

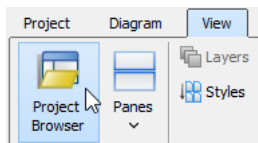


How to Generate Class Diagram from ERD?

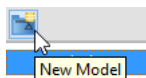
Written Date : October 30, 2009

To generate class diagrams from entity relationship diagrams:

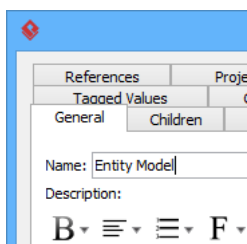
1. First, open the Project Browser by selecting **View > Project Browser** from the toolbar.



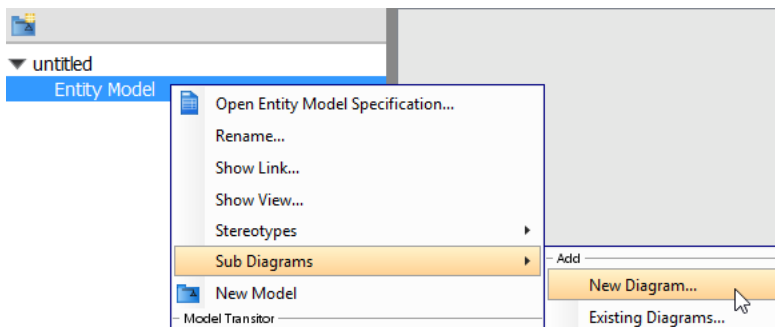
2. Click the **New Model** button to create a new model.



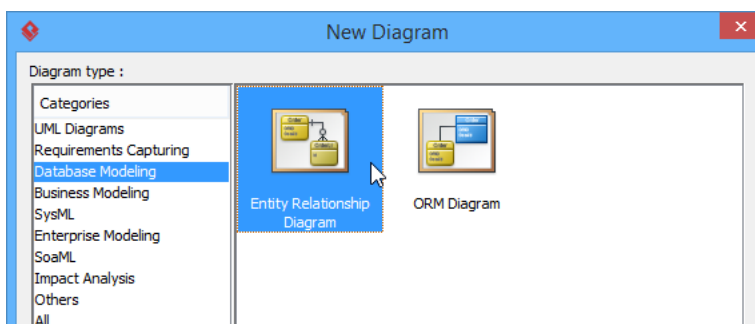
3. Enter the name as "Entity Model."



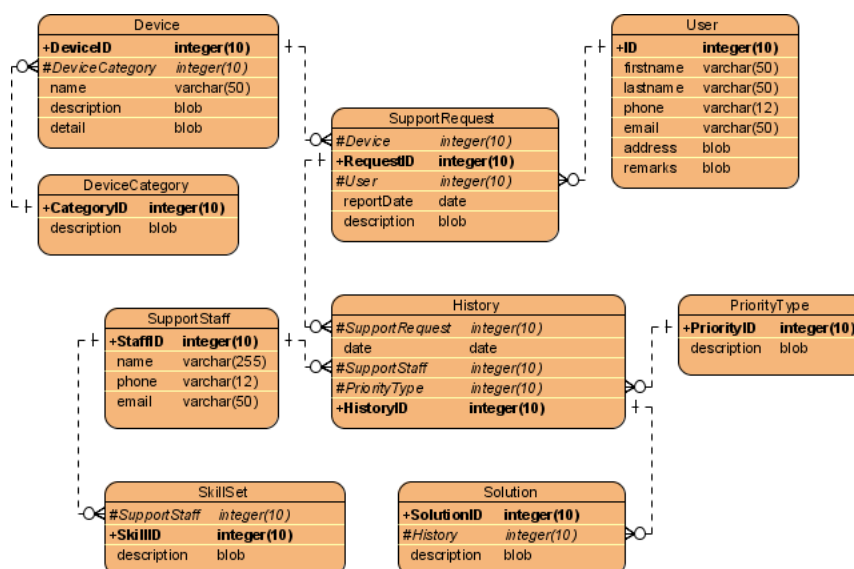
- Now, let's create an entity relationship diagram under *Entity Model*. Right-click on the **Entity Model** and select **Sub Diagrams > New Diagram....**



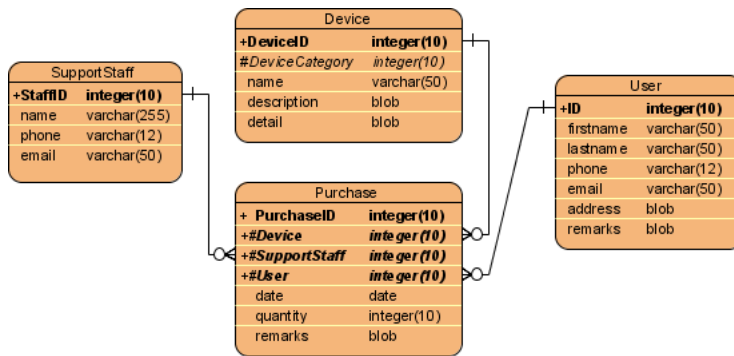
- In the **New Diagram** popup window, select **Database Modeling > Entity Relationship Diagram**. Click **OK** to confirm.



