

A Quick Guide to Using Multi Table Windows

*A white paper based on OpenInsight for
Workgroups version 4.1.3 or above.*

*Written and compiled by:
Andrew McAuley
29th May 2003*



Creating and Using Multi Table Windows.

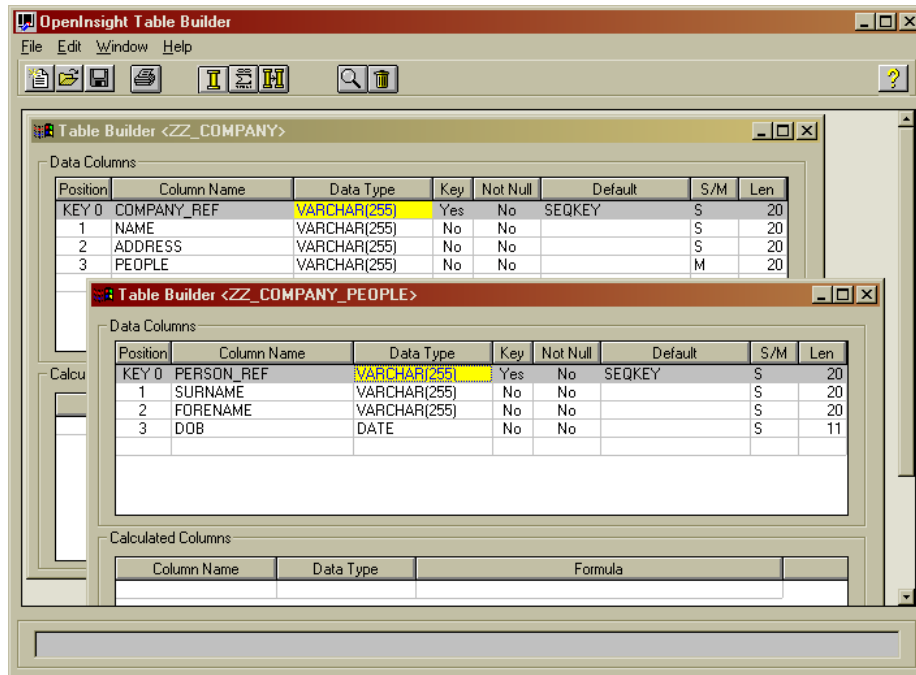
This white paper was written to show how two independent Linear Hash tables can be used successfully populate different OpenInsight windows (forms). This white paper also briefly explores the different options held within the Form Selection Criteria window.

It is assumed that the reader has a good basic understanding of OpenInsight 4.1.3 or later and that they have access to a full development copy of the product or the evaluation software.

This tutorial can be used with earlier versions of OpenInsight but we would always advise using the latest version.

We hope that you find this white paper useful and informative.

The Tutorial



So let's start with a simple relationship –

We have a company table and we want to link employees at the company to the company. A normal header detail arrangement.

The screenshot shows the Person form window. It has a menu bar with File, Edit, View, QBF, and Help. Below the menu bar are four input fields: Person ref: (with the value 1), Surname:, Forename:, and Dob:.

So let's start by painting our PERSON window. We'll do this very straight forwardly at first...

Person [Window Title]

File Edit View QBF Help

Person ref:

Surname:

Forename:

Dob:

Company [Window Title]

File Edit View QBF Help

Company ref:

Name:

Address

... And then our COMPANY window

Company - <New Entry> [Window Title]

File Edit View QBF Help

Company ref:

Name:

Address

11 The Pavement, Popes Lane

Ealing

W5 4NG

and now let's look at combining the two.

