Integration in Ability

Integration is a term used to describe how different applications work together and especially how they share data.

There are three main ways Ability can share information:

1.   Copy and paste – a simple copy of data from one application to the next.

2.   Linking through fields – sharing data through linking with fields. Data remain live so that when the source is changed, the linked fields change also. Mail Merge is the most obvious example of field level integration.

3.   Embedding and linking documents – whole documents, or a selected part of a document, can be inserted into another application. For example:

   - Include spreadsheets and charts into Write

   - Include drawings into Write and Spreadsheet

   - Include Write documents into Spreadsheet

See also:

   Fields - an introduction

   Mail merge

Copy and paste

In general, you can select any text, data or formulas and make a copy for insertion into another – or the same – document. Ability has commands that enable you to **Copy**, **Paste** and **Cut** data. If you want to copy data to another location without retaining the original source data, then use **Cut** instead of **Copy**. Here are the basic steps:

1. Select the data you wish to copy using either the mouse or cursor keys. This might be the contents of an individual cell or range in a spreadsheet or database, whether text, data or formulas, or an area of a Write document.

2. Click on the **Copy** button or select **Copy** from the **Edit** menu. This command copies to the Clipboard.

3. Switch to the application that contains the document to which you wish to copy.

4. Click on the **Paste** button or select the **Paste** command from the **Edit** menu. This copies from the Clipboard to the target document.

Once the Paste command has been issued, there is no further link between the copied data in the target document and the contents of the clipboard or the source of the data. It is as if you have retyped the data, but much quicker. The contents of the clipboard remain unchanged until you copy some other data to it.

Most of the Ability applications –Write, Database, Spreadsheet – support rows and columns. When you copy data from one application to another, the rows and columns are preserved. This is obvious with Database and Spreadsheet, which are defined in term of fields and cells, but less so with Write, in which a row is represented by a paragraph and a column by a tab stop. For example,

Jan	Feb	Mar	Apr
12	13	9	7

has four columns (since the months and numbers are each separated by pressing the **Tab** key) and two rows.

See also:

Examples of copy and paste

Copy and paste in dialogs

Examples of copy and paste

Here are some examples of what you can do with Copy and Paste:

- **Database è Spreadsheet**

  Select the rows and columns (the range of fields) you want to copy from the database and copy and paste into a spreadsheet. Ability will preserve the order of the rows and columns and every field from the database will appear in a different spreadsheet cell.

- **Database è Write**

  Select the rows and columns (the range of fields) you want to copy from the database, and copy and paste into a Write document. Each column is separated by a tab stop and each row begins on a new line.

  If the database row is too long to fit on a single line in the Write document and "wraps around" onto the next line, try bringing the tab stops closer together and/or reducing the font size.

- **Write, Spreadsheet è Database**

  This is the reverse of the above two operations and ideally the number of columns in Spreadsheet – or the number of tab separated columns in Write – should match the number of fields (columns) in your database (if not, you may find fields from different records merge into a single record).

- **Write è Spreadsheet**

  Select the text you wish to copy: this can be a word, a line or several paragraphs. When you paste into Spreadsheet, tabs will begin new columns and paragraphs new rows. Use Paste Special from the Edit menu and select Unformatted Text.

See also:

    Copy and paste in dialogs

Copy and paste in dialogs

As well as using copy and paste to transfer data between applications, you can copy and paste into dialog boxes and formula entry lines. You will need to make use of the shortcut keys to do this:

Ctrl+C   Copy

Ctrl+V   Paste

For example, in the text of a Write document there appears the name of another document, say, a spreadsheet called Figures. To copy and reuse the word "Figures":

1. Select it by double-clicking on it.

2. Press **Ctrl+C** to copy it.

3. Switch to Spreadsheet.

4. Click the **Open** button .

5. Press **Ctrl+V** to paste it into the File name box.

Linking through fields

One of the most powerful features of Ability is the capacity for a field in one document or application to refer to a field in any other Ability document or application. Such a relationship is called linking and can take two forms: one way linking and two way linking:

1. A one way link is used to access data in the current document that is located in another document. The data can be displayed or used in a formula, but cannot be changed unless you open the original document. A one way link can be made between documents in different applications.

