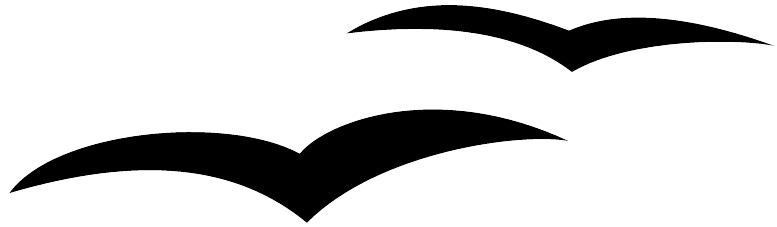OpenOffice.org
The Open Source Office Suite

Creating and Using Master Documents

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Contents

Overview

This document describes how to create and use the Master Document feature in OpenOffice.org Writer.

Acknowledgments

This document was written by Jean Hollis Weber.

Many thanks to people who have asked and answered questions about master documents on the [users] list and in private correspondence. These people include Robert Black Eagle, Daniel Carrera, Tamar Granor, Solveig Haugland, and no doubt others whose names I have forgotten.

Modifications and updates

Version	Date	Description of Change
1.0	13 Sept. 2004	First published version
1.01	4 October 2004	Trivial changes, not affecting the content

Why use a master document?

Master documents are typically used for producing long documents such as a book, a thesis, or a long report, especially when graphics, spreadsheets, or other included material causes the file size to become quite large. Master documents are also used when different people are writing different chapters or other parts of the full document, so you don't need to share files.

Yes, master documents do work in OOoWriter. However, their use is full of traps for inexperienced users. Until you become familiar with the traps and how to avoid (or work around) them, you may think that master documents are unreliable or difficult to use.

You can use several methods to create master documents. Each method has its advantages and disadvantages. Which method you choose depends on what you are trying to accomplish. The different methods are described in this document, along with suggestions on when to use each one.

Creating a master document

Depending on the state of your document when you decide to create a master document, here are the three most common scenarios:

- You have one existing document (let's call it a book) that you want to split into several subdocuments (let's call them chapters) that will be controlled by the master document.

- You have several existing documents (chapters) that you want to combine into one book that will be controlled by the master document.

- You have no existing documents but intend to write a long book containing several chapters.

We will look at each of these scenarios in turn.

Splitting one document into a master document and subdocuments

When you have one existing document that you want to split into several subdocuments that will be controlled by the master document, you can split the document automatically.

When to use this method: If the original document uses only the Default page style, is numbered sequentially from the first page, and uses the Heading 1 style to identify the start of each chapter, this method will work well.

Advantages: This method is quick and easy. Although cleanup work may be necessary, once you have done the cleanup, the document will behave itself.

Disadvantages: If the original document was complex, you may have major cleanup work to do because some formatting will be lost—for example, page styles, page breaks, restarted page numbering.

How to do it: Open the document and click **File > Send > Create Master Document** to split the document. You'll find that each of the subdocuments begins with a Heading 1 and the file names are all "maindocnameX.sxw," where X is 1, 2, 3, and so on. If you have a Preface or other "chapter" starting with a Heading 1 before Chapter 1, the file names will not directly correspond to the chapter numbers.

Combining several documents into a master document

This method works best when all of the documents were created from the same template, but you can also use it when the documents were created from different templates.

Use one of the techniques described in "Starting with no existing documents" to create a blank master document and insert the other documents as subdocuments of the master document.

Starting with no existing documents

The ideal situation is to start with no existing documents, because you can do everything correctly right from the beginning. Writer provides three ways to create a master document:

- Method 1. Quick and easy, but not recommended
- Method 2. Not too complicated, but with restrictions
- Method 3. Complete control

In each case, you need to have a disciplined approach to make sure the master document works correctly and reliably. Each method below describes the steps to take. Be sure to do them in the order given.

Method 1. Quick and easy, but not recommended

Writer provides a quick and easy way to create a master document, but I do not recommend using it, because the master document is not associated with a template, so changes to styles and formatting are difficult to apply reliably.

