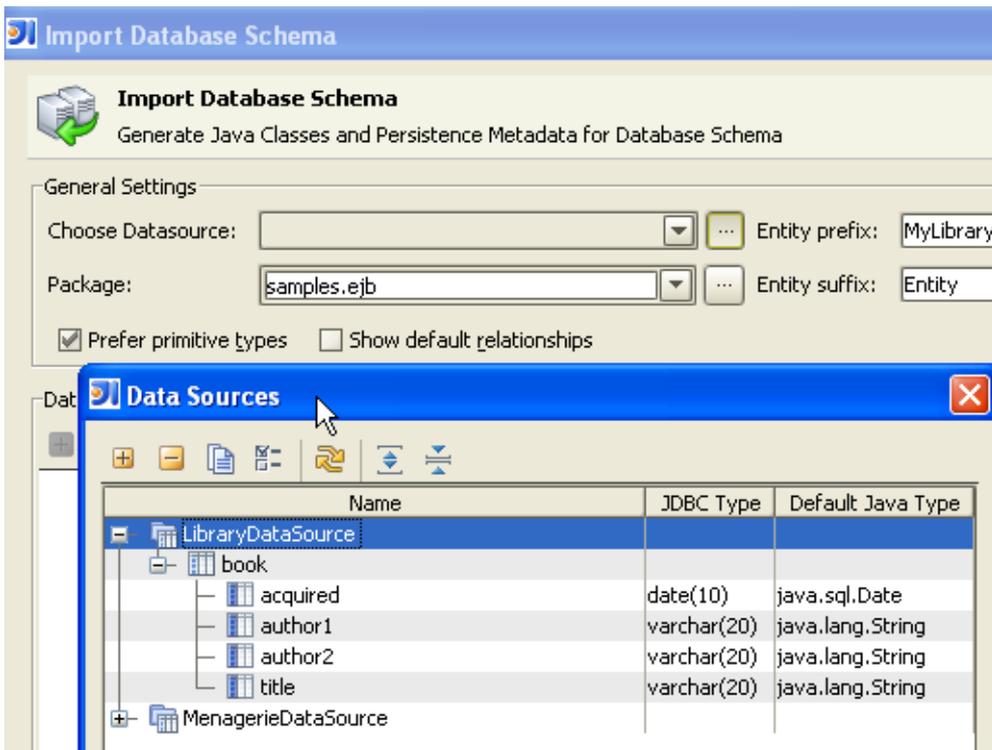


# Mapping by Database Schema

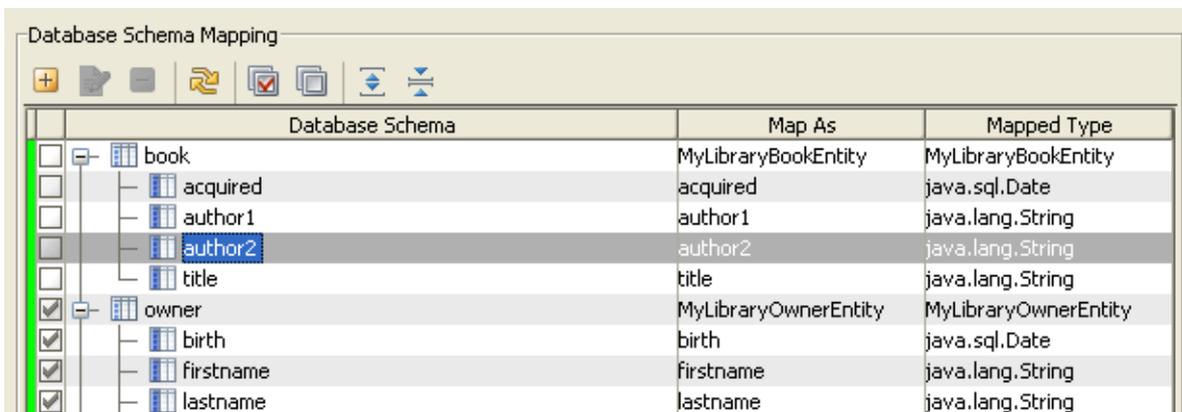
This section describes how to map data source to an object model using the database schema. After choosing **Generate Persistence Mapping | By Database Schema**, IntelliJ IDEA displays the **Import Database Schema** dialog, where you can choose to generate a mapping xml file, an annotated Java class, or both.