2. A two way link allows you to change data at either end of the link. This means that the original document is updateable from the target document, though two way links cannot be used in formulas.

Linking can be used to connect these documents:

• Cells in a spreadsheet to another spreadsheet, write document or database form.

• Fields in a database to a spreadsheet or write document.

• Fields in a write document to another write document, spreadsheet or database form.

For a general discussion on fields, see fields - an introduction.

One way links

To create a one way link, you need to know the name and the location of the document to which you want to link. With a Write document or spreadsheet you need to know the name of the field or cell address whose value you want to access. If you want to link to a database you also need to know the table or query name, along with the field name and record number.

The link is created using one of the **Remote** functions. The remote functions you will most often need are:

WPGET(document_name, reference)	Retrieve field from Write
SSGET(document_name, reference)	Retrieve field from Spreadsheet
DBGET(database_name, source_table, field_name, record)	Retrieve field from Database

When you enter a remote function in a field in the current document, you need to specify the following:

1. Name and path of the remote document or database (otherwise the current folder will be searched).

2. Name of the field in the remote document, whose value is sought.

3. When linking to a database, you will additionally need to supply the table name, field name and record number.

As well as returning single values, all field links can be used to return ranges, which can then be used to provide range totals, maximums, minimums and so on.

See one of the following examples:

       Linking two spreadsheets together

       Linking two Write documents togther

       Linking from a Write document to a spreadsheet

       Linking from a spreadsheet to a database

For more on Remote functions, see function reference.

Linking two spreadsheets together

To create a one way link from a spreadsheet called accounts to a cell, say B10, in a spreadsheet called sales follow these steps:

1. Select a cell in sales where you'd like the value from accounts to appear, say A1.

2. Click in the formula entry line.

3. Click on the **Insert Function** button to bring up the Insert Function dialog.

4. Click on Remote tab and scroll through to select the SSGET function.

5. Select OK to pick the function.

6. Enter the function parameters so the formula appears as follows:

   =SSGET ("sales", "B10").

7. Click OK to finish the formula.

Ability will display the value from the sales spreadsheet inside the accounts sheet.

Once the link has been made, the cell can be referenced like any other. For example, the formula:

   =A1 * 2

in the accounts spreadsheet will simply display the value, originally from sales, doubled.

You can also use the SSGET function directly as part of a formula. For example:

   =(10 + SSGET("sales", "B10"))/2

Note that the function parameters must be placed in quotation marks. Also, the example assumes that the two spreadsheet documents are in the same folder. If they are not, then you must specify the full document path. For example

   =SSGET("c:\my documents\sales", "B10")

if sales was stored in the default document folder.

Any change made to B10 in sales will automatically be reflected in A1 of accounts. However, since this is a one way link, the attempt to enter a value in A1 of sales will overwrite the link formula and hence destroy the link (see two way links if you want to enable this feature).

Linking two Write documents together

To create a one way link between a field, say **janprofits**, in a Write document called **report**, and a field, say **monthtotal**, in a Write document called **annuals**, where the link is from **report** to annuals, take the following steps:

1. You first need to create a field in report. Select **Field** from the **Insert** menu. Enter **janprofits** for the field name (which is more descriptive than the default name of Field1) and click the **Next** button and enter **1276.34** as the field contents in the Formula entry line. Click the **Finish** button.

2. Switch to annuals and click where you want the field to appear. Select **Field** from the **Insert** menu. Enter **monthtotal** for the field name and click the **Next** button. Click the Functions button and select **WPGET** from the Remote function category. Enter the document name and field name into the function so that the formula appears as follows:

   =WPGET("report", "janprofits")

   Click the **Finish** button

3. The field will appear in the document. Click outside the field to activate the one way link. The value from the report document, 1276.34, will appear in the document.