How to do it: Click **File > New > Master Document**.

Method 2. Not too complicated, but with restrictions

This technique works well if you want to use sequential page numbering throughout the final document (not restarting at 1 at any point), and each chapter starts with a Heading 1 on a new page. If you want to restart page numbering anywhere in the document, use Method 3.

How to do it: Follow the instructions in the next section (Method 3. Complete control), but don't put in the text sections between the subdocuments or try to change the page numbering.

Method 3. Complete control

This method gives you complete control over complex documents with several page styles or

restarted page numbering. It's a bit more work to set up, but works reliably.

How to do it: Follow these steps, in the order given.

Step 1. Plan the project

Step 2. Create a template containing the required styles, fields, and other elements

Step 3. Create the master document and subdocuments from the same template

Step 4. Insert the subdocuments into the master document

Step 5. Add a table of contents, bibliography, or index

Step 1. Plan the project

Although you can make changes at most steps in this process, the more you can plan before you start, the less work you'll have to do to correct any problems later. Here are some things you need to plan:

- Parts of book or report required, and the page numbering to be used in different parts of the book. I will use as an example a book with these parts:

Title (cover) page	1 page	no page number
Copyright page	1 page (back of title page)	no page number
Table of Contents	unknown length	start with i
Preface (Foreword)	2 pages	continue from ToC
Chapters 1 to 8	unknown length	start with 1
Appendixes A, B	unknown length	continue from Chapter 8
Index	unknown length	continue from Appendix B

- What pages will be in the master document and what will be in the subdocs. The ToC and Index must be in the master document. A typical arrangement would be:

Title (cover) page	In master document
Copyright page	In master document
Table of Contents	In master document
Preface (Foreword)	Subdocument
Chapters 1 to 8	Subdocuments
Appendixes A, B	Subdocuments
Index	In master document

- Page, paragraph, character, frame, and numbering styles. See the User Guide chapter on Styles for instructions on how to create or modify styles. Some styles for my example book are:

Page styles

Name	Characteristics	Next page style
Title page	No header, footer or page numbers; layout different from other pages	Copyright page
Copyright page	No header, footer or page numbers; layout different from other pages	Front matter first page

Name	Characteristics	Next page style
Front matter first page	No header; page number in footer, Roman numbers (i, ii, iii); layout different from following pages	Front matter left page
Front matter left page	Header and footer, one containing the page number (Roman)	Front matter right page
Front matter right page	Margins mirrored from Front matter left page; Roman page number	Front matter left page
First page	No header; page number in footer, Arabic numbers (1, 2, 3); layout same as Front matter first page	Left page
Left page	Layout as for Front matter left page, but Arabic page numbers	Right page
Right page	Layout as for Front matter right page, but Arabic page numbers	Left page

Paragraph styles

Use Heading 1 for Chapter titles. If necessary, define a heading level to use for Appendix titles. A handy style is Page Break, defined as 6 pt, no space before or after, page break before. Use whatever other paragraph styles suit your requirements.

● Fields and AutoText entries as required. See other parts of the User Guide for ideas.

Step 2. Create a template containing the required styles, fields, and other elements

You can create your template from an existing document or template that contains some or all of the styles you want for this document, or you can create the template from a blank document. For more about templates, see the Templates chapter in the Writer Guide.

If you use an existing document or template, I recommend that you delete all the text from it except for fields in headers and footers before saving it as the template for this project. It will still have all the styles you defined, even if the text is not there.

Be sure to use **File > Templates > Save** when creating the template. You can change the styles in the template as your project develops.

Step 3. Create the master document and subdocuments from the same template

If you are starting a new project, you must ensure that you create the master document and all the subdocuments from the same template. It doesn't matter what order you use to create the master and subdocuments, and you don't have to create all the subdocuments at the same time, when you're starting the project. You can add new subdocuments at any time, as you need them—as long as you always create them from the same template.