Company [Window Title]

File Edit View QBF Help

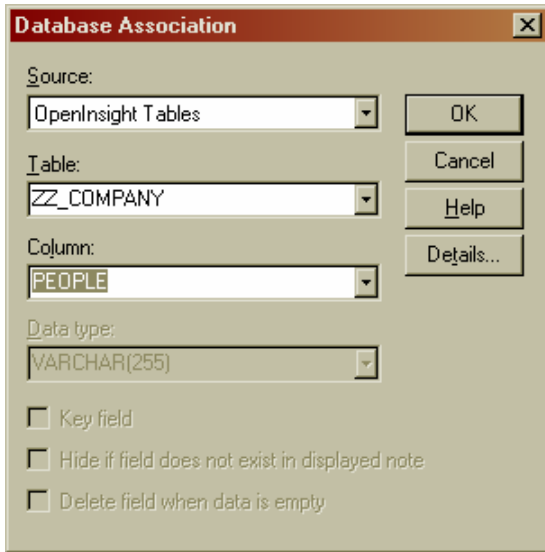
Company ref:

Name:

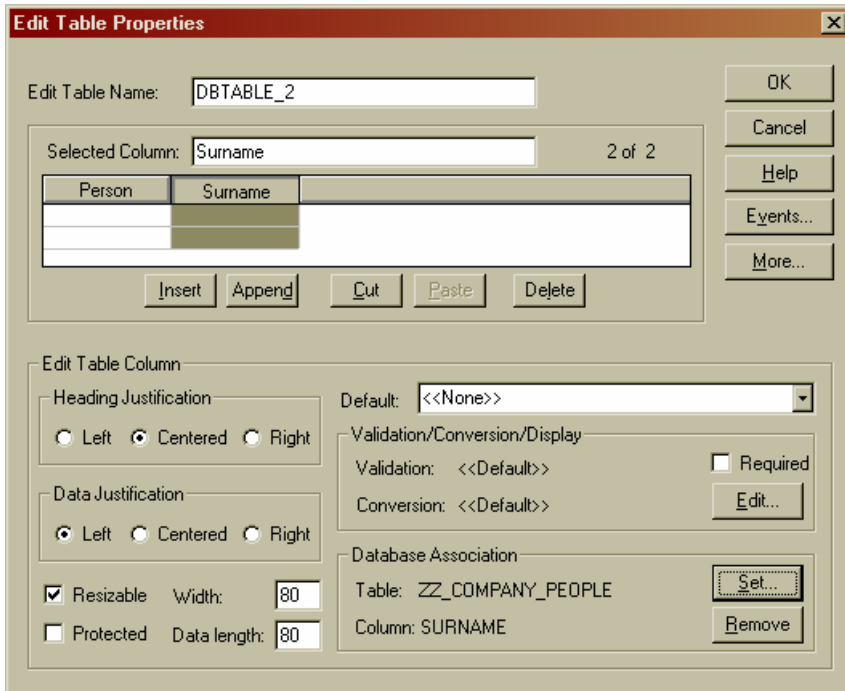
Address

	Text
1	<input type="text"/>
2	<input type="text"/>
3	<input type="text"/>

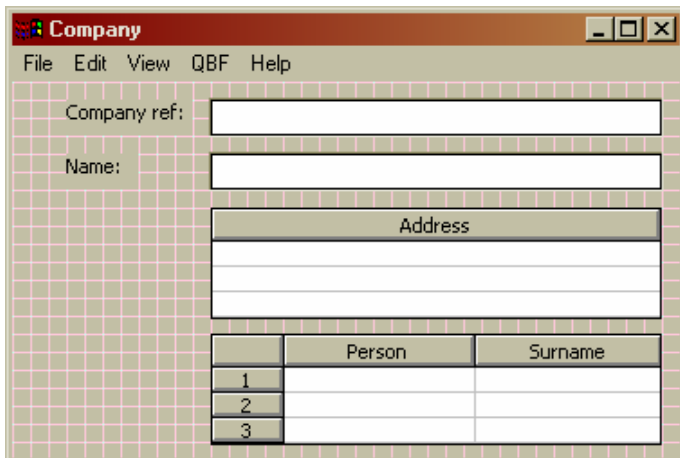
Firstly let's add an editable



Change the Text column to read Person and edit the Table Properties to set the database association accordingly.



and add a column pointing to the ZZ_COMPANY_PEOPLE table and column SURNAME



Save this and test run (this won't work as the system as of yet does not know how to go from the Company table to the Company_People table – we need to tell it!