Note that the example assumes that the two documents are in the same folder. If they are not, use the full document path of the source document. For example

   =WPGET("c:\my documents\report", "janprofits")

Linking from a Write document to a spreadsheet

Suppose you have a sales spreadsheet with monthly sales figures. You want to include the highest monthly figure and the total sales for the year into a Write document. The spreadsheet is called sales97 and the figures you need run from C1 to C12. The figures need to appear in the middle of a paragraph like this:

> "The average monthly sales for 1997 was $xxxx.xx with the highest single month topping out at $xxxx.xx."

Follow these steps to link from the Write documents and extract these figures:

1. In the Write file, type the text of the paragraph. Leave a space where the fields need to be inserted.

2. Position the cursor between the words "was" and "with".

3. Select **Field** from the **Insert** menu.

4. Click the **Next** button (if you want, you can enter a more meaningful field name on the first page of the wizard).

5. Enter the following formula:

   =AVG(SSGET("sales97", "C1..C12"))

6. Click **Finish**

7. Position the cursor at the end of the paragraph and repeat steps 3 through 6 using the following formula:

   =MAX(SSGET("sales97", "C1..C12))

Note that the example assumes that the two documents are in the same folder. If they are not, use the full document path of the source document. For example

   =MAX(SSGET("c:\my documents\sales97", "C1..C12"))

Linking from a spreadsheet to a database

Suppose you have a database called **accounts** containing a table called **invoices**. Among other fields in the database table, there is a field for the total of the invoice, **invtotal**, one to identify the customer, **custid**, and two more for the date of the invoice and the date it was paid, **invdate** and **paydate**. The particular customer you are interested in has a custid of 1024. In a spreadsheet, you want to analyze their payment history, perhaps plotting a graph showing the payment trend. Follow these steps:

1. Display the first invoice total: Enter the following formula:

   =DBSQLFILTER("accounts.adb", "invoices", "custid=1024", "invtotal", 1)

   Let's explain this in some detail. The first two parameters to this function are simply the database name and the table name – note you need to include the document extension with the database name (adb). The table contains invoices to many customers, so you have to identify which customer you want to return values for – this is done with the third parameter to the function – "custid=1024". Next, we specify which field is to be returned with the third parameter – invtotal. The function actually returns all the fields matching the condition so we need to say which one is to be displayed. The final parameter says "display record 1".

2. Display the invoice and payment dates. In the cells to the right of the invoice total, enter the following two functions:

   =DBSQLFILTER("accounts.adb", "invoices", "custid=1024", "invdate", 1)
   =DBSQLFILTER("accounts.adb", "invoices", "custid=1024", "paydate", 1)

3. Repeat steps 1 and 2 the rows below, incrementing the record number (the fifth parameter) by one each time, until all the matching invoices are displayed.

4. You can now analyze the data in several ways. Here are two examples:

   Produce an average payment period by subtracting the invdate column from the paydate column and dividing by the number of invoices.

   Plot a bar chart of the number of days it takes to pay each invoice (again by first subtracting the invdate column from the paydate column).

There are a number of ways this example can be improved and made more general (so it will work easily for other customers) – see refining database links

Refining database links

The database is the normal tool to store repeated information and spreadsheet is the best place to carry out calculations. Using the database links, you can combine these tools in an efficient and powerful way (for an example on how to make links to database, see linking from a spreadsheet to a database). The notes below show how the example can be refined.

1. The number of matching records can be calculated in advance using the following formula:

    =ROWS(DBSQLFILTER("accounts.adb", "invoices", "custid=1024", "invtotal"))

2. If there are many matching invoices, the ROW function can be used to propagate the formula. For example, suppose record one was entered in row 10. You could use the following:

    =DBSQLFILTER("accounts.adb", "invoices", "custid=1024", "invtotal", ROW()-9)

    When this cell is copied down the spreadsheet, the appropriate record will be displayed.

3. It could be more efficient if some of the parameters were entered separately in spreadsheet cells. For example, cells A1 through A5 could contain the following text/formulae:

	A
1	accounts.adb
2	invoices
3	1024
4	= CONCAT ("custid=", A3)
5	= DBSQLFILTER (A1, A2, A4, "invtotal", ROW () - 4)

    Once A5 was copied down and across (with the correct field names), you could enter a new customer ID in cell A3 and analyze a different customer.