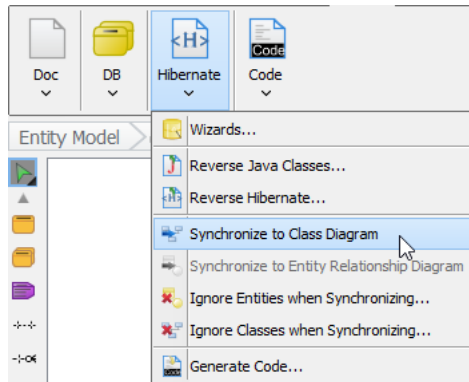
- Develop the following entity relationship diagram.



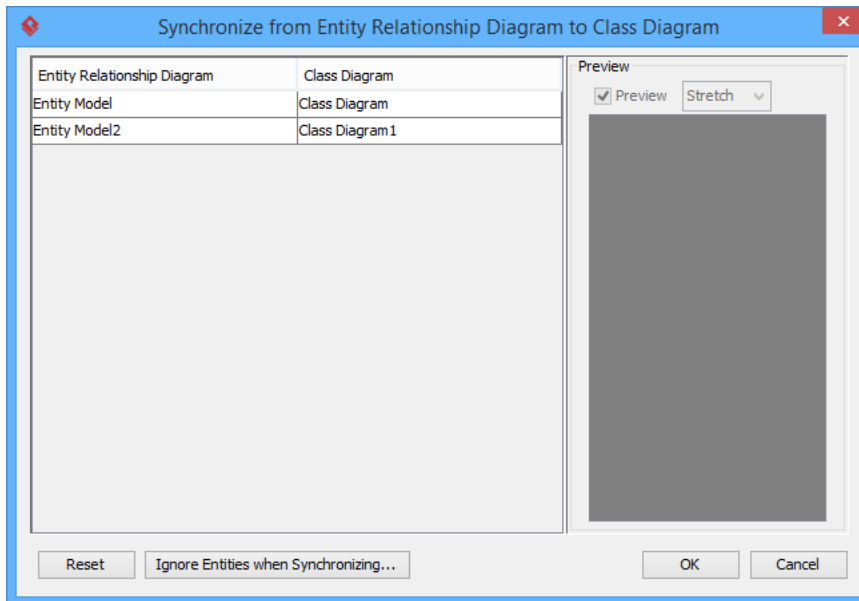
7. Repeat the above steps to create the following entity relationship diagram under *Entity Model*.



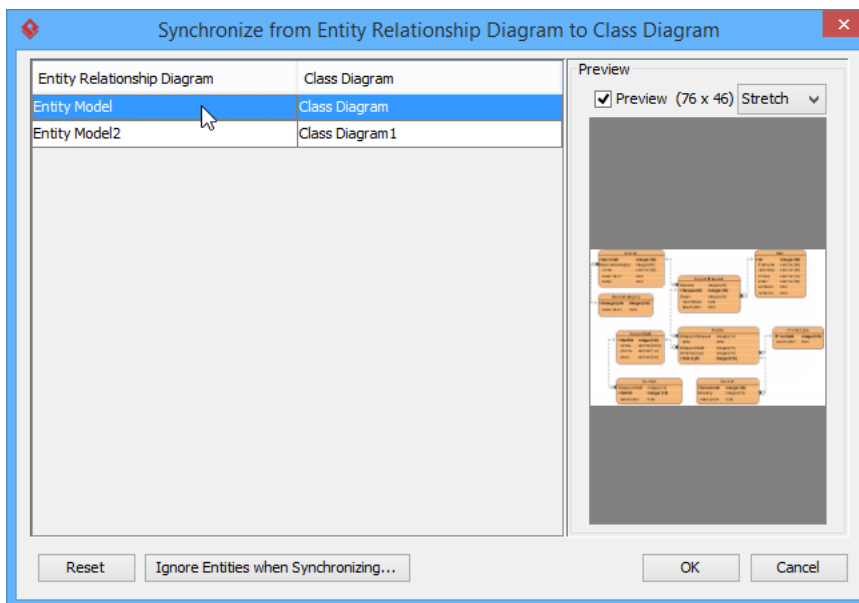
8. Once the entity relationship diagrams are ready, we can then generate class diagrams from our entity relationship model. Select **Tools > Hibernate > Synchronize to Class Diagram** from the toolbar.



