

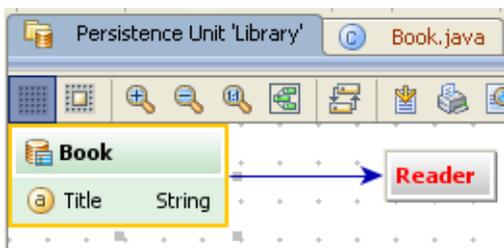
Creating Relationships in Entities

When relationships are created between entities:

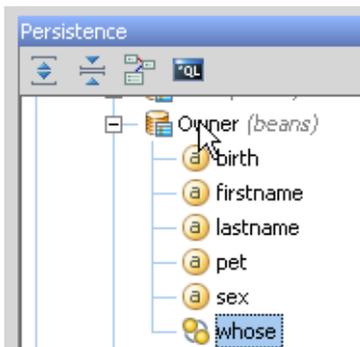
- The respective annotated properties are added to the source files of the entity classes, marked with gutter icons in the editor:

```
@OneToOne
private Reader takenBy;
Associated With
Reader
public Reader getTakenBy() {
    return takenBy;
}
public void setTakenBy(Reader takenBy) {
    this.takenBy = takenBy;
}
```

- Links appear in the ER diagram of a persistence unit:



- Nodes are added to the entity view in the Persistence tool window:



IntelliJ IDEA suggests several ways to create relationships between entities:

- By editing the entity classes
- Using drag-and-drop in ER diagram
- Using the context menu of an entity

To create a relationship using editor

1. Open the desired entity class for editing.
2. Type field declaration for a new relationship. For example,

```
private Book bookTitle;
```

3. Create getter and setter methods. To do that, press Alt+Insert, and select **Getter and Setter** from the suggestion list. For example:

```
return public Book getBookTitle() {  
    bookTitle;  
}  
public void setBookTitle(Book bookTitle){  
    this.bookTitle = bookTitle;  
}
```

4. Annotate the field with the desired relationship annotation. For example:

```
@OneToOne
```

If the required import is missing, use the suggested quick fix.

5. If required, next to the annotation, specify the following parameters:

- Strategy for fetching data from the database
- Cascadable options to be propagated to the associated entities
- Owning entity
- Target entity
- Mapping field

For example:

```
@OneToOne(cascade = CascadeType.ALL,  
fetch = FetchType.LAZY, optional = false,  
mappedBy = "takenBy")
```

- For creating *bidirectional relationships*, you have to edit both the owner and the target entity classes.
- Coding assistance is available.

To create relationships using drag-and-drop in er diagram

1. In the [Persistence tool window](#), right-click the desired persistence unit, and select **ER Diagram** in the context menu.
2. In the diagram, select the source entity and draw a link to the target entity.
3. In the **Create Relationship** dialog box, specify the options for the owner and the inverse side of a relationship. Note that if you specify options for one side of a relationship only, it will be created unidirectional. In particular, specify the following options:
 - Relationship name
 - Multiplicity
 - Owner of a relationship
 - Cascading options
 - Fetching strategy

Click OK.

To create a relationship using an entity context menu

1. In the [Persistence tool window](#), right-click the desired persistence unit and choose **New | <relationship type>** on the context menu.

You can invoke the same command on the context menu of an entity in the ER diagram.

2. In the dialog box that opens, specify the relationship name and type. By default, the entity in question becomes the owner of a relationship. If you want to make it the inverse side, check the **Inverse** option. Click **OK**.

See Also

Concepts:

- [Data Sources](#)

Reference:

- [Database Tool Window](#)
- [Persistence Tool Window](#)

Web Resources:

- [Developer Community](#) 