4. Taking step 3 a bit further, you could insert a mail merge field that stepped through each customer and so printed out a "payment history". Follow these steps:

    a) Select **Field** from the **Insert** menu.

    b) Enter **custfield** as the field name. This is actually the name of the new field, not the database field to be linked to, so you can choose any name you like.

    c) Select the **Database** radio button and then click **Next**.

    d) Make the link: pick the accounts database, the invoice table and the custid field and click **Finish**.

    e) Substitute the following formula for cell A4 (in step 3 above):

    =SSGET("spread1", "custfield")

    where spread1 is the name of the current spreadsheet and custid is the

    f) Select the **Mail Merge** button or the **Mail Merge** button from the **Tools** menu.

    g) Select **Print** to finish the mail merge.

Using one way links in formulas

One way (but not two way) links can be used as part of a standard formula. In addition, because the link functions can return ranges as well as individual cells, you can apply any function that has a range as a parameter directly to the link. For example, using the following spreadsheet called **quarter**:

	A	B
1	Quarter	Volume
2	Qtr1	2500.23
3	Qtr2	2992.04
4	Qtr3	3659.48
5	Qtr4	4085.42

When building a formula in another spreadsheet or a field in a Write document, treat the link function like any other. For example:

=10+SSGET("Quarter", "B3") / 2

To count, total, average and find the maximum volumes, refer to the range and use the built-in functions:

=ROWS(SSGET("Quarter", "B2..B5"))
=TOTAL(SSGET("Quarter", "B2..B5"))
=AVERAGE(SSGET("Quarter", "B2..B5"))
=MAX(SSGET("Quarter", "B2..B5"))

The same ideas can be applied to a database table. Consider the following invoice table in an accounts database:

	custid	invtotal
▶	1001	63.45
	1024	129.99
	1024	8.50
	1024	267.00
	1001	63.45
✳		

The table information can be referred to in the following ways:

=10+DBGET("accounts.adb", "invoices", "invtotal", 3) / 2

to reuse the invoice total field from row 3 (that is the value 8.50) in a formula and:

=ROWS(DBGET("accounts.adb", "invoices", "invtotal"))
=TOTAL(DBGET("accounts.adb", "invoices", "invtotal"))
=AVERAGE(DBGET("accounts.adb", "invoices", "invtotal"))
=MAX(DBGET("accounts.adb", "invoices", "invtotal"))

to find the number of records, the total, average and maximum of the invoice totals.

Two way links

A two way link is a connection between the current field and a field in another – or the same – document . If you change the value of either field, the value in the other field will also change.

A two way link cannot be used as part of a formula like a one way link can (see using one way links in formulas). Apart from this, you build two links in the same way as one way links as follows:

1. Create a normal one way link (see one way links for more details).

2. Turn the edit source property on:

    - In a spreadsheet, use the **Edit Source** button or select the **Edit Source** property in the **Format/Attributes** dialog.

    - In a Write document, double-click on the field, select **Attributes** from the **Field** menu and select the **Edit Source** property.

For example, consider the following database table, called invoices:

custid	invtotal
1001	63.45
1024	129.99
1024	8.50
1024	267.00
1001	63.45

1. In a spreadsheet cell, enter the following formula:

    =DBGET("accounts.adb", "invoices", "invtotal", 3)

2. The result of the formula, 8.5, will be displayed.

3. Click on the **Edit Source** button.

4. You can now enter a new value in the cell and the database will be updated.

Linking and embedding documents

Often, you may find you need to insert a chart or part of a spreadsheet (or both) into a report you're creating with Write. It could be that you want to create a new spreadsheet that only exists within the current document or you may want to insert a spreadsheet that you've already created. Further, you may want the document to automatically update should the original spreadsheet change.

These are all examples of a standard Windows technique called Object Linking and Embedding (or OLE for short) that Ability uses to enable such documents to be created. The Object refers to the spreadsheet, Embedding refers to the inclusion of an object within the current document (the first two examples above) and Linking refers to the "live" display of external data (the final example above).