## To define mapping by database schema

1. In the **Persistence tool window**, right-click the desired module with the JPA facet, or one of its persistence units, and choose **Generate Persistence Mapping | By Database Schema** on the context menu. The **Import Database Schema** dialog box appears.
2. In the **General Settings** section, specify the general mapping options (prefix and suffix of the new entity, the target package, etc.), and the database to be mapped. To do that, in the **Choose Data Source** field, click the ellipsis button, and select the desired database in the **Data Sources** dialog box:

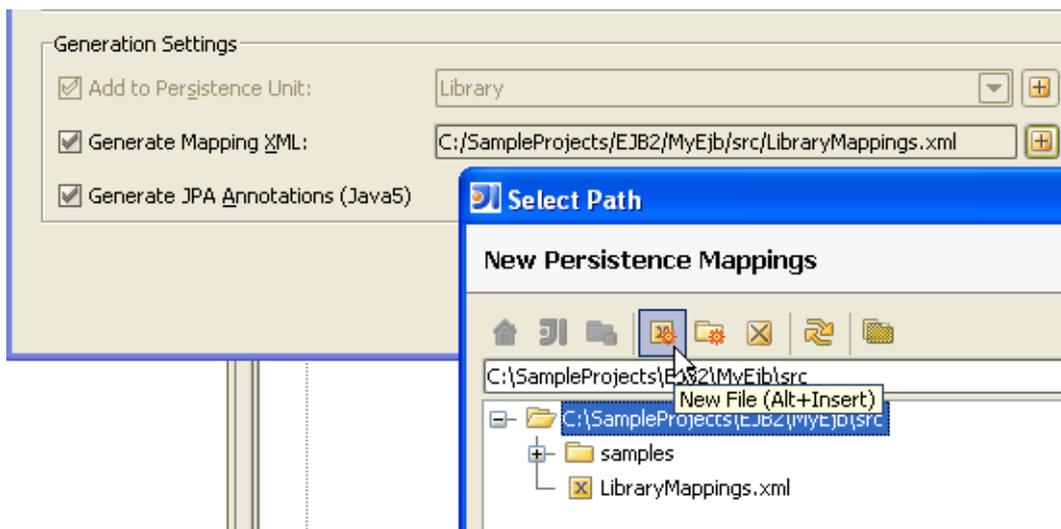


3. In the **Database Schema Mapping** section, select the tables and fields to be included in the mapping:



- If needed, create relationships between tables. To do that, in the **Database Schema Mapping** section, select a table or one of its columns, and click **+**.  
In the **Add Relationship** dialog box, specify the tables for the both sides of the new relationship, attribute names and types on both sides, and join options.  
To define the joint columns, click **+** in the **Join Columns** section, and specify the columns in the source and target tables. Add as many column pairs as required and close the dialog box.
- Define the target files to be generated. If you have invoked the **Generate Persistence Mapping | By Database Schema** command on a module node, specify the persistence unit to which the generated mapping will be added.

If you want to define persistence using metadata, select the check box **Generate Mapping XML**, and specify the name of the xml mapping file. To do that, click **+**, or press **Shift+Enter**, and specify the desired XML file name in the **dialog that opens**. If the desired file doesn't exist, select the directory where a mapping file will be created, click **+**, and type the name of the new mapping file:



If you want to define persistence using Java annotations, select the check box **Generate JPA Annotations (Java 5)**.

- Click **OK**.

## See Also

### Concepts:

- [Data Sources](#)
- [Annotating Source Code](#)

### Reference:

- [Import Database Schema / Import Mappings](#)
- [Add Relationship](#)

### Web Resources:

- [Developer Community](#)