OpenOffice.org Writer for Technical Writers

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Introduction

This document is designed to provide information about some of the trickier aspects of OpenOffice which you might need to master when creating technical documentation.

It includes:

- information on current known bugs
- workarounds for those bugs (if available)
- procedures for tasks which aren't particularly intuitive
- procedures for tasks which aren't possible using the GUI

> **Note**
>
> This document is designed with my current workplace in mind, so you may find it very lacking in some areas and info-heavy in others. It is a work in progress.

The information provided in this document is based on OpenOffice.org versions 2.0.3 to versions 2.3.1. Be aware that some of it may be outdated.

OpenOffice.org Manual

If you have the time and energy, read the Writer User Guide (available for download from the OOo website).

Text Properties

Outline Numbering

Outline numbering (where numbers automatically appear in front of headings to denote the chapter number and level number(s)) is set up via the Tools menu. It is not set up in paragraph styles, although it is linked to specific heading styles.

Set Up Outline Numbering

This is designed for a 4-level outline numbered heading setup.

1. Go to **Tools -> Outline Numbering...**
2. Select **1-10** from the **Level** list.
3. Select **Numbering Symbols** from the **Character Style** drop down list
4. Select 1 from the **Level** list.
5. Select **Heading 1** from the **Paragraph Styles** drop down list
6. Select **2** from the **Level** list.
7. Select **Heading 2** from the **Paragraph Styles** drop down list
8. Select **3** from the **Level** list.
9. Select **Heading 3** from the **Paragraph Styles** drop down list
10. Select **4** from the **Level** list.
11. Select **Heading 4** from the **Paragraph Styles** drop down list

Refer to Heading Text in Header

To include the name of the current chapter in the header of each page (excluding the cover page):

1. Place the cursor where you want the heading text to be displayed.
2. Press Ctrl-F2.
3. Click on the **Document** tab.
4. Select **Chapter** from the **Type** list.
5. Select **Chapter Name** from the **Format** list.
6. Check that **Layer = 1**
7. Click on **Insert**.

Paragraph and Character Formatting

Read the Styles information in the OpenOffice.org Writer User Guide. Knowing how these work can be crucial to working successfully with technical documents in OpenOffice.org.

Tips for Working with Text Styles

Paragraph Formatting

If someone has added extra formatting to text (without modifying the paragraph style), the easiest way to get rid of it is to highlight the text, right-click and select Default Formatting. This (theoretically) resets the text to ONLY use formatting from the applied paragraph style. This method works better in later versions of OpenOffice.org.

Replacing Paragraph Styles

It may occasionally be necessary to change a large amount of text from one style to another – eg. Text body to Text body indent. Where the text is spread over a document, with other paragraph styles in between, the easiest way to achieve the change is a Find and Replace:

1. Press Ctrl-F.
2. Click on **More Options**.
3. Tick the **Search for Styles** checkbox.
4. Select the paragraph style you want to get rid of from the **Search for** drop down list.
5. Select the paragraph style you want to use instead from the **Replace with** drop down list.
6. Click on **Replace All**.

Changing a Document's Template

Standard Document

Automated Process

Download and install this template changer extension for OOo Writer:

http://extensions.services.openoffice.org/project/templatechanger

Manual Process

1. Select All.
2. Copy.
3. Create new document from correct template.
4. Paste contents into new document.
5. Save.

Master Document

> **Note**
>
> The template changer extension does not currently work for master documents.

1. Create new document from the correct template.
2. Send to new master document (File -> Send -> Create Master Document).
3. Save and close the new master document.
4. Make a copy of the entire file for the original master document.
5. Change the copy's extension from .odm to .zip.
6. Unzip the file to a new folder.
7. Change the new master document's extension from .odm to .zip.
8. Unzip the file to a new folder.
9. Find the content.xml file in the folder created when the copied original master document was unzipped. Copy it.
10. Paste it into the folder created for the unzipped new master document (this will overwrite a file).

11. Select all files in the unzipped new master document folder.

12. Zip all files into a new .zip file (overwrite the 'new master document' file).

13. Change the extension on the file from .zip to .odm.

14. Open the new master document file and check for problems.

Creating a Master Document

> **Caution**
> When creating a master document, follow these steps only (the obvious method is buggy).

To create a master document:

1. Create new document from the correct template
2. Send to new master document (File -> Send -> Create Master Document)
3. Save and close the new master document

Using Variables

Two actions are required for using variables in a document:

- Set variable name and value
- Show variable value

> **Important Note**
> Due to some issues in OpenOffice.org 2.3.1, I started declaring most variables in a single subdocument. See **Variables** for more information on the bug.

Each variable is typically set once per document, either in a child document or on the cover page (underneath the graphic elements). 'Show variable' can then be inserted throughout text in the document, and will change whenever the variable value is modified. See **Referring to a Variable** for more information.

Limitations on variables:

- Cannot currently be inserted into text boxes.
- Must be set before being shown.

> **Tip**
>
> Press CTRL-F2 to set or show references, variables etc.

Creating a Variable

1. Position the cursor where you want the variable to be placed.
2. Press Ctrl-F2.
3. Click on the **Variables** tab.
4. Select **Set variable** from the **Type** list.
5. Type the name of the variable into the **Name** field, and the current value in the **Value** field.
6. Click on **Insert**.
7. Click on **Close**, or create another variable.

Editing a Variable

Right-click on the set variable statement and select **Fields**.

Referring to a Variable

In the Same Document

1. Position the cursor where you want the variable text value to be placed.

2. Press Ctrl-F2.

3. Click on the **Variables** tab.

4. Select **Show variable** from the **Type** list.

5. Select a variable name from the **Selection** list.

6. Click on **Insert**.

7. Click on **Close**.

In a Different Document

When using master documents, you will frequently need to refer to a variable which is set in a different child document. The easiest method is to include a reference to each variable (each on a new line) – as above - and cut and paste the variable reference from the 'set variable' document to the other. It can be a pain – but it is far easier than replacing text throughout an entire document when a product name changes.

> **Tip**
>
> Enable View Fieldnames (Ctrl-F9) to make this process easier.

Using References

References allow for dynamic links within a single document or master document.

Note

This section refers to applying the CrossRef character style to all links within a document. This is standard practice at my workplace, because it makes it clear to a reader as a link. You may, however, choose not to do so, or to use a different character style.

Creating a Reference

1. Highlight the text to use as the reference (note: this text will appear in the link).
2. Press Ctrl-F2
3. Click on the **References** tab.
4. Select Set Reference from the **Type** list.
5. Enter a name for the Reference in the **Name** field (this will usually be the same text as used for the reference, but must be unique – so the name may have to vary slightly from the highlighted text).
6. Click on **Insert**.

Creating a Link to a Reference - Same Document

If creating the link in the document where the reference was created:

1. Place the cursor where you want the link to appear.
2. Press Ctrl-F2
3. Click on the **References** tab
4. Select Insert Reference from the **Type** list.
5. Select a Reference to link to.
6. If you use chapter numbering in your headings, double-click on **Chapter**.
7. Double-click on **Reference**
8. Click on **Close**.
9. Place a space between the two reference links.
10. Apply the CrossRef character style to the links just added.

Creating a Link to a Reference – Different Child Document

The fields window will only display references created in the currently-displayed document. If creating the link in a different child document to that where the reference was created:

> **NOTE**
>
> The cross reference link will only work if both documents are included in the same master document. This is not the method to use if you want to open an external document on a click.

1. In the same document in which the reference was created, find a place to put a temporary link.
2. Press Ctrl-F2.
3. Click on the **References** tab.
4. Select **Insert Reference** from the **Type** list.
5. Select a Reference to link to.
6. If you use chapter numbering in your headings, double-click on **Chapter**.
7. Double-click on **Reference**.
8. Click on **Close**.
9. Place a space between the two reference links.
10. Highlight and cut (Ctrl-X) the reference link.
11. Open the document in which you wish the link to appear.
12. Paste the link.
13. Apply the CrossRef character style to the links just added.

Editing a Link to a Reference

1. Right-click on the cross-reference and select **Fields...**
2. Select the format you want.
3. Click **OK**.

Using Captions

Captions are typically used before or after images and tables. They include the caption type (eg. Image), a unique number and a label (eg. Component Overview). Using a caption allows you to:

- Create a table of references (with page numbers)
- Create links to the caption (eg. see Image 2: Component Overview)

Create a Caption

There are two ways to set a caption for an object in Writer. The automatic option is obviously the easiest, but does have the annoying 'feature' of creating a frame for the object and caption while it's at it. If you're like me, you'll find this highly irritating.

Once you've got one caption set up, you have the choice of redoing the process for each new caption, or simply copying and pasting. As long as numbering is set to increment automatically, this should work fine for most situations.

Automatic (Within a Frame)

1. Right-click on the object and select **Caption**.
2. Select a category or type in a new category name in the drop down list.
3. Enter text to be displayed after the caption category and number – this will typically be a unique description of the object.
4. Click on **OK**.

Manual

1. Press Ctrl-F2
2. Click on the **Variables** tab
3. Select **Number Range** from the **Type** list
4. Enter a category name (eg. Table, Image) in the **Name** field
5. Enter <category name>+1 in the **Value** field (eg. Table+1) if you want automatically-numbered references. If not, enter a number)
6. Click on **Insert**.

Link to a Caption

1. Press Ctrl-F2
2. Click on the **References** tab

3. Select the caption category from the **Type** list

4. Select your specific reference from the **Selection** list

5. Double-click on the link text desired (typically **Reference**).

6. Click on **Close**.

Create a Table of References for a Caption Category

1. Select **Insert -> Indexes and Tables -> Indexes and Tables** from the main menu.

2. Select **Illustration Index** or **Index of Tables** from the **Type** drop down list.

3. Select **References** from the **Display** drop down list.

4. Click on **OK**.

Hidden Text and Paragraphs

Where a topic contains greatly different information, separate child documents are recommended. But sometimes only a relatively small amount of text needs to differ between documentation for different products. Where this is the case, hidden paragraphs and text can be used to show or hide product-specific text.

> **Caution**
> In earlier versions (2.0 – 2.1?) of OpenOffice.org, it was necessary to use User Fields, rather than variables, on which to base hidden text and paragraphs. Those builds contain a bug which means that hidden text and paragraphs based on a variable do not always function correctly in a master document. Variables should work correctly in OOo 2.3 and beyond.

Creating Variables

See **Using Variables** for information on creating variables in OOo Writer.

Creating User Fields

1. Place the cursor where you want to create a User Field.
2. Press Ctrl-F2.
3. Click on the **Variables** tab.
4. Select **User Field** from the **Type** list.
5. Enter a name and a value for the field (eg. **Product** and **vm3**).
6. Click on **OK**.

Referring to User Fields and Variables

To hide a paragraph or text if the document is being used for a specific product, use this syntax:

```
<User Field or Variable Name>=="<value>"
```

To hide a paragraph (or text) if the document is being used anything other than a specific product, use this syntax:

```
<User Field or Variable Name>!="<value>"
```

Example

Product=="vm3" will hide the paragraph or text if the **Product** User Field is set to vm3.

Product!="vm3" will hide the paragraph or text if the **Product** User Field is set to anything except vm3. If it IS set to vm3, the paragraph or text will be displayed.

Note the double = sign in the first option, and the use of double quotes.

Hiding a Paragraph

1. Place the cursor at the start of the paragraph.
2. Press Ctrl-F2.
3. Click on the **Functions** tab.
4. Select Hidden Paragraph from the **Type** list.
5. Enter a condition, using the examples above as a guide.
6. Click on **Insert**.

Hiding Text

1. Highlight the text to be hidden.

Note

Hidden text may only contain plain text. No character formatting or variables may be included.

2. Press Ctrl-F2.
3. Click on the **Functions** tab.
4. Select Hidden Text from the **Type** list.
5. Enter a condition, using the examples above as a guide.
6. Click on **Insert**.

Paragraph Style Inheritance

To view the inheritance structure used in paragraph styles, open the Styles and Formatting window and select **Hierarchical** from the bottom drop down list.

This paragraph style inheritance structure is important, because it allows a font or size change to be made once and propogated throughout many styles. Unfortunately, it's also ridiculously easy to break in current versions of OpenOffice.

It IS possible to reset the inheritance structure by editing the **styles.xml** file from an unzipped template. All settings which should be inherited must be removed from a child style.

Setting Up Page Styles

Page styles can be tricky to get your head around, but are well worth the effort. Why are they tricky? For two basic reasons – they're somewhat idiosyncratic, and they work differently to Word's page formatting.

The important thing to remember is that any time you want a page to look different to others in the same document, you'll need at least two page styles.


Example

Ted has a fairly basic 10 page document. He wants the page number in the footer of every page except the first. On the first page, he wants no header or footer at all.

Ted should use two page styles. If he doesn't want to bother creating his own, he can use the standard ones which come with the normal template... First Page and Default. To set them up correctly, he should follow these steps:

1.   Edit Default page style to display no header, but a footer.

2.   Place the cursor on the first page of his document, after any text on the page, and insert a page break with the page style of First Page.

3.   Insert a Page Number field into the footer of the second page.

View Available Page Styles

1.   If you don't already have the **Styles and Formatting** window visible, press F11.
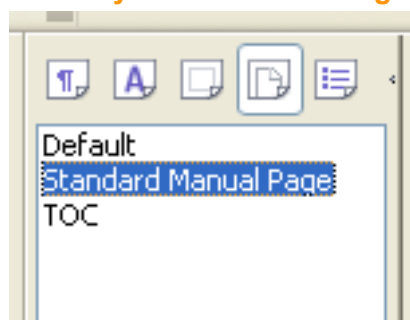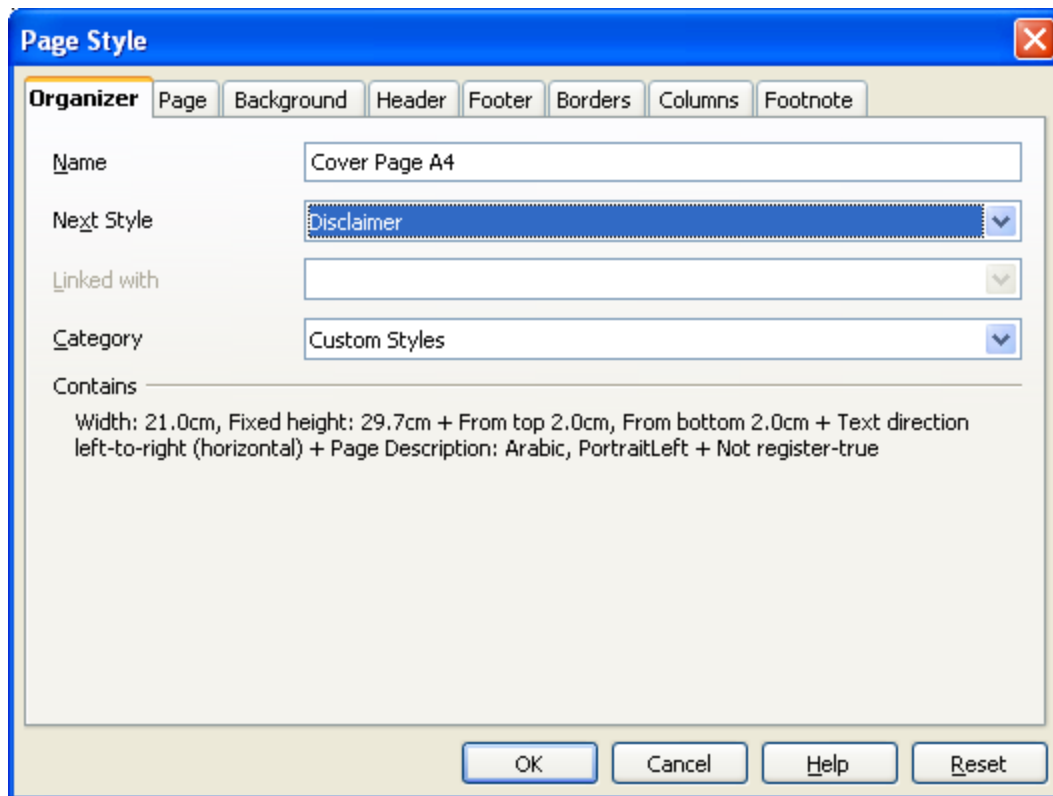

2.   Click on the fourth icon from the left at the top of the screen.

The styles displayed are your current Page Styles.

Create a Page Style

1.   Right click on an existing page style.

2.   Select **New...**

3.   Enter a name for the style.

4.   Have a look at the **Next Style** drop down list.

This allows you to set a page style for the very next page after any with the new page style set. Confused? If you create a 'Cover Page' style, for example, you might be sure that it will only ever take up one page, and that you'll *always* want a 'Disclaimer' page straight after it. So you would set the Next Style to Disclaimer.

If, however, this page style will be for multiple pages in a row, you'll want to set Next Style to whatever you just named this new page style.

5.   Click on the **Page** tab to set a page size.

6.   To use a header with this page style (note: header will be the same for each page with this page style), click on the **Header** tab and tick the **Header on** checkbox.

7.   To use a footer with this page style (note: footer will be the same for each page with this page style), click on the **Footer** tab and tick the **Footer on** checkbox.

8.   Click on **OK**.

Edit Header and Footer

Unlike most versions of Word, this is simple. If headers and/or footers are enabled for a page style, they'll be visible in your document as boxes above/underneath the normal text area. Click inside to add text or fields.

Add Heading Text to Header

You can see that this document displays the name of the current chapter in its header. For instructions on doing the same in your document, see **Refer to Heading Text in Header**.

Add Page Number to Footer

1. Place the cursor in the left side of the footer.
2. Press Ctrl-F2.
3. Click on the **Document** tab.
4. Select **Page** from the **Type** list.
5. Select **Page numbers** from the **Select** list.
6. Select a format for the page numbering typically you'll want to make it **As Page Style** and make modifications in the Page Style options.
7. Click on **Insert**.

Change Page Style

Switching from one page style to another is simple:

1. Place the cursor at the end of the text for the last page of the current style.
2. Select **Insert -> Manual Break** from the main menu.
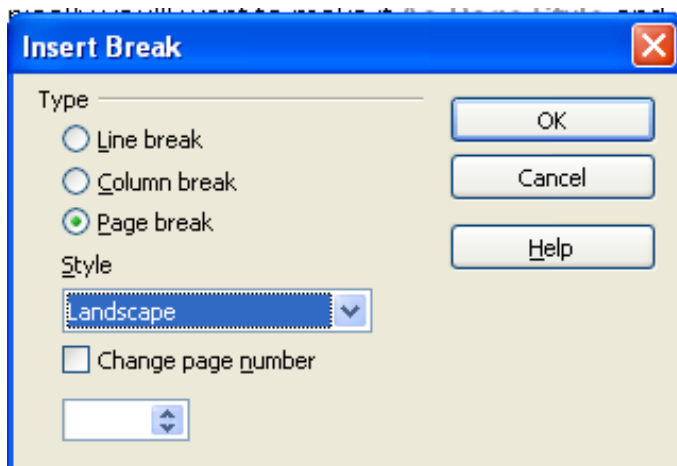
3. Select the **Page break** option button.
4. Select the new page style from the **Style** drop down list.
5. Click on **OK**.

Troubleshooting

OpenOffice.org Crashes on Picture Arrangement

Occasionally OOo will crash when an image is moved backwards or forwards in the page structure. If the image is flickering – constantly redrawing – then a crash is almost inevitable if you atttempt to rearrange. One solution which seems to work is:

1. Right-click on the image and select **Picture...**
2. Click on the **Wrap** tab.
3. Select **Through** (even if it's already selected).
4. Click on **OK**. The flickering should stop now.
5. Attempt the arrangement again.

Variables

OOo 2.3 comes with an annoying bug – it will occasionally lose the **value** part of a **set variable** statement. Of course, this is only obvious if you look at the xml behind the document or master document. But the symptom is a show variable field which displays a zero instead of your variable value.

How to Fix Them

There are a few options:

- Use an older version of OOo. 2.1 and earlier don't seem to have this bug. I'm not sure about 2.2.
- Use a variable statement subdocument. This will NOT stop the problem from occurring, but it will make it a lot easier to fix. Set the variables in a document, insert the document in your master document, then edit the link (right-click on the file name in the navigator pane) – tick the Hide checkbox. The variable declarations will be invisible, but easy to edit. If the variables lose their values, you can re-insert them in the document.
- Edit the content.xml and styles.xml files behind the document. See **Edit the XML Behind a Document** for instructions.

Edit the XML Behind a Document

Accessing the XML

1. Make a copy of the entire file for the original master document.
2. Change the copy's extension from .odt (or .odm) to .zip.
3. Unzip the file to a new folder.
4. Open the folder just created.
5. Open the desired .xml file in an xml editor (I recommend XmlPad).
6. Format the xml code so it's easier to read (XML -> Format Document in XmlPad).

Check Variable Settings

Variable statements are generally found in the content.xml and styles.xml files.

1. Search for 'variable'.
2. When you find a set variable statement, check for a value setting. If it's not there, then OOo doesn't know (anymore) what value to assign to the variable, which will be why it's showing up as 0.
3. Check the type of variable it's set to. If it's set to "floating" or a numeric option, try changing it to "string".
4. When you find a get variable statement, check for any text assigned to it (eg. <get variable [other info]>0</get variable>. You can edit a get variable statement to <get variable [other info]/> instead.

Get the XML Back to OpenOffice Document Format

1. Rezip the unzipped files and folders.
2. Change the zipped file's extension from .zip to .odt (or .odm)
3. Open it in OpenOffice.org to see how it looks.

Keyboard Shortcuts

Some useful keyboard shortcuts are:

<ctrl-BACKSPACE> Deletes an entire word

<ctrl-shift-U> Adds an unnumbered line to a numbered list