All the Ability applications support OLE to some extent, as do many other non-Ability applications (meaning that Ability can share data with other applications).

Here's a list of what can be inserted where:

Application	Include objects from
Write	Spreadsheet (including charts), Draw and any external applications that support OLE
Spreadsheet	Write, Draw and any external applications that support OLE
Database OLE field	Spreadsheet (including charts), Write, Draw and any external applications that support OLE
Draw (and Database forms)	Spreadsheet, Chart, Write and any external applications that support OLE
External programs (non -Ability applications supporting OLE).	Write, Spreadsheet, Chart, and Draw.

For more information on linking and embedding, see:

[Object linking](#)

[Object embedding](#)

For examples of how this can be put into practice (it's much easier to do than the terminology might suggest), see one of the following:

[Inserting a spreadsheet into a Write document](#)

[Inserting a chart into a Write document](#)

[Inserting a Draw document into Write or Spreadsheet](#)

[Inserting an image into Write or Speadsheet](#)

Object linking

When an object is linked, the source data continues to reside physically wherever it was initially created. Only a reference, or link, to the object is kept with the compound document (along with appropriate presentation data). Linked objects cannot "travel" with documents to another machine; they must remain within the local file system or be copied explicitly.

Linking is efficient and keeps the size of the compound document small.

You may choose to link when the source object is owned or maintained by someone else, so that a single instance of the object's data can serve many documents.

Changes made to the source object are automatically reflected in any compound documents that have a link to the object.

To link an object:

1. Select **Object** from the **Insert** menu:

2. Select the **Create from File** radio button.

3. Make sure the **Link** box is checked.

4. Select the **Browse** button to locate the source object (for example, if you are embedding an Ability spreadsheet, you should be looking for a document with an AWS extension).

5. Select OK to insert and link the object.

See also:

   Object embedding

Object embedding

When an object is embedded, a copy of the original object is stored physically in the compound document, along with all the information needed to manage the object. As a result, the object becomes a physical part of the document. A compound document containing embedded objects will be larger than one containing the same objects as links.

However, embedding offers several advantages that may outweigh the disadvantages of the extra storage overhead. For example, new objects can inserted as needed and compound documents with embedded objects may be transferred to another computer and edited there.

To embed an object, select **Object** from the **Insert** menu and do one of the following:

- **Create and embed a new object**

    1. Select the **Create New** radio button.

    2. Select the object type – this can be Ability Spreadsheet, Write or Draw or an object from any other application listed.

    3. Click OK to embed the new object.

- **Embed an existing object**

    1. Select the **Create from File** radio button.

    2. Make sure the **Link** checkbox is clear.

    3. Select the **Browse** button to locate the source object (for example, if you are embedding an Ability spreadsheet, you should be looking for a document with an AWS extension).

    4. Click OK to embed the object.

See also:

Inserting a spreadsheet into a Write document

To insert a spreadsheet into a Write document, position the cursor in the Write document at the point where you want the spreadsheet to go and do one of the following:

- **Insert a new spreadsheet**

    Select the **Spreadsheet/Chart** option from the **Insert** menu. A standard spreadsheet will appear ready for entering the spreadsheet data.

- **Insert an existing spreadsheet**

    1. Select **Object** from the **Insert** menu.

    2. Select **Create from File**.

    3. Click on the **Browse** button to choose the spreadsheet.

    4. Optional − if you want the spreadsheet to be linked, check the **Link** box (see object linking for details on what this means).

Inserting a chart into Write

Since a chart is always attached to a spreadsheet, you insert a chart into a Write document in by first inserting the spreadsheet and then selecting or creating the chart to display. See Inserting a spreadsheet into a Write document for the details on how to insert the spreadsheet.

Immediately after insertion the spreadsheet will be in edit mode. This means you can make change to the spreadsheet rather than the document. If you drop out of edit mode (by clicking in another part of the document for example) double-click on the spreadsheet again to make it active.

