

Modeling database view

A database view is the result of a query on the data stored in a database. You can select columns, specify where and join statements to a view and present the data as if the data were coming from one single table. In Visual Paradigm, you can edit database view in a visual editor.

Creating database view

A database view is represented visually with a View shape. You can create a database view from the diagram toolbar or from the entities involved in the database view.

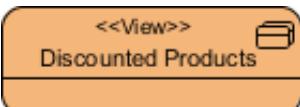
From diagram toolbar

You can create a database view and then edit it by specifying the entities involved. To create a database view:

1. Select **View** from the diagram toolbar.

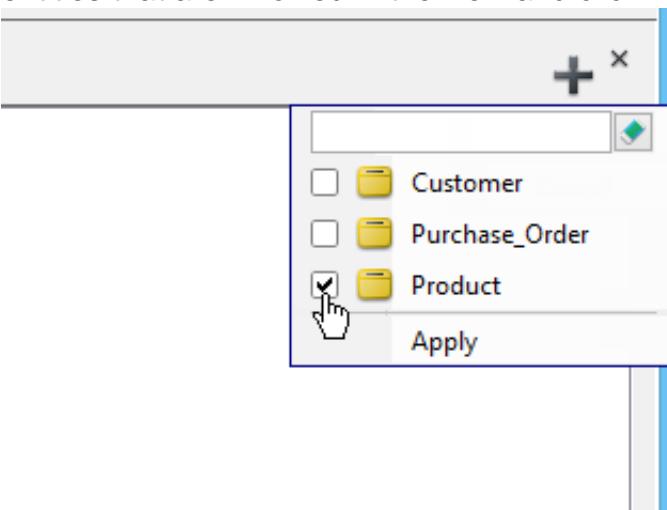


2. Click on the diagram to create a view.
3. Enter its name and confirm.



You can now specify the entities involved in the view via the **View Editor**. To open the **View Editor**, right click on the background of [ERD](#) and select **Show Table Record Editor or View Editor** from the popup menu.

4. On the right hand side of the **View Editor**. Click on the add button. Then, select the entities that are involved in the view and click **Apply**.



Now, you can specify the view. For details, read the following sections.

View Editor of **Discounted Products** ▾

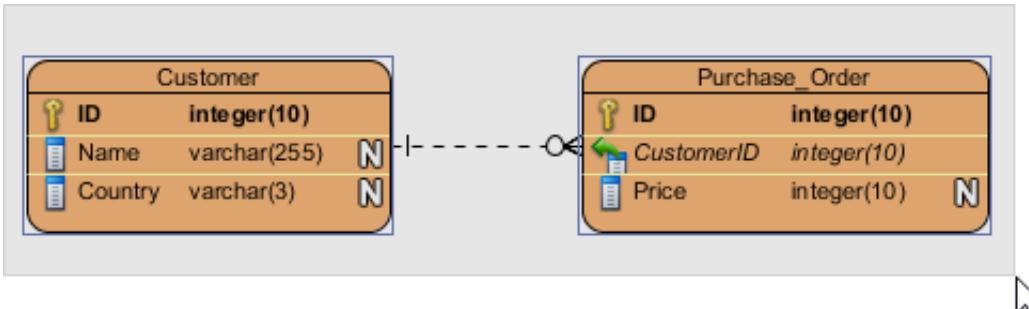
The View Editor interface shows a list of columns for the 'Product' entity. The columns are: All Columns, ID, Name, and Price. There is a checkbox next to each column name.

Column	Alias	Entity	Output	Sort
			<input type="checkbox"/>	

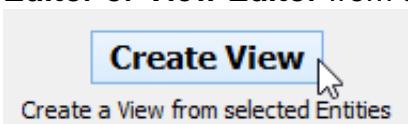
From entities

Instead of creating a blank view and adding entities into the view, you can create a view directly from entities that are involved in the view. To create a database view from entities involved:

1. Select the entities in ERD.



2. Click **Create View** in the **View Editor**. The **View Editor** is placed under the ERD. If you do not see it, right click on the background of ERD and select **Show Table Record Editor or View Editor** from the popup menu.



Now, you can specify the view. For details, read the following sections.

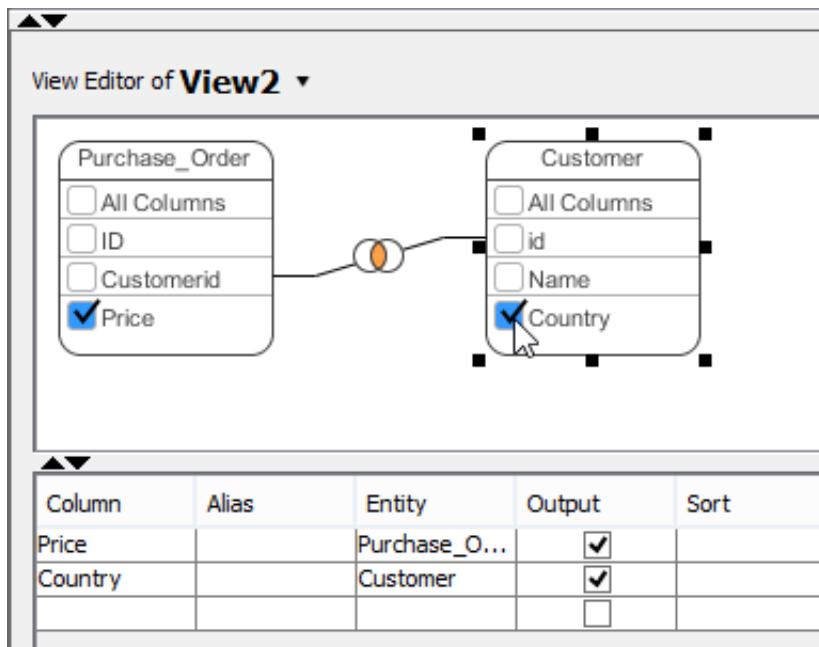
View Editor of **View** ▾

The View Editor shows a view definition involving the 'Purchase_Order' and 'Customer' entities. The 'Purchase_Order' entity has columns: All Columns, ID, Customerid, and Price. The 'Customer' entity has columns: All Columns, id, Name, and Country. A line with a circle at the end connects the Customerid attribute in 'Purchase_Order' to the id attribute in 'Customer', indicating a relationship.

