



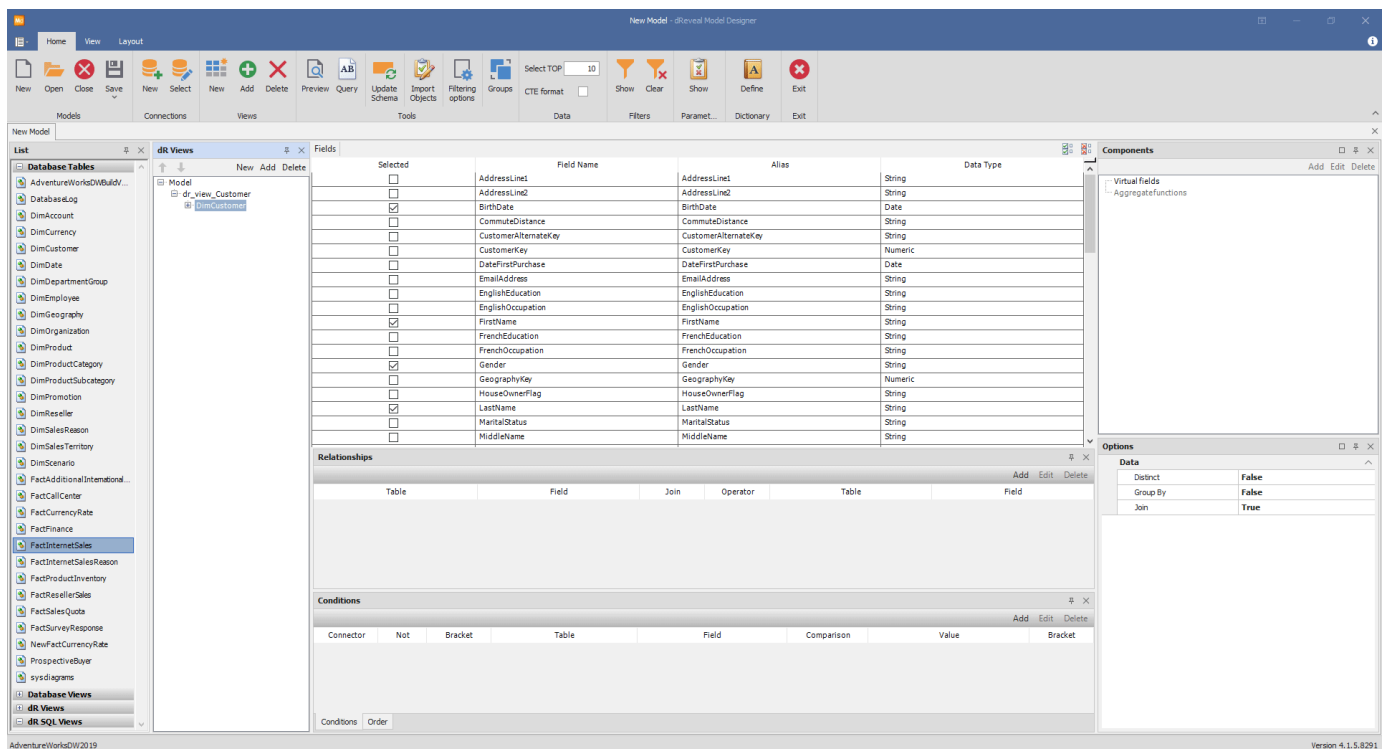
# Relationships

Article 08/22/2023

## Exploring dR View - Relationships

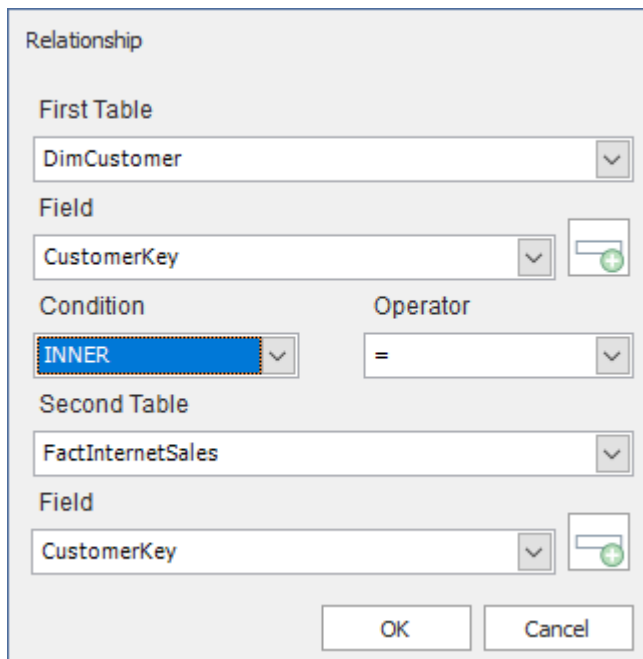
Now that we've gained an understanding of what a dR View encompasses, let's delve deeper into the remarkable advantages it offers.

