# Visual Paradigm

# Altering the nullable of column from ERD

Written Date : August 16, 2010

A nullable column in a database table means a column that accepts nothing to be its value when inserting or updating a record. On the contrary, non-nullable column is a column that must be filled. With Visual Paradigm, you can modify the nullable property of a column, and directly update to your database schema. In this tutorial, you will learn how to modify the nullable property of a column in ERD, and update your database schema using the Update Database feature.

Note that you are expected to have a fundamental knowledge on database modeling with ERD and database engineering.

## Setting up your database

MySQL will be used as database software throughout this tutorial. You can, however, use any other types of database products that Visual Paradigm supports. Once you are familiar with the database software you are using, you will not find it hard to complete this tutorial.

Before you start, create a database. Name it *myshop*.



## Configuring your database

1.   Create a project with Visual Paradigm. Select **Tools** > **Database** > **Database Configuration...** from the main menu.

2.  In the **Database Configuration** dialog box, select the database software you use from the list. In this tutorial, check **MySQL**.
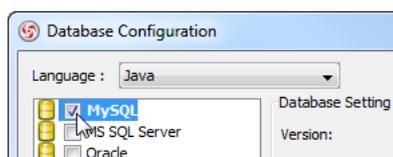
3.  In the **Database Setting** panel, press on the upside down arrow button next to **Driver file** field.
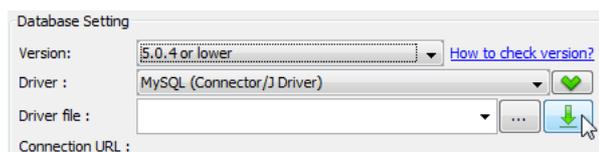
    If your database provider does not support downloading driver file, the pop-up **Download** dialog box will notify you that the database software is not available and provide a link for downloading the driver file. Alternatively, you can refer to **Database Driver Description** section. There shows you the link for downloading the driver file.
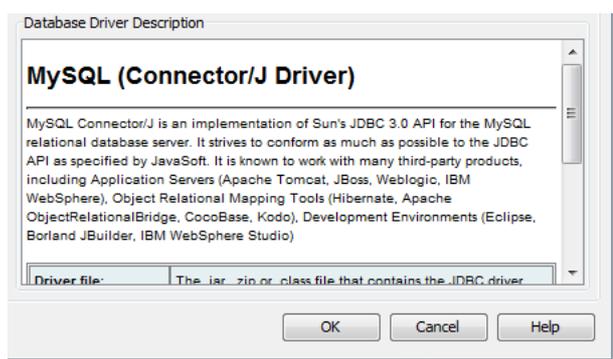
4.  Fill in the connection information to connect to database. Enter *myshop* as database name. For MySQL DB users, select **InnoDB** as engine to keep the relationships among entities when generating database.
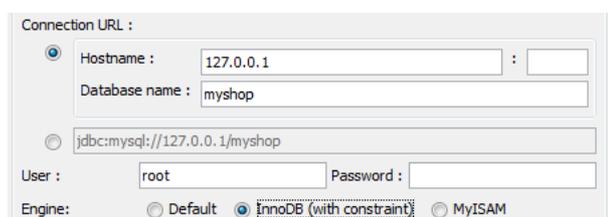
5.  Finally, check on **Test Connection** to verify the connection. Click **OK** to close the configuration dialog box.

## Drawing an ERD

1.  Create an ERD. Right-click on **Entity Relationship Diagram** in **Diagram Navigator** and select **New Entity Relationship Diagram** from the pop-up menu.
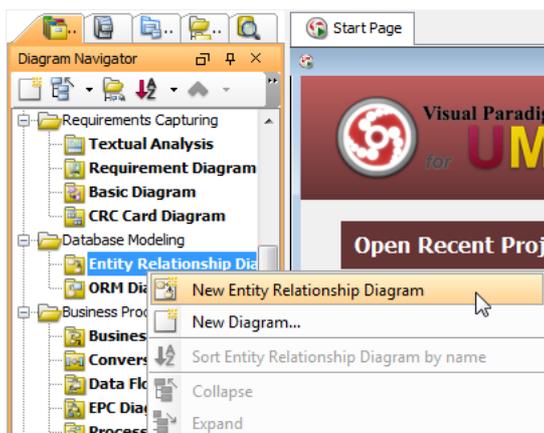
    

2.  Immediately name the diagram as **MyShop ERD** at the top left corner. Keep **Physical Model** selected at the top right corner.