Build Form Selection Criteria [X]

Ordinal Component List:

- ZZ COMPANY
- ZZ COMPANY PEOPLE

Control: DBTABLE_2.Person.1 Relation: = Column: DOB +

Criteria:

Allow Insert Implicit Delete
 Allow Update Explicit Delete

Buttons: OK, Cancel, Help, Up, Down

and choose the FOREIGN key in the PRIMARY table that points to the PRIMARY KEY in the SECONDARY table

Build Form Selection Criteria [X]

Ordinal Component List:

- ZZ COMPANY
- ZZ COMPANY PEOPLE

Control: DBTABLE_2.Person.1 Relation: = Column: PERSON_REF +

Criteria:

Allow Insert Implicit Delete
 Allow Update Explicit Delete

Buttons: OK, Cancel, Help, Up, Down

then we select the PRIMARY key in the SECONDARY table that corresponds to the FOREIGN key in the PRIMARY table

Build Form Selection Criteria

Ordinal Component List:

ZZ COMPANY
ZZ COMPANY PEOPLE

OK
Cancel
Help
Up Down

Selection Criteria

Control: DBTABLE_2.Person.1 Relation: = Column: PERSON_REF

Criteria: DBTABLE_2.Person.1 = PERSON_REF

Allow Insert Implicit Delete
 Allow Update Explicit Delete

and we add it (“+”).

Company

File Edit View QBF Help

Company ref: 1

Name: Revelation Software

Address
11 The Pavement, Popes Lane

	Person	Surname
1	1	McAuley
2	2	Phillips
3		

For now let's not set any other details up. Behind the scenes I've already added a couple of people to my file so...

Entering their keys in the first column of the table allows me to retrieve their details from the database. Saving this row allows the details to be retrieved from both tables at once.

Company

File Edit View QBF Help

Company ref: 1

Name: Revelation Software

Address
11 The Pavement, Popes Lane

	Person	Surname
1	1	Smith
2	2	Phillips
3		

But what happens if we change “McAuley” to Smith and save the record.

Company

File Edit View QBF Help

Company ref: 1

Name: Revelation Software

Address
11 The Pavement, Popes Lane

	Person	Surname
1	1	McAuley
2	2	Phillips
3		

Re-run the form and you will notice that nothing has changed.

This is because we have not allowed for update.

So let's allow for that....

Build Form Selection Criteria

Ordinal Component List:

- ZZ COMPANY
- ZZ COMPANY_PEOPLE

Selection Criteria

Control: COMPANY_REF Relation: = Column: DOB

Criteria: DBTABLE_2.Person.1 = PERSON_REF

Allow Insert Implicit Delete
 Allow Update Explicit Delete

select Edit Selection Criteria from the Database menu option.

Check the Allow Update option and leave the other three boxes unchecked for the moment. We'll come to those in a few minutes.

Company

File Edit View QBF Help

Company ref: 1

Name: Revelation Software

Address
11 The Pavement, Popes Lane

	Person	Surname
1	1	Smith
2	2	Phillips
3		

Run the form again and change to Smith again and save.

Person

File Edit View QBF Help

Person ref:

Surname:

Forename:

Dob:

Now open the Person form and you'll notice that the Person form now shows the change that we made in the Company form.

Company

File Edit View QBF Help

Company ref:

Name:

Address

	Person	Surname
1	1	Smith
2	2	Phillips
3	9	Jones

Run the Company form and let's try to add another person to the company who doesn't yet exist on the person table

Company

File Edit View QBF Help

Company ref:

Name:

Address

	Person	Surname
1	1	Smith
2	2	Phillips
3	9	Jones

and save the row and retrieve it

Person - <New Entry>

File Edit View QBF Help

Person ref:

Surname:

Forename:

Dob:

the Person Id has been stored but there is no one on the Person file with that key – see?