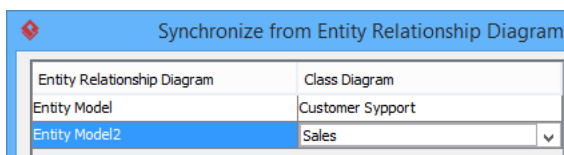
- The **Synchronize from Entity Relationship Diagram to Class Diagram** dialog will be shown. The entity relationship diagrams in your project are shown on the left-hand side of the table, and the target class diagram is shown on the right-hand side.



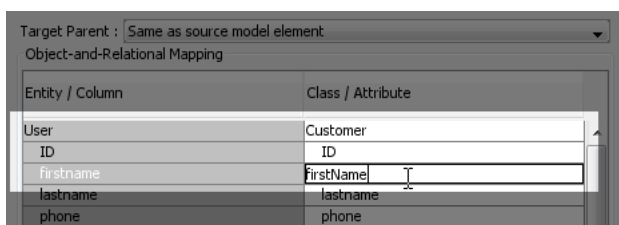
- Click on the entity relationship diagram cell, and the preview will be shown.



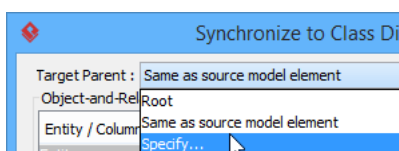
11. You can name the target class diagram directly in the class diagram cell, or you can synchronize to an existing class diagram (if any).



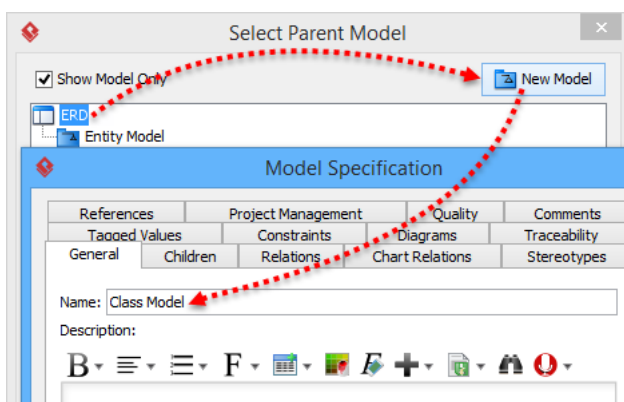
12. Press **OK** to proceed.
13. Now the **Synchronize to Class Diagram** dialog will show up. The mapping between entity name and class name, as well as the column name and attribute name, will be listed in the dialog. Let's change the name of the *User* class to *Customer* and change the attribute name from *firstname* to *firstName*.



14. We can specify the target for storing the output class diagram. Select **Specify...** in the **Target Parent** combo box.