3.  Create an entity. Press on **Entity** in diagram toolbar and drag it on the diagram. Name it as *Product* and press **Enter** to confirm.
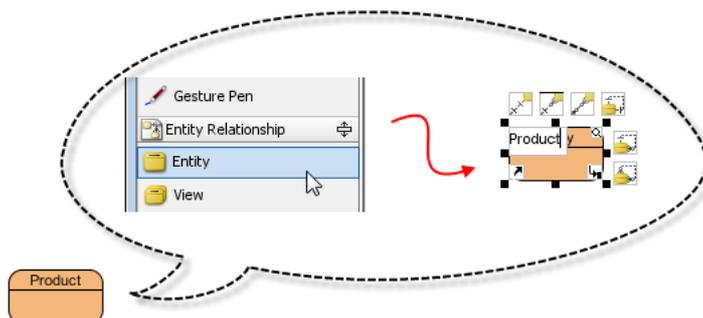
    

4.  Let's add columns to the entity. Right-click on *Product* and select **New Column** from the pop-up menu. Enter *+id:int* as name (note: The plus sign is to indicate that this is a Primary Key column). Press **Enter**.
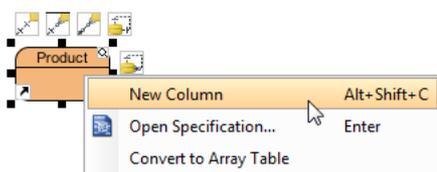
5. Next, add another column *name : varchar(255)*. The entity now turns into the image as shown below:
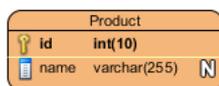


6. Right-click on the name column. You can see that the option **Nullable** is checked. This means that you can enter nothing for product name when inserting or updating a product record.
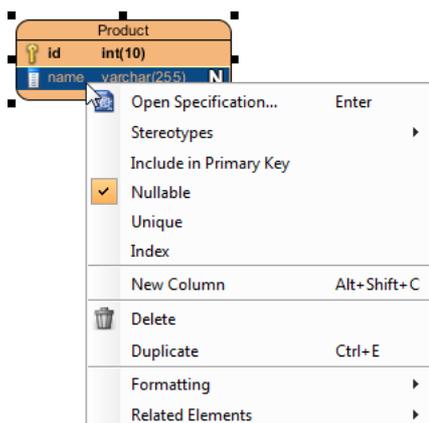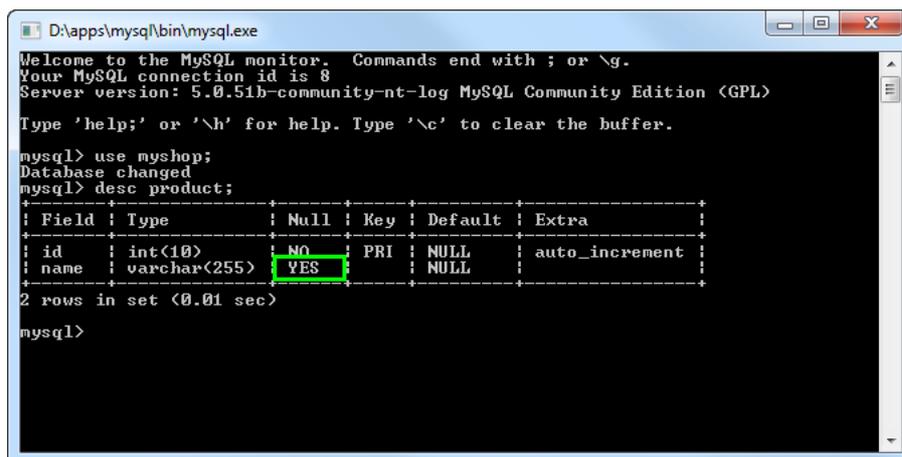