Create the master document

I recommend you follow this process to create the master document. You can use other methods, but each method (including this one) has its drawbacks.

1. Open a new document from the template you created in Step 2. Be sure the first page of this new document is set to the page style you want for the first page of the final document; if it isn't, change it. In our example, the style for the first page is Title Page.

2. If any text or page breaks came into this document from the template, delete the text. (Fields in headers and footers can stay.)

3. Click **File > Send > Create Master Document**. Save the master document in the folder for this project, not in the templates folder. We'll return to this master document later. For now, you can either leave it open or close it, as you prefer.

Create subdocuments

A subdocument is no different from any other text document. It becomes a subdocument only when it is inserted into a master document and opened from within the master document. Some settings in the master document will override settings in a subdocument, but only when the document is being printed or otherwise manipulated by the master document.

Create a subdocument in the same way as you create any ordinary document:

1. Open a blank document based on the project template (very important).

2. Delete any unwanted text, and set the first page to whatever page style you specified for the first page of a chapter.

3. Click **File > Save As**. Give the document a suitable name and save it in the folder for this project.

If you already have some of the chapters written, the files are probably not based on the template you just created for this project. You will need to change the template attached to the existing files. The only way to do this is:

1. Open a blank document based on the project template.

2. Copy the contents of the original document into this new document.

3. Click **File > Save As** and save the new document in the project folder under a suitable name.

4. Rename the original chapter file so you don't use it by mistake.

Step 4. Insert the subdocuments into the master document

The instructions in this step use the page numbering requirements given in Step 1. If your book has different requirements, change these instructions to suit.

These instructions are fairly tedious, but once you have the master document set up, you shouldn't have to change it, and with a bit of practice setting it up goes quickly.

1. Open the master document and do the following.

    ● Make sure paragraph marks are showing (if necessary, set them in **Tools > Options > Text Document > Formatting Aids**, or click the **Nonprinting characters** icon ⌷).

    ●   Show text boundaries, table boundaries, and section boundaries (**Tools > Options > OpenOffice.org > Appearance**).

    ● Display the Navigator (click **Edit > Navigator**, or press **F5**, or click the **Navigator** icon ⌷).

2. Type the contents of the title page (or leave placeholders and fill in later). With the insertion point in the last blank paragraph on the page, click **Insert > Manual Break**. On the Insert Break dialog (Figure 1), select **Page break** and the page style for the second page (Copyright page in our example), and leave the **Change page number** checkbox deselected. Click **OK**.
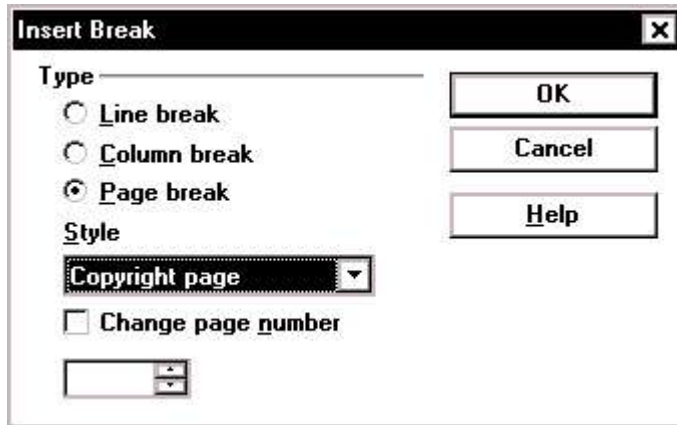

Figure 1. Inserting a page break between the title page and the copyright page

3. Type the contents of the copyright page (or leave placeholders). Insert another manual page break, this time setting the page style to Front matter first page. Select the Change page number checkbox and choose 1 in the box below that, as shown in Figure 2. This number 1 will show in your document as i, because the page style is defined to use Roman numerals.

4. Let's assume the third page is for the Table of Contents. Leave a blank paragraph or two on this page and insert another page break, with next page again set to the Front matter first page style, which we want to use for the first page of the Preface. Because we want the page numbering for the Preface to continue from the page numbers of the Table of Contents, we do *not* select the **Change page number** checkbox this time. Notice that the Navigator shows one item, labelled **Text**.
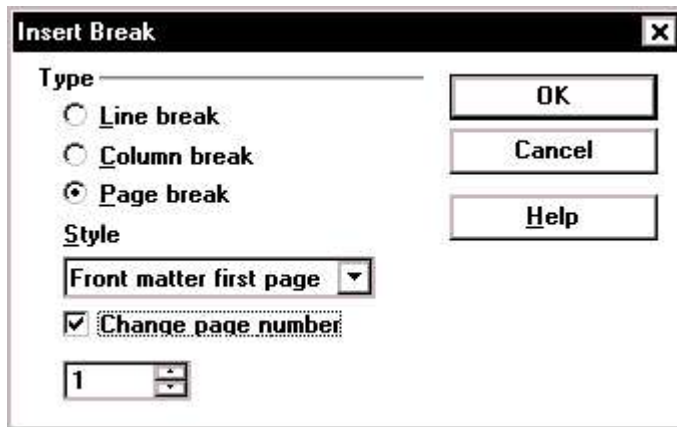
Figure 2. Inserting a page break before the first page of the front matter

5. At last we're ready to add the first subdocument, which is the Preface. On the Navigator, select **Text**, then long-click on the **Insert** icon and click **File**.

Figure 3. Inserting a subdocument into a master document using the Navigator

A standard File Open dialog will appear. Select the required file (which you created in Step 3) and click **OK**. Wait while OOoWriter loads this document.

You'll see that the inserted file is listed in the Navigator *before* the Text item, as shown in Figure 4. You do not want it there; you want it after the text. Select **Text** and then click the **Move Up** icon.
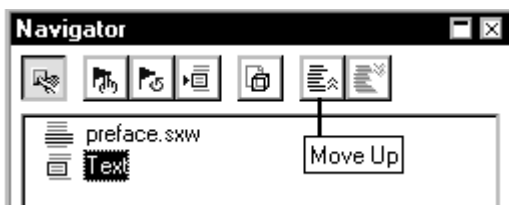

Figure 4. Moving text to before a subdocument

Check whether the first page of the master document has the correct page style. If not, change it.

Scroll to the place where the subdocument begins. You'll see that it has a blank paragraph at the top of the page; this was inserted as part of the manual page break. Set this paragraph to the PageBreak style you created in Step 2.
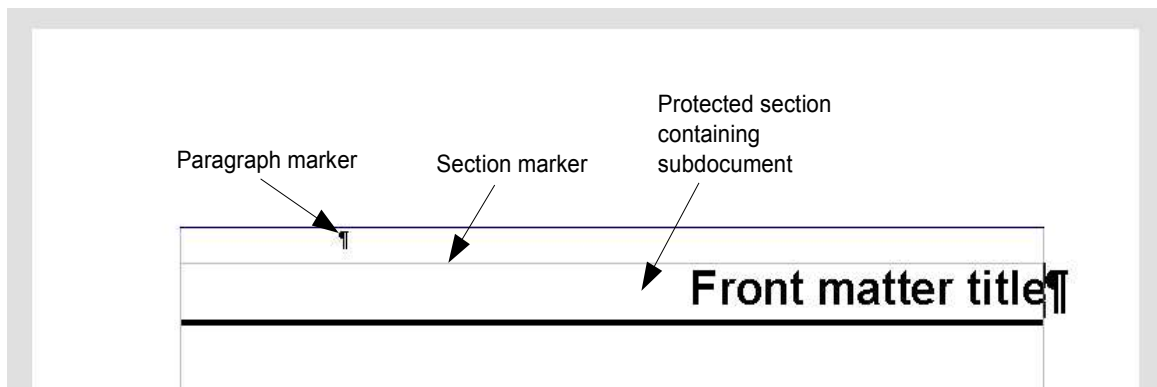
Figure 5. Page break before subdocument, which is in a protected section

You'll also notice that the document you just inserted is in a protected section. That means you can't change any of the contents of this subdocument from within the master document.

6. Save the master document file before you do anything else.

   Now you want to add the next subdocument, which in our example is Chapter 1. In the Navigator, select the Preface file you just inserted. Long-click on the **Insert** icon and click **File**. Select the required file for the first chapter and click **OK**. Wait while OOo loads the file.

   You'll see that it comes into the master document before the Preface, which again is not what you want. Select the new file and click the **Move Down** icon to move the new file to be after the Preface.

7. Now place the cursor in the master document itself and scroll around until you find the beginning of Chapter 1. You'll find that it is on the same page as the end of the Preface, and you'll probably find there is no paragraph marker between the section markers for the end of the preface and the beginning of the chapter, so you can't insert a page break.
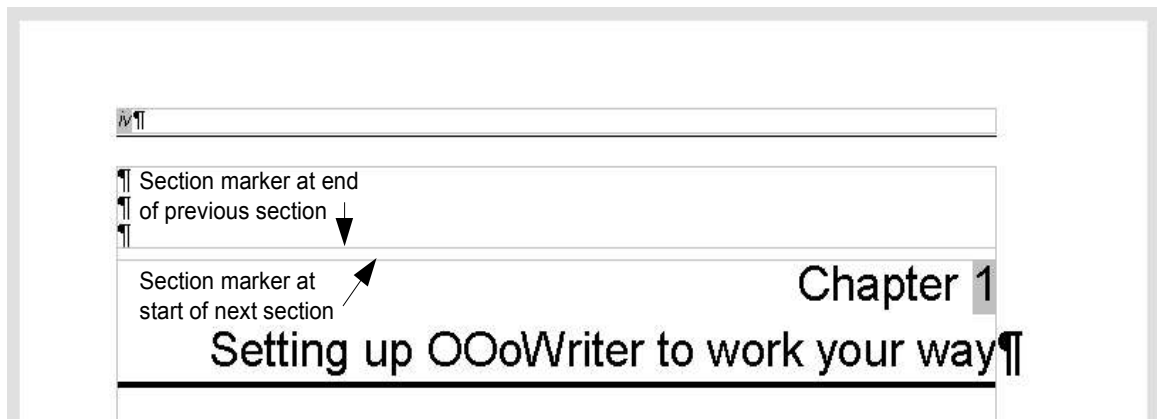

Figure 6. Two sections of a master document with no text area between them

To fix this, go back to the Navigator. Select the last file in the list (which should be Chapter 1), then long-click on **Insert** and click **Text**. A blank paragraph appears in the master document between the two section marks.

Click on this blank paragraph and insert a page break, specifying the First Page style and the page number to start at 1. Click **OK**.
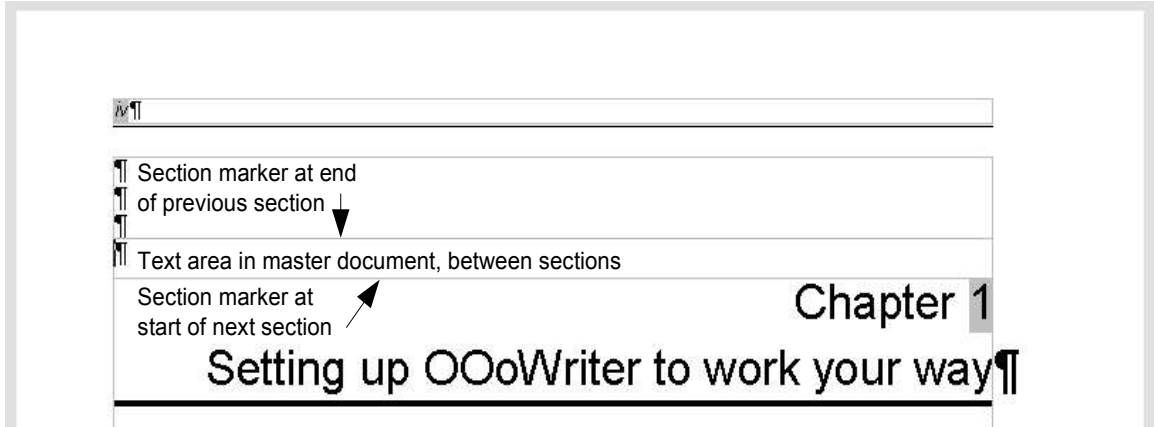

Figure 7. A text area between two sections of a master document

8. Save the master document again.

    Now go back to the first page of the Preface and check whether its page style is correct. (It may go wrong when the chapter is inserted.) If the page style is wrong, change it to the correct style (**Front matter first page** in our example).

9. To insert Chapter 2, go to the Navigator and select the last item on the list, which should be Chapter 1. Insert the file for Chapter 2, move it to the end of the list, and insert a page break as described earlier. Repeat until all the subdocuments have been added to the list.
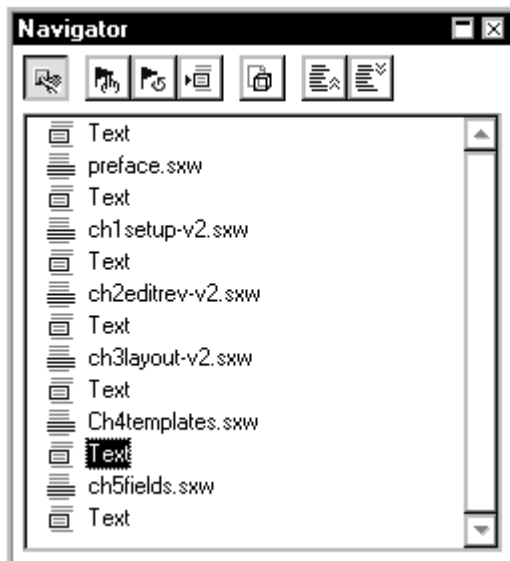
    The Navigator will now look something like Figure 8.

Figure 8. The Navigator showing a series of files in a master document

Tip

You can define your Heading 1 paragraph style to start on a new page, and thus avoid inserting manual page breaks between chapters, but this causes a page numbering problem if you want to restart page numbering at the beginning of Chapter 1. To restart page numbering, you must insert a manual page break; but because the Heading 1 style on the first page of Chapter 1 forces yet another page break, you end up with one or more unwanted blank pages before the first page of Chapter 1. The technique described in this chapter avoids this problem.

Step 5. Add a table of contents, bibliography, or index

You can generate a table of contents, bibliography, or index for the book, using the master document. You must insert these items into a text section in the master document.

Put the insertion point on the page in the first text section, where the table of contents is to go. Create the table of contents as described elsewhere in the User Guide.

If you do not have a Text section at the end of the master document, insert one before the last subdocument, then move it down so it is after the last subdocument. Now, if you have included bibliographic entries in your subdocuments, you can put the insertion point on the page in this last text section, where the bibliography is to go. Create the bibliography as described elsewhere in the User Guide.

If you have included index entries in your subdocuments, put the insertion point on the page in the last text section where the index is to go. Create the index as described elsewhere in the User Guide.

Editing a master document

After creating a master document, you may want to change its appearance or contents.

Changing the appearance of the document

You can change the styles in the template as your project develops. Don't make changes to styles in the master document or in any of the subdocuments—do it in the template.

To update the master document (and all of the subdocuments) with changes to the template, just open the master document. You'll get two messages: first, to ask if you want to update all links; and second, if you want to apply the changed styles. Answer Yes to both of these messages.

Editing subdocuments

You cannot edit a subdocument from within the master document. Instead, you must open the subdocument, either by double-clicking on it in the master document's Navigator, or by opening it from outside the master document. Then you can edit it just as you would edit any other document. Just one rule: if you make any changes to the styles while editing a

subdocument, you must copy those changed styles to the template so they are available to all of the subdocuments and to the master document.

If you change the contents of any subdocument, you need to manually update the table of contents, bibliography, and index from within the master document.

Advanced techniques

The methods described earlier in this chapter are all most writers will need when using master documents. However, some master documents do need automatically-updating cross-references between the subdocuments. This section describes how to make these work.

Cross-referencing between subdocuments

The process to create cross-references between subdocuments is tedious, but it works. (An alternative is to use Ian Laurenson's CrossRefHeadings macro, available from http://homepages.paradise.net.nz/hillview/OOo/.)

1. First set references in each subdocument, just as you would when you are cross-referencing within a single document. When you do this, keep a list of what you've named the reference fields, and be sure every name is unique. One way to keep track of this information is by putting it in a separate text file or a spreadsheet.

   The field names are case-sensitive. You can check the field name by hovering the mouse pointer over the referenced item. In our example (Figure 9), the heading has the field name word count.
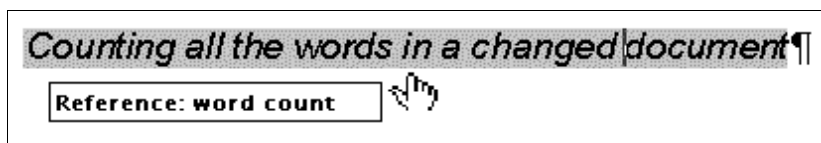

Figure 9. Finding the field name for a heading

2. Open the master document. In the Navigator (Figure 10), select a subdocument and click the **Edit** icon (or right-click and choose **Edit** from the pop-up menu). The subdocument opens for editing.
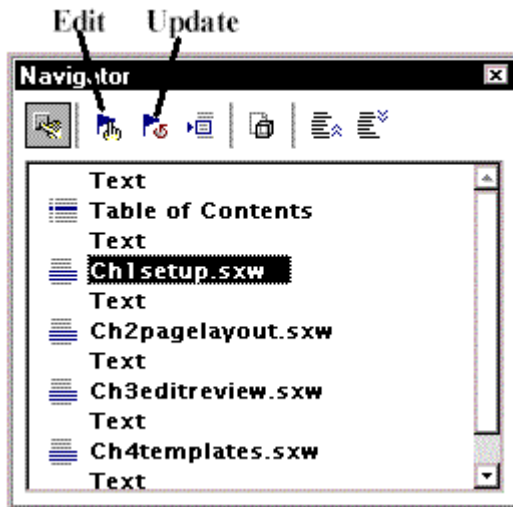
Figure 10. Selecting a subdocument in the Navigator

3. In the subdocument, place the cursor where you want the cross-reference to appear. Click **Insert > Cross Reference**.

4. In the Fields dialog, on the References page, select **Insert Reference** in the Type list on the lefthand side (Figure 11). The Selection list in the middle column shows only the reference field names for the subdocument you're using, so ignore that list and check the list you created manually in step 1.
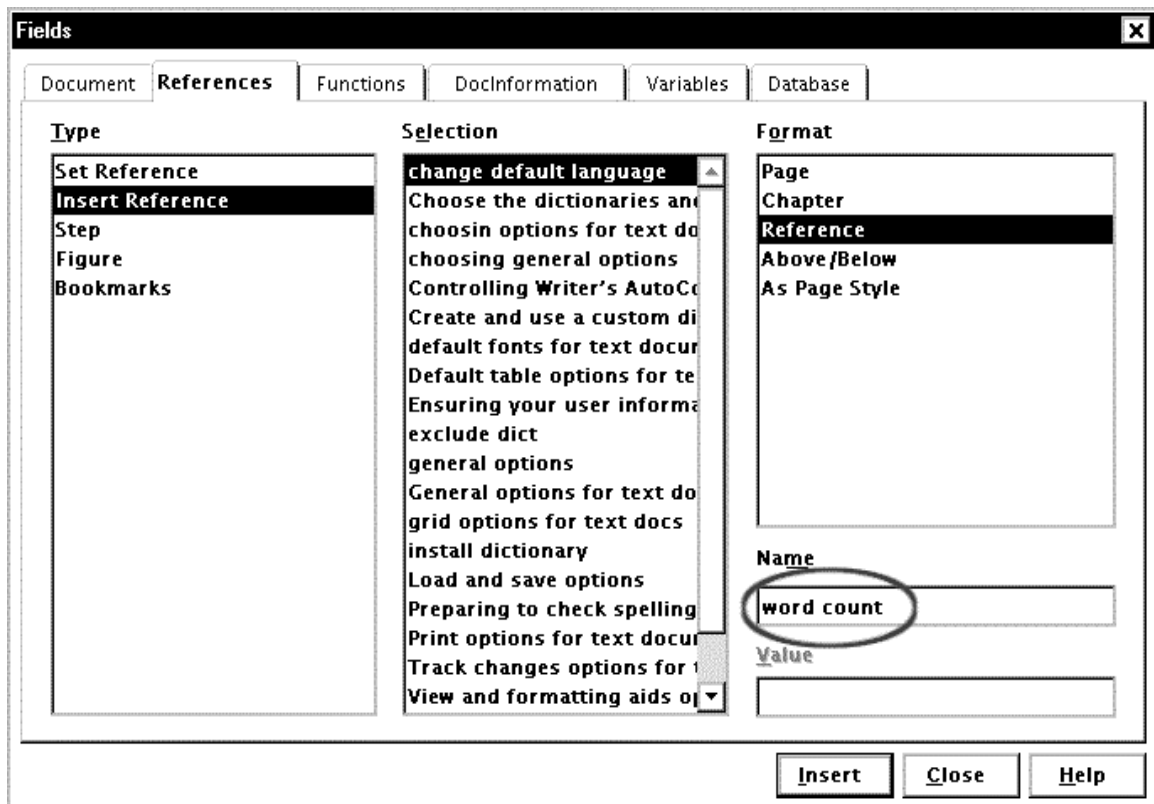

Figure 11. Fields dialog showing manual entry of field name

5. In the **Name** field in the lower righthand column, type the name of the reference you set in the subdocument you're referring to. In our example, the reference is in Chapter 3, and its name is *word count*.

6. Click **Insert**. Nothing will appear in the subdocument except a tiny grey bar indicating a field. If you hover the mouse pointer over this field, you should see the field name (Figure 12).

Figure 12. Viewing the field name

(You can turn on the display of field codes by clicking **Tools > Options > Text Document > View** and selecting the **Field Codes** checkbox. The two fields shown as grey lines in Figure 12 now look like Figure 13.)
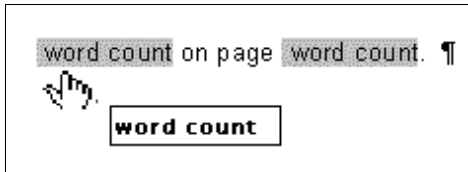

Figure 13. Displaying field codes

7. After you have inserted all the cross-references required in the subdocument, save and close it and return to the master document window.

Within the master document, navigate to the page of the subdocument on which you inserted the cross-reference field. You should now see the text of the cross-reference appear in the spot where you inserted it (Figure 14), because within the master document, the subdocument can find the target of that field reference.
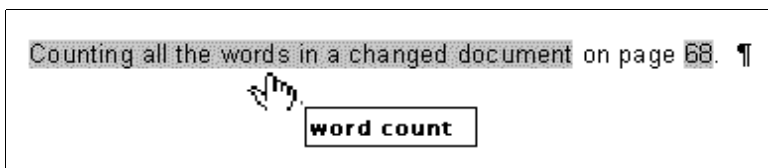

Figure 14. Field contents showing where inserted in file

This technique also works if you open a subdocument directly in step 2 (that is, not from within the master document) and insert a cross-reference field.