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ClientDataSet level

The easiest approach is to use two TSQLTable components that connect to the customer and orders tables, and feed their contents to a ClientDataSet component (using a TDataSetProvider in between). This means that the full contents of both MySQL tables are loaded into the two ClientDataSets (in memory) and can be used to define the master-detail relationship in memory. This is fast, but it consumes potentially large amounts of memory, since the entire master-detail relationship is maintained in memory. Table 2 lists the components and property values needed for this setup (assuming we already have a SQLConnection1 as well as the master TSQLDataSet available on the form or data module).

» **Table 2**

Component	Property	Value
TSQLTable	Name SQLConnection TableName	SQLTableOrders SQLConnection1 orders
TDataSetProvider	Name DataSet	dspOrders SQLTableOrders
TClientDataSet	Name ProviderName MasterSource MasterFields	cdsOrders dspOrders dsCustomer CustNo - CustNo
TDataSource	Name DataSet	dsOrders cdsOrders

As you can see, the master-detail relationship is defined at the ClientDataSet level here. Let's now look at two alternatives.

dbExpress Level

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As you can see, the master-detail relationship is defined at the ClientDataSet level here. Let's now look at two alternatives.

dbExpress Level

A less memory intensive, but slower, solution relies on a dbExpress dataset to build the details (or, more specifically, to refresh the details). We can do this in two ways, using either a TSQLTable component that connects its MasterSource property to the ClientDataSet of the master, or by using a TSQLQuery component with a parameter that gets revolved using a value from the master ClientDataSet again (this time by pointing the DataSource property of the TSQLQuery to the master ClientDataSet).

Both techniques deliver the same results, but do rely on an explicit refresh statement in the OnDataChange event handler of the master DataSource (see Listing 3). Tables 3 and 4 list the components and property values needed for the two details defined at the dbExpress layer (assuming the master is already set up according to the previous table).

» **Listing 3: DataSource.OnDataChange.**

```

procedure
  TForm1.dsCustomerDataChange(
    Sender: TObject; Field: TField);
begin
  if cdsOrdersByCustomer.Active
  then
    cdsOrdersByCustomer.Refresh;
  if cdsQOrders.Active then
    cdsQOrders.Refresh;
end;
```

» **Table 3**

Component	Property	Value
TSQLTable	Name SQLConnection TableName	SQLTableOrders SQLConnection1 orders