## Generating database

1. Select **Tools** > **Database** > **Generate Database...** from the main menu.

2. In the **Database Code Generation** dialog box, select **Export to database** and **Generate sample data**. If you do not select them, both database and sample data will not be created in database.
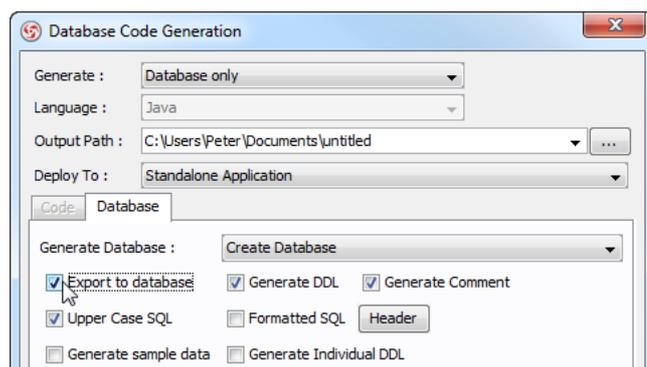


3. Click **OK** to start generation.

## Checking your database

You can now check yor database, to see if the name column was generated as nullable or not. Here is a screenshot captured under MySQL.

## Altering the nullable setting

1.  Now, go back to the diagram. Right-click on the name column and de-select **Nullable** from the pop-up menu. Immediately, the symbol **"N"** does no longer appear in the entity shape.
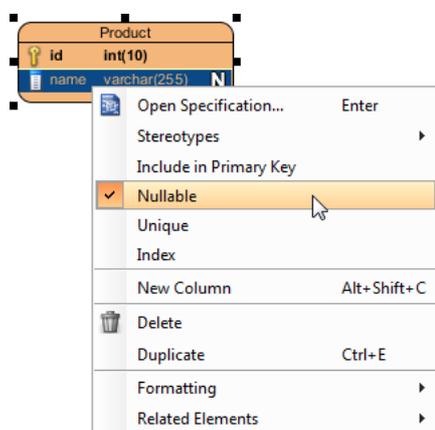


2.  To update database, select **Tools** > **Object-Relational Mapping (ORM)** > **Generate Database...** from the main menu.

3.  In the **Database Code Generation** dialog box, select **Update Database** for the action to perform.
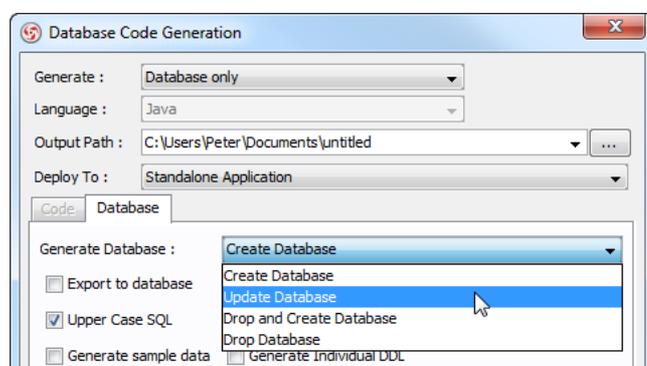
4.     Click **OK** to start updating database.

5.     Check the database again. This time, you can see that the name column is no longer nullable.



Related Links

•     [What is Entity Relationship Diagram (ERD)?](#)



[Visual Paradigm home page](https://www.visual-paradigm.com/)
(https://www.visual-paradigm.com/)

[Visual Paradigm tutorials](https://www.visual-paradigm.com/tutorials/)
(https://www.visual-paradigm.com/tutorials/)