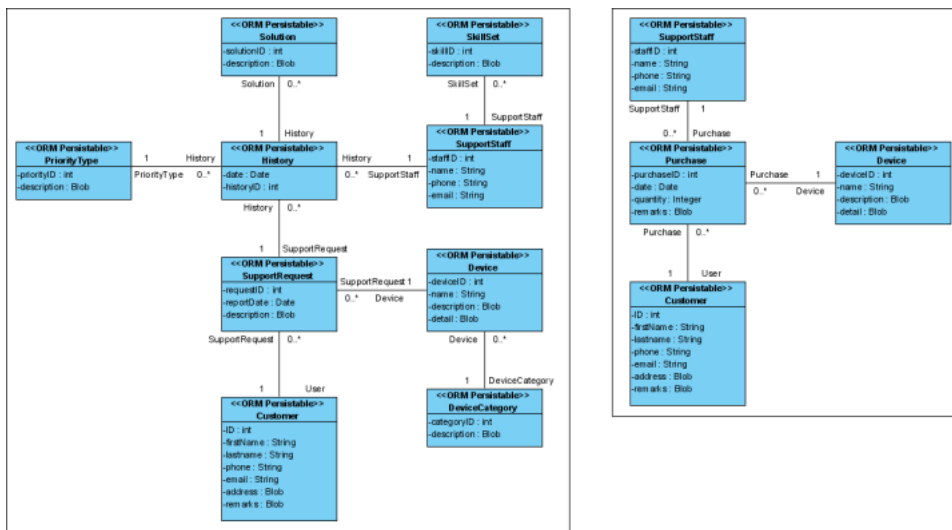


15. Select the root node in the tree and press the **New Model** button. Name the model *Class Model*.

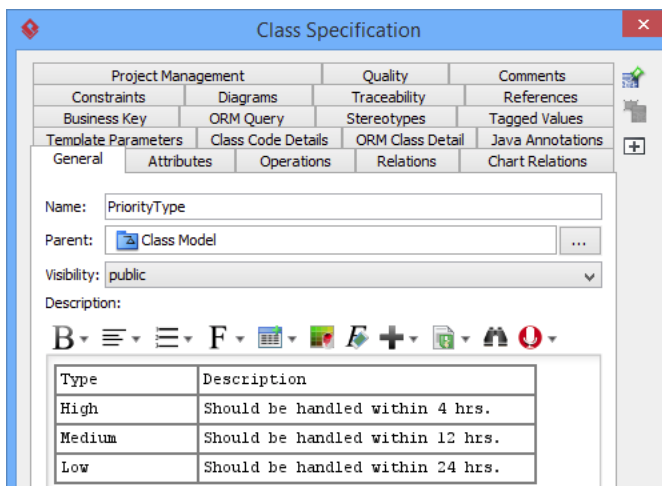


16. Press **OK** to proceed.

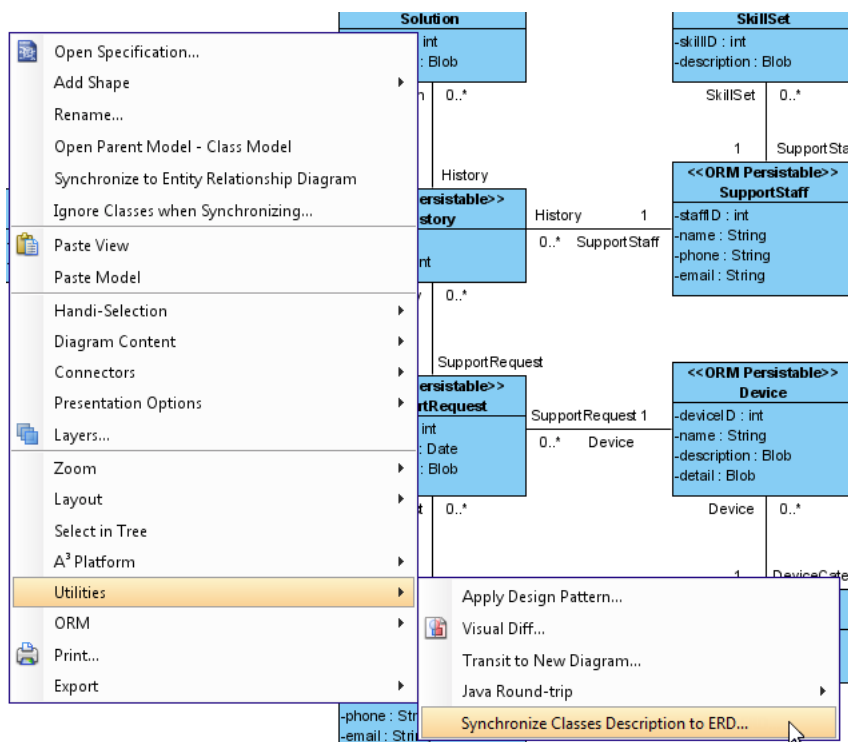
17. Now the class diagrams are being generated.



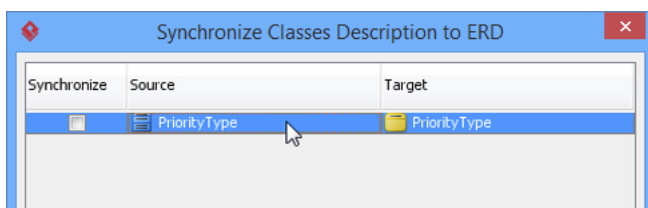
18. Let's try to modify the description of the class *PriorityType*.



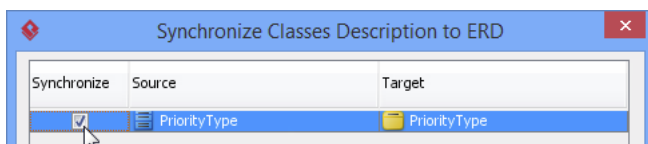
- You can synchronize the description from the class model to the associated entity model by right-clicking on the diagram and selecting **Utilities > Synchronize Class Description to ERD**.



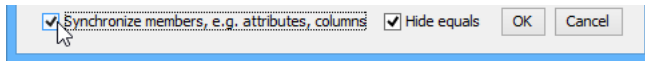
- The **Class Description to ERD** dialog will list class models that contain different descriptions from the entity model.
- Click on the entity *PriorityType* in the list, and the differences in descriptions between the class and entity model will be shown.



- Select the checkbox under the **Synchronize** column to specify the model you would like to synchronize their descriptions.



23. By selecting the **Synchronize members** checkbox, the descriptions of the class attribute and entity column will also be synchronized.



24. Uncheck the **Hide equals** checkbox, and all classes/entities will be listed, even if their descriptions are the same.

Related Links

- [What is Entity Relationship Diagram \(ERD\)?](#)
- [Full set of UML tools and UML diagrams](#)



Visual Paradigm home page
(<https://www.visual-paradigm.com/>)

Visual Paradigm tutorials
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