When you "Add" additional tables to a view that already have an object inside, a wizard is triggered. This wizard presents you with a streamlined process to configure the relationship between the elements. At this stage, you are prompted to define settings that determine how the relationship will be established.



**Note:** It's crucial to note that these relationships are seamlessly encapsulated within the framework of a dR View. This encapsulation ensures that all relationship-related actions remain confined to the scope of the specific dR View, maintaining a cohesive structure within your model.

Within the wizard, you're asked to specify the type of join you intend to create, much like the familiar SQL JOIN clauses. Additionally, you provide information about the fields that will form the basis of the join clause, shaping the foundation of the relationship dynamics.



The screenshot shows a 'Relationship' dialog box with the following fields and values:

- First Table:** DimCustomer
- Field:** CustomerKey
- Condition:** INNER
- Operator:** =
- Second Table:** FactInternetSales
- Field:** CustomerKey

Buttons: OK, Cancel

These relationships mirror the well-established principles employed in SQL, amplifying your familiarity with database interactions and extending your capabilities within the dReveal environment.

Please see how the following SQL statement reflects the settings from the image above. The **INNER JOIN** and the **equal** '=' operator on the join columns.

```
DimCustomer INNER JOIN FactInternetSales
ON DimCustomer.CustomerKey = FactInternetSales.CustomerKey
```

## Visualizing Established Relationships

Take a moment to observe the transformation in the middle panel. It now provides a visual representation of the relationship that has been expertly established between the two tables.

Within this middle panel, essential details are elegantly presented. You can readily identify the names of the tables involved, the specific fields chosen for the relationship, and the defined join type that dictates the interaction between these elements.

Relationships						Add	Edit	Delete
Table	Field	Join	Operator	Table	Field			
DimCustomer	CustomerKey	INNER	=	FactInternetSales	CustomerKey			

Maintaining control over the relationships within your dR Views is a fundamental aspect of your modeling journey. With dReveal's intuitive design, you retain the flexibility to **Add**, **Edit**, and **Remove** relationships as your analytical needs evolve.

**Note:** The relationship wizard exclusively engages within the context of the chosen dR View. Additionally, when adding a relationship directly from the relationship panel, your selections are confined to the tables and columns existing within the scope of that specific dR View.

## Adding more views and relationships

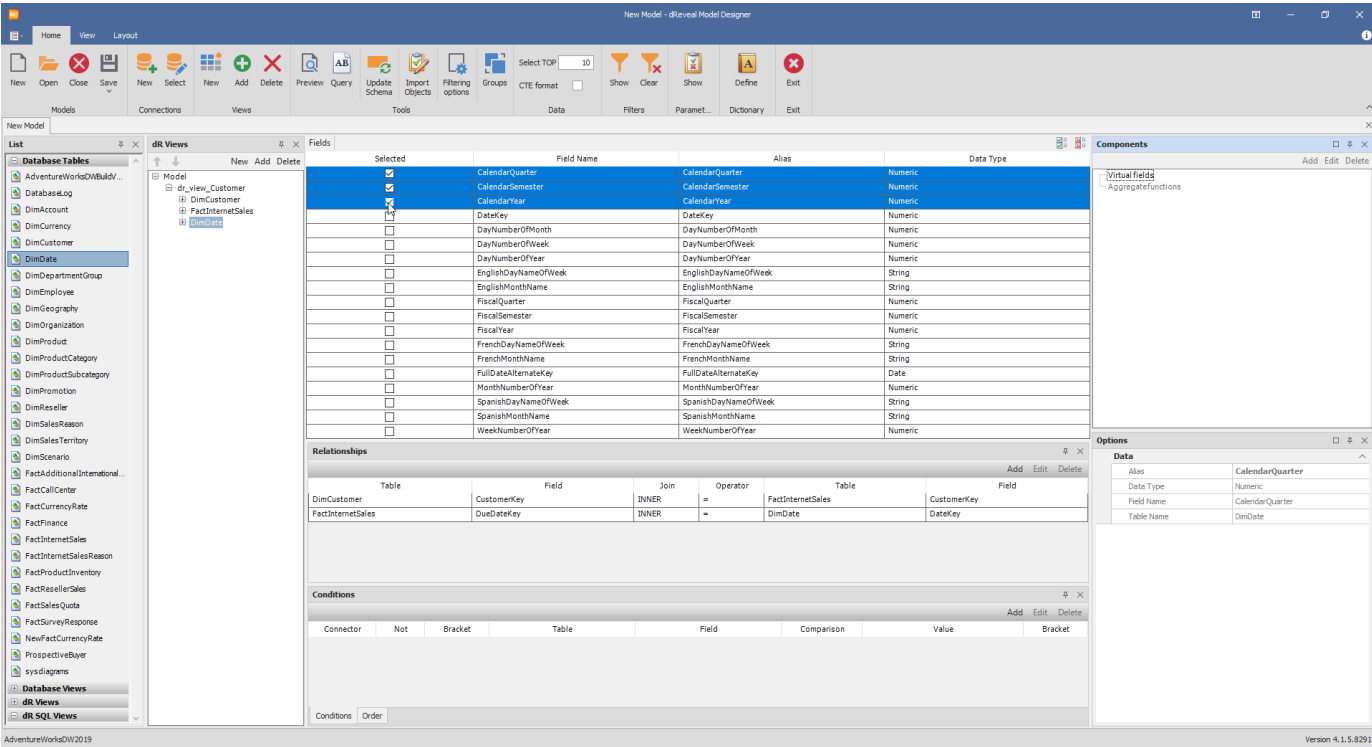
Incorporating additional tables into the dR view will establish new relationships within the view. This provides you with the flexibility to connect the objects as you see fit. An example below illustrates how a third table was introduced, leading to the inclusion of a second join.

The screenshot shows the dReveal Model Designer interface. The 'List' pane on the left contains a tree view of the model, including 'Database Tables' and 'dR Views'. The 'dr\_view\_Customer' view is selected, showing its fields: 'DimCustomer' and 'FactInternetSales'. The 'Fields' pane in the center lists all fields from both tables, including 'CalendarQuarter', 'CalendarSemester', 'CalendarYear', 'DateKey', 'DayNumberOfMonth', 'DayNumberOfWeek', 'DayNumberOfYear', 'EnglishDayNameOfWeek', 'EnglishMonthName', 'FiscalQuarter', 'FiscalSemester', 'FiscalYear', 'FrenchDayNameOfWeek', 'FrenchMonthName', 'FullDateAlternateKey', 'MonthNumberOfYear', 'SpanishDayNameOfWeek', 'SpanishMonthName', and 'WeekNumberOfYear'. The 'Relationships' pane at the bottom shows a relationship between 'DimCustomer' and 'FactInternetSales' on the 'CustomerKey' field, with an 'INNER' join and an '=' operator. The 'Options' pane on the right shows settings for 'Virtual fields', 'Aggregate functions', 'Data', 'District', 'Group By', and 'Join'.

## Selecting fields from available tables

With the inclusion of multiple tables within a dR View's scope, you gain the ability to cherry-pick the essential fields from each table. By doing so, you create a dR view that can display all the relevant columns seamlessly.

In the forthcoming example, we'll choose distinct columns from each table and then observe how the dR view effectively presents the required information.



Upon selecting columns from the provided tables, take a moment to interact with the dR view itself. You'll quickly observe how the chosen columns are elegantly presented, mirroring the appearance of a native database object. This inherent harmony exemplifies the true essence of dR views.

HomeViewLayout

NewOpenCloseSaveNew SelectNew AddDeletePreviewQueryUpdate SchemaImport ObjectsFiltering optionsGroupsSelect TOP10CTE formatShowClearShowDefineExit

ModelsConnectionsViewsToolsDataFiltersParametersDictionaryExit

New Model

List

Database Tables

AdventureWorksDWBuildV...  
DatabaseLog  
DimAccount  
DimCurrency  
DimCustomer  
DimDate  
DimDepartmentGroup  
DimEmployee  
DimGeography  
DimOrganization  
DimProduct  
DimProductCategory  
DimProductSubcategory  
DimPromotion  
DimReseller  
DimSalesReason  
DimSalesTerritory  
DimScenario  
FactAdditionalInternational...  
FactCallCenter  
FactCurrencyRate  
FactFinance  
FactInternetSales  
FactInternetSalesReason  
FactProductInventory  
FactResellerSales  
FactSalesQuota  
FactSurveyResponse  
NewFactCurrencyRate  
ProspectiveBuyer  
sysdiagram  
Database Views  
dr Views  
dr SQL Views

dr Views

NewAddDelete

Field Name	Alias	Data Type	Label
FirstName	FirstName	String	
BirthDate	BirthDate	Date	
Gender	Gender	String	
LastName	LastName	String	
Title	Title	String	
CalendarYear	CalendarYear	Numeric	
CalendarSemester	CalendarSemester	Numeric	
CalendarQuarter	CalendarQuarter	Numeric	
SalesAmount	SalesAmount	Numeric	

Relationships

Table	Field	Join	Operator	Table	Field
DimCustomer	CustomerKey	INNER	=	FactInternetSales	CustomerKey
FactInternetSales	DueDateKey	INNER	=	DimDate	DateKey

Conditions

Connector	Not	Bracket	Table	Field	Comparison	Value	Bracket
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ConditionsOrder

Components

AddEditDelete

Virtual fields  
AggregateFunctions

Options

Data

Alias	SalesAmount
Data Type	Numeric
Field Name	SalesAmount
Table Name	FactInternetSales

Dictionary

> Source

InfoArch.Common.Core.Struct...

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