The next step depends on whether you're creating a new chart or displaying an existing chart as follows:

- **Creating a new chart**

  Select the figures you want to chart (or type them in if it's a new spreadsheet). Select **As New View** from the **Insert** / **Chart** menu. Follow the steps in the chart wizard to create the appearance you want. See charts for more detail on how to do create charts.

- **Displaying an existing chart**

  Once a spreadsheet has been inserted, you can choose which view you'd like to show in the document. Select **Sheet** from the **View** menu to display the normal spreadsheet grid. Select **Chart** from the **View** menu to view the chart. If there is more than one chart, you will be prompted to make a selection.

Inserting a Draw document into Write or Spreadsheet

To insert a Draw document into a Write document or spreadsheet, position the cursor at the point where you want the Draw document to appear and do one of the following:

- **Insert a new draw document**

  Select **Drawing** from the **Insert** menu. A standard draw document will appear ready for creating a new drawing – see Draw .for more details on how to create a drawing.

- **Insert an existing draw document**

  1. Select **Object** from the **Insert** menu.

  2. Select **Create from File**.

  3. Click on the **Browse** button to choose the draw document.

  4. Optional – if you want the drawing to be linked, check the **Link** box (see object linking for details on what this means).

Inserting an image into Write or Spreadsheet

An image (or picture) can be inserted directly into a Write document and (via Draw) into a spreadsheet.

An image is file in one of the following formats:

BMP	Windows Bitmap
WMF	Windows Meta File
DIB	Device Independent Bitmap
TIF	Tagged Image File Format
GIF	CompuServe™
TGA	Targa
PCX	PC Paintbrush™

- **Inserting into Write**

   1. Select **Picture** from the **Insert** menu.

   2. Double-click on the image you want (or first browse to the folder where the image resides if necessary).

   3. Once inserted, you can scale the image to the size you need by dragging the picture's handles.

- **Inserting into Spreadsheet**

   1. Select **Drawing** from the **Insert** menu. A new, blank draw document will be inserted.

   2. With the draw document still active, select **Picture** from the **Insert** menu in the same as described for inserting into Write above.

Note: both Spreadsheet and Write support the pasting of images via the clipboard.

Fields – an introduction

Fields are common throughout Ability. The most obvious example of a field is a cell in a spreadsheet – it can contain plain text, numbers or dates or it can display the result of a formula. The same is true of formula fields in Write and Database forms.

Fields share common properties – fonts, borders, colors, numeric formatting, alignment – throughout the Ability applications.

There are other properties of fields that are specific to a particular function. For example, a mail merge field (which allows database information to be browsed and merge printed in Write and Spreadsheet) has a source database, table and field.

Another powerful property of fields is their ability to refer to, or link to, fields in other documents and applications – see linking through fields.

Here are some examples of fields:

Application	Description	Created through
Write	Date and time field	Insert/Date and Time
	Mail merge field	Insert/Mail Merge
	Formula field	Insert/Field – this is the standard field that can be used for formulas and links.
Spreadsheet	Cells	Always present
	Floating field – can be used to mail merge or browse database information or as a separate store of information to the standard spreadsheet cell.	Insert/Field – select either the Formula or Database field type in the field wizard.
Database	Formula field in forms – equivalent to a standard field in Write.	Insert/Formula Field when in forms design mode.
	Lookup Summary field – joins the current table to a another table to provide group summary information.	Insert/Lookup Summary Field – available in both forms and report design mode.

Field controls

A field control type governs the how the field information is editable by the user. The type is set when creating the field in the third page of the Insert Field wizard.

The control type can be any of the following:

- **Edit box**

  This is the standard field that can contain text, numerics, formula or database information. After selecting this, the next page of the wizard will offer options for **Lock** , **Hide**, **Hide Zeros** and **Hide Errors**, **Edit Source** (for setting up two way links), and **Show as control if inactive**.

  For example, if you have set up a database field in a Write or Spreadsheet document and then switch on **Edit Source**, you can enter data at either end of the link and it will be reproduced at the other end. In this way you can change the data in a field in a database from the field you have created in a Write or Spreadsheet document.

- **Checkbox**

  Allows you to insert a checkbox field into a document and to determine how it should work. Checkboxes are useful when you want a field in your document to indicate that another field or a piece of text or data is in one of two states.

  The checkbox has two states: **Checked** (marked with a tick) or **Unchecked** (checkbox is empty). The mouse can be used to check or uncheck a checkbox, when the checkbox is selected in your document. By default, the checkbox will display either **True** or **False** when in display mode in your document, but you can choose whether to have it display **True**, **Yes** or **1**, or **False**, **No** or **0**. Type your display choice in the **Display choice**, using one of these options.

  It is also possible to have a checked box represent **False** (**No**, **0**) and an unchecked box represent **True** (**Yes**, **1**). Select your choice from the drop down list attached to the two options under **Check**. In this case it is best to type in a appropriate display choice in **Display choice** to match the options in **Check**. Note that changing the value in **Checked** automatically causes the opposite value to be selected in **Unchecked**.

  Once you have set up the checkbox, whenever you check it by clicking on it with the mouse, or type a value from the available options in the **Formula Entry Bar**, the checkbox will display the matching value from **Display choice** in your document.

  You can also choose to have a checkbox indicate **@Empty** or **@Not Empty**, using either **True** or **False** in **Display choices**.

- **Listbox**

  Allows you to scroll through a list defined by yourself, or the records under one field of a database with the option to display another field from the same record in the database.

  Once you have selected **Listbox**, go to the next page and click on **Use Choices** in the **Control Source** group box. The **Choices** box will be highlighted. Here you can enter, line by line, any list you want, for example, the names of members of your family.

  If you want to scroll through a list from a particular database field, then click on **Lookup Choices**. Click on the button attached to the **Lookup Database** box to select a database. Use the arrow attached to the **Lookup Source** box to find a table within the database. Select a field from **Lookup Field**: this field contains the list of values through which you can scroll. In the **Display Field** box choose the display field, which will correspond to the lookup field i.e. you can scroll through a list of surnames from a database in the lookup field but display the first names from the display field. Once the field is inserted in a document, use the **Page Up / Page Down** or the arrow keys to move through the list.

- **Combo**

  option allows you to scroll through a list defined by yourself, or the records under one field of a

database with the option to display another field from the same record in the database. This is the same as for **Listbox**, except that in addition **Combo** enables you to access a drop-down menu which displays all the items in the display list.

Once you have selected **Combo**, click on **Use Choices** in the **Control Source** group box. The **Choices** box will be highlighted. Here you can enter, line by line, any list you want, for example, the names of members of your family.

If you want to scroll through a list from a particular database field, then click on **Lookup Choices**. Click on the button attached to the **Lookup Database** box to select a database. Use the arrow attached to the **Lookup Source** box to find a table within the database. Select a field from **Lookup Field**: this field contains the list of items which you can use to look up or refer to the items in the display field. In the **Display Field** box choose the display field, which will correspond to the lookup field i.e. you can type a name from a list of first names from a database but display the surname to which the first name is attached.

Once the field is inserted into a document, click on the arrow attached to the field to access the drop-down menu of all the items in the display list. Alternatively, type a lookup item in the entry box at the bottom left of the window and press return to display the associated display item.

Note: You can set **Editbox** options in conjunction with **Checkbox**, **Listbox** and **Combo**.

When a field is inserted into a document it can be in one of two modes: active and display. In active mode the field is selected and is available for editing and for the input of data. In display mode the field displays its results. To activate a field double click on it; to display a field click once outside it.

To edit a field you should first select it by double clicking in the field. The **Field** menu option is displayed along the top of the window. Clicking on any of the options in the **Field** menu brings up the "Field Attributes" dialog. In here you can change or add to attributes already set. The following options are available:

General contains details of the field type - either formula or database - and field name. You can change these here.

Color allows you to select a color for the field.

Font enables you to choose a font and special effects for text within the field.

Border contains various border types for the field.

There are also options for **Alignment**, **Style**, **Control**, **Attributes**, and **Format**.