Column	Alias	Entity	Output	Sort
			<input type="checkbox"/>	

Column selection

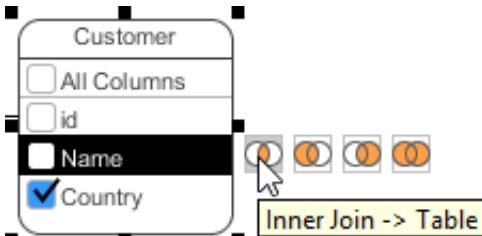
A database view contains rows (i.e. the results) and columns, just like a database table. To select columns, simply click on the checkbox of the desired column. Alternatively, select the column in the **Column** column in the **View Editor**.



Joining columns

Joining of columns between entities can be done by the resource-centric interface. To do this:

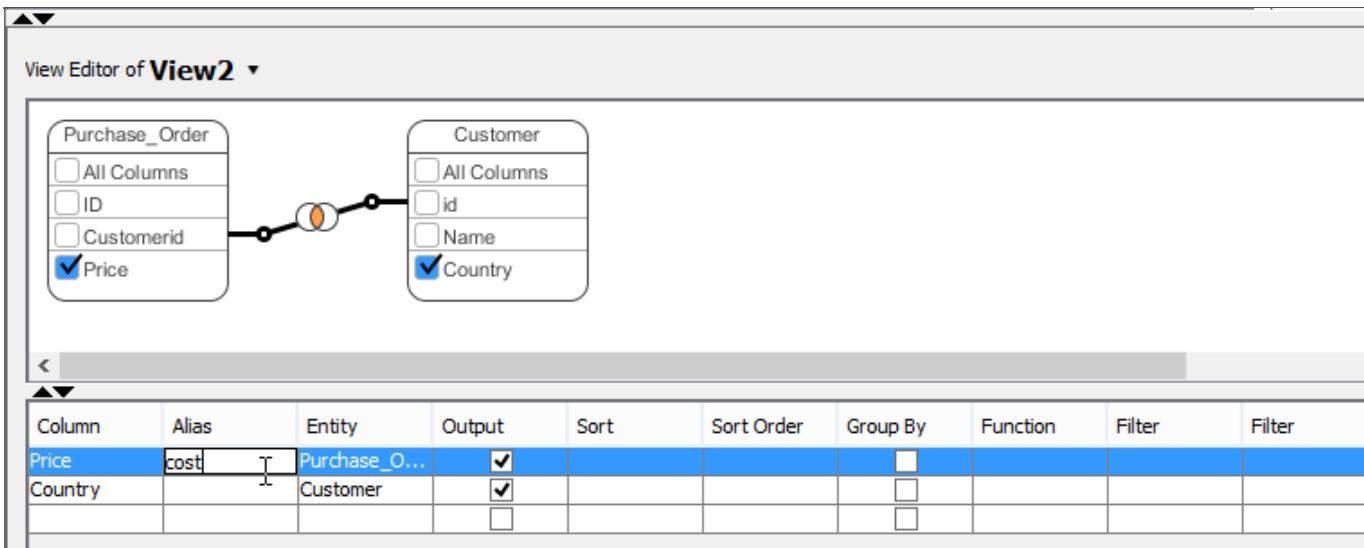
1. Click on the source column in the entity in **View Editor**.
2. Press on the desired resource and drag it out.



3. Drag to the target column and release the mouse button.

Editing database view in View Editor table

There is a table under the visual view editor where you can configure a view's column alias, sort order, grouping, function, filter, etc.



Property	Description
Column	Correspond to the SELECT clause of a view creation statement.
Alias	The displayed name of column.
Entity	The entity where the column come from.
Output	Check it to include the column into the creation statement of view.
Sort	Specify whether to sort the column ascendingly or descendingly
Sort Order	Specify the sort column. Records are sort following the order, with smaller number sort first.
Group By	Check it if you want the results be grouped by the column.
Function	Apply function to the column.
Filter	Add filter for the column.

Supported filters

The following table lists out the filters you can enter in the Filter field.

Filter	Description	Sample
=	Equals Does not equal	= 10 250
=	Greater than or equal to	>= 18
LIKE	Search for a pattern	LIKE '%PRIORITY%'
IN	To specify multiple possible values	IN ('Administrator', 'Manager')
BETWEEN	Between an inclusive range	BETWEEN 10 AND 20
IS NULL / IS NOT NULL	IS NULL: To select records with null IS NOT NULL: To	IS NULL / IS NOT NULL

	select records with filled values
NOT	Only when no row NOT EXISTS is returned from (SELECT NAME the sub query. FROM USERS)
EXISTS	Only when at least EXISTS (SELECT one row is NAME FROM returned from the USERS) sub query.
ALL	Compares a scalar >= ALL (SELECT value with a single-STOCK FROM column set of PRODUCTS) values.
ANY	Compares a scalar >= ANY (SELECT value with a single-STOCK FROM column set of PRODUCTS) values.