Build Form Selection Criteria

Ordinal Component List:

ZZ COMPANY
ZZ COMPANY PEOPLE

Selection Criteria

Control: COMPANY_REF Relation: = Column: DOB

Criteria: DBTABLE_2.Person.1 = PERSON_REF

Allow Insert Implicit Delete
 Allow Update Explicit Delete

We didn't have "Allow insert" set – so we couldn't add new values to the secondary table. Let's rectify that

Company

File Edit View QBF Help

Company ref: 1

Name: Revelation Software

Address
11 The Pavement, Popes Lane

	Person	Surname
1	1	Smith
2	2	Phillips
3	9	Jones

and add the details again

Person

File Edit View QBF Help

Person ref: 9

Surname: Jones

Forename:

Dob:

and this time the person is added.

Company - <New Entry>

File Edit View QBF Help

Company ref:

Name:

Address

	Person	Surname
1	10	Brown
2		
3		

Now let's add another company with a new employee

Person

File Edit View QBF Help

Person ref:

Surname:

Forename:

Dob:

and save it then recall it.

We then delete it but even though record 2 has gone from COMPANY, record 10 remains in PEOPLE.

Company - <New Entry>

File Edit View QBF Help

Company ref:

Name:

Address

	Person	Surname
1	10	Brown
2		
3		

So let's add record 2 back to COMPANY ...

Company

File Edit View QBF Help

Company ref:

Name:

Address

11 The Pavement, Popes Lane

	Person	Surname
1	1	Smith
2	2	Phillips
3	10	Brown

... AND add record 10 to company record 1.

Build Form Selection Criteria

Ordinal Component List:

ZZ COMPANY
ZZ COMPANY PEOPLE

OK
Cancel
Help
Up Down

Selection Criteria

Control: COMPANY_REF Relation: = Column: DOB

Criteria: DBTABLE_2.Person.1 = PERSON_REF

Allow Insert Implicit Delete
 Allow Update Explicit Delete

We now want to set the system so that it does delete the whole record correctly.

Open up the Edit Selection Criteria window (from Database menu option).

And check the Implicit Delete option. Save and then test run the form.

Company

File Edit View QBF Help

Company ref: 1

Name: Revelation Software Ltd

Address
11 The Pavement, Popes Lane

	Person	Surname
1	1	Smith
2	2	Phillips

Now let's decide that we don't actually want Record 10 on Company 1 any more and delete it.

Company

File Edit View QBF Help

Company ref: 2

Name:

Address

	Person	Surname
1	10	
2		
3		

it's gone from there BUT it has also gone from 2...

Person - <New Entry>

File Edit View QBF Help

Person ref: 10

Surname:

Forename:

Dob:

... AND from the PERSON table.

Company

File Edit View QBF Help

Company ref: 2

Name:

Address

	Person	Surname
1	10	Brown
2		
3		

Let's reinstate 10 into 1 and 2

Build Form Selection Criteria

Ordinal Component List:

- ZZ COMPANY
- ZZ COMPANY PEOPLE

OK
Cancel
Help
Up Down

Selection Criteria

Control:	Relation	Column:
COMPANY_REF	=	DOB

Criteria:

DBTABLE_2.Person.1 = PERSON_REF

Allow Insert Implicit Delete
 Allow Update Explicit Delete

This time uncheck the implicit delete and go for explicit delete

Company

File Edit View QBF Help

Company ref:

Name:

Address

	Person	Surname
1	1	Smith
2	2	Phillips
3		

Now when I delete 10 from 1...

Company

File Edit View QBF Help

Company ref:

Name:

Address

	Person	Surname
1	10	Brown
2		
3		

... it remains in row 2 and on the PERSON table

As this is effectively the same as not checking Implicit Delete it is apparent that Explicit Delete has not been correctly implemented and should be ignored for now.

Person

File Edit View QBF Help

Person ref:

Surname:

Forename:

Dob: