

# Microsoft Access – Defining Relationships



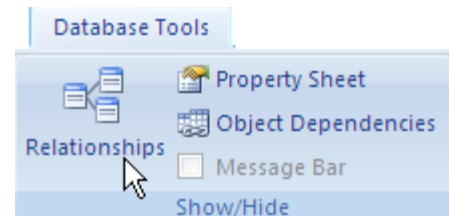
## Defining Relationships

The relationships define how the tables are interconnected. If Lookups are created then the relationships are set up automatically but all the settings are not input automatically.

To view or change the relationships you need to be able to see the current relations.

They can be displayed by clicking on the Relationship button on the Database Tools ribbon.

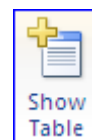
This opens up the relationship window that shows the tables that are already included in any relationships.



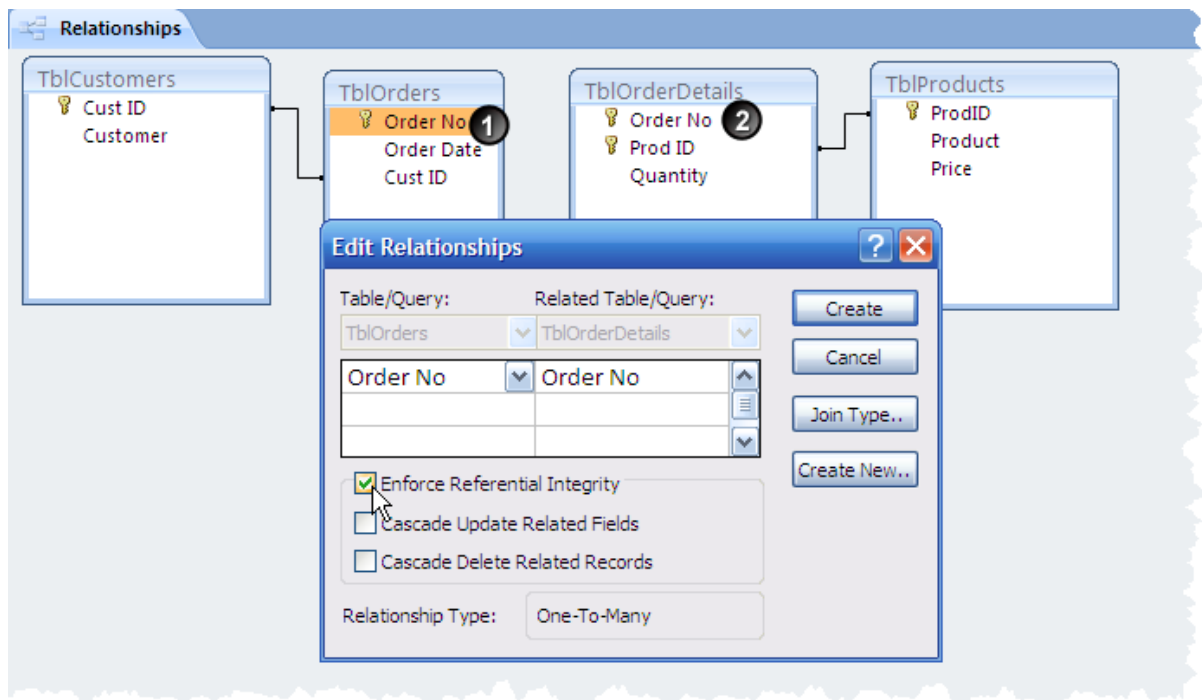
If this is the first time that you have gone into the relationship window, the only relationships it would display are those that have been set up via the Lookup Wizard

Even if the lookup has been created and then cancelled by changing the property Display Control back to text the relationship remains.

To create a relationship between two tables the two tables must be in the relationship window. To add more tables to the window you need to click on the Show Table button. This will allow you to add however many tables you need.



# Microsoft Access – Defining Relationships



To create a relationship you need to drag from one side of the relationship to the other (in this case from 1 to 2). This activates the Edit Relationship window.

If you were to click on Create this would set up a relationship to the same effect as the Lookup, that is to say that the two fields are interconnected, but not actually checking for data consistency.

If you wanted to say that you could only add order details for orders that actually existed then you would have to Enforce Referential Integrity. This would mean that before a record could be saved in the Order Details table, Access would check that a record of that order number already existed in the Orders table. If it didn't then an error message preventing you from saving the record would appear.

Once the Enforce Referential Integrity has been selected there are two other independent options that need to be considered.

1. Cascade Update Related Fields – This means that if the data in the primary key field on the one side of the relationship changes it will automatically change the data on the many side of the relationship.

Eg if a customer ID in the customers table has to change for any reason, then the Customer Id in the Orders table would automatically change for any orders placed by that customer.

# Microsoft Access – Defining Relationships

2. Cascade Delete Related Records – This means that if a record is deleted on the one side of the relationship then Access would automatically delete all of the records on the other table that are associated with deleted record.

Eg If an Order is deleted from the Orders table this option would automatically delete all the items ordered on that order number from the Order Details table.