



Wordman's Production Corner

By Dick Eassom

By The Numbers

Unraveling the Mysteries of Word's Automatic Numbering Features

The Problem

First, many thanks to those of you who attended either of the sessions that Suzanne Kelman and I gave at the recent APMP Conference in New Orleans. We really appreciated the turnout, and your questions and interaction. In our first session, a three-hour tutorial workshop entitled "Microsoft Word Templates 101," we went through all the steps necessary to set up an attractive, robust and compliant template for a proposal. However, as we prepared our handout material, we realized that one aspect of template creation deserved further work—the use of automatic heading numbering styles.

For those of you who have ventured into this feature, and felt safer with manual numbering, you are missing out on several key benefits of automatic numbering:

- Newly inserted headings adjust themselves (and subsequent headings) to the correct number in the heading sequence
- Generating (and updating) a table of contents is really easy

- Modules distributed to contributing authors can be made to start at correct heading number
- Defined heading styles make formatting easier and more robust
- Cross references to other sections are easy to add and maintain

Nevertheless, I can understand your trepidation—I used to have problems with header formatting going haywire, and heading level numbering not following the sequence I expected.

The formatting craziness is due to a conflict between the paragraph formatting, held by the **Heading X** style, and the heading formatting, held by the numbering list gallery.

The Solution

There is a consistently safe way to create automatic heading numbering, which I have described below. If you follow this, you should be safe!

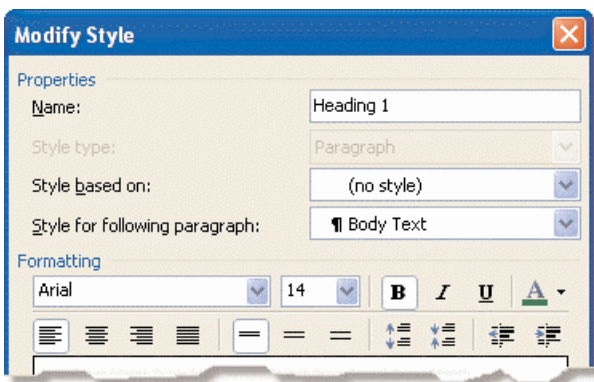
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I strongly recommend that you ensure that **Field shading** is set to **Always** once you start using automatic numbering, since Word uses fields to provide these features and it is extremely useful to differentiate from text that you typed and Word created automatically! Go to **Tools > Options** and, on the **View** tab, set **Field shading** to **Always**, then click **OK**.

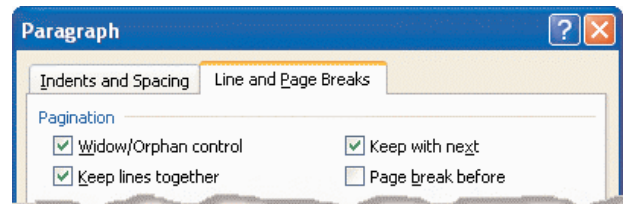
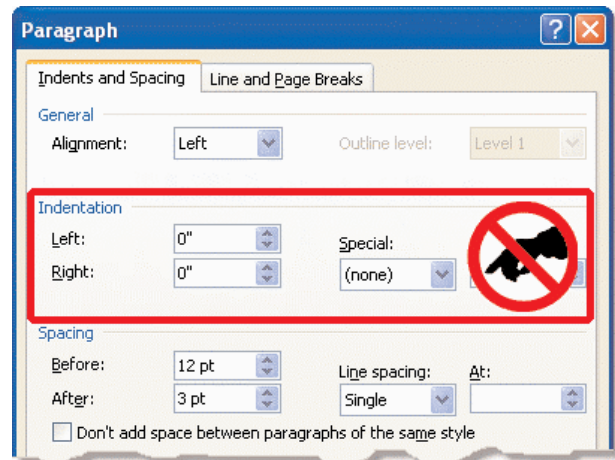
Set Up the Heading Styles

Go to **Format > Styles and Formatting...**, or click **Styles and Formatting** on the **Formatting** toolbar to display the **Styles and Formatting** task pane in Word 2002 (Office XP) and Word 2003. By default, you will have **Heading 1** through **Heading 3**. Click **Modify...** on the dropdown next to **Heading 1** to display the **Modify Style** dialog. Select **(no style)** in the **Style based on** dropdown—basing your styles on **(no style)** ensures that they will not be corrupted by a different **Normal** style on another computer. Select **Body Text**, rather than **Normal**, in the **Style for following paragraph** dropdown for the same reason:



Click **Format** at the bottom of the dialog, click **Font...** on the dropdown list, and select the desired font settings in the **Font** dialog. Click **Paragraph...** on the **Format** dropdown list and select the desired settings on the **Indents and Spacing** tab of the **Paragraph** dialog. However, do not change the **Indentation** settings from those shown below, as we will set these up later. You may

also want to select the settings on the **Line and Page Breaks** tab:



Click **OK** on the **Modify Style** dialog when you've finished with the **Heading 1** settings. Word will automatically add **Body Text** to the list of available styles—you can edit this style later. Now edit the **Heading 2** style. Select **Heading 2** in the **Style based on** dropdown. Similarly, base **Heading 3** on **Heading 2**, etc. This sets up a hierarchy through the heading styles. Remember to select **Body Text** in the **Style for following paragraph** of each heading style. To edit **Heading 4** through **Heading 5**, select **All Styles** in the **Show** dropdown at the bottom of the **Styles and Formatting** task pane. Set the **Show** dropdown back to **Available Styles** when you have finished, and close the **Styles and Formatting** task pane.

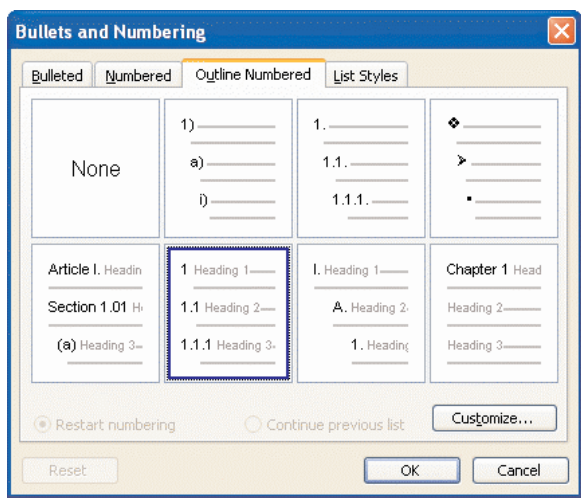
Set Up the Automatic Numbering

Check the formatting of all your heading styles using some dummy heading and paragraph text. When you're happy with the look and feel of your template, we can now set up the automatic numbering.

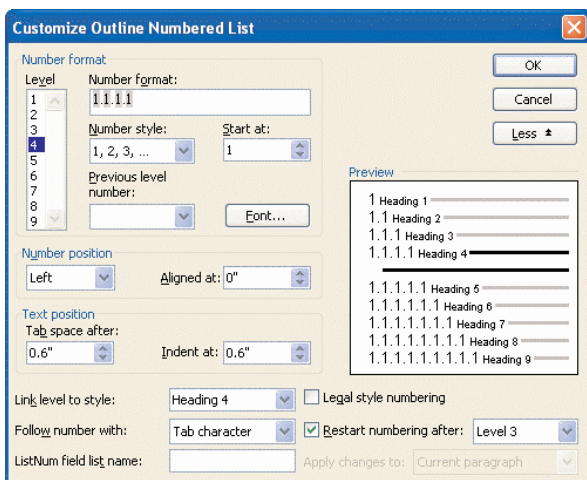
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Go to **Format > Bullets and Numbering...** and select the **Outline Numbered** tab on the **Bullets and Numbering** dialog. The closest list (in terms of the numbering style used in proposals, also known as legal-style numbering in Word) in the outline-numbered gallery is second from left on the bottom row (this is list number 5, counting from zero). The view of the dialog shown below has all the lists in their default state. You can return any list to this state by selecting it, and then clicking **Reset** at the bottom left of the dialog:



Click **Customize...** to display the **Customize Outline Numbered List** dialog. Before we move on to setting up the numbering scheme, let's spend a minute on each feature on the dialog. Firstly, click **More** to display the normally-hidden bottom part of the dialog:



- **Level** shows the heading level whose details are currently displayed on the dialog, e.g. heading level 4 in the example
- **Number format** shows the way the heading number will appear for that level, in a confusing, Word-like way, e.g. 1.1.1.1 for heading level 4. The gray-shaded text represents the value of the relevant heading level, automatically generated by Word—anything else is plain old text. So, 1.1.1.1 represents “Starting value of the heading level 1, followed by a period, followed by the starting value of heading level 2...” and so on. For those of you that enjoy poking around under the hood, Word stores the number format using %x, where x is the heading level. So the heading level 4 number format above would be stored as “%1.%2.%3.%4” which makes a lot more sense.

Therefore, do not assume that the third gray-shaded 1 is the starting value of heading level 3, when you're looking at the level 4 format of 1.1.1.1. When all the levels start at 1, it is all too easy to start editing this value and getting the heading level values out of sequence. If this happens, your best bet is to go back to the **Bullets and Numbering** dialog and reset the list.

- **Number style** shows the way that the heading level will be displayed, i.e. as an Arabic number (1, 2, 3,...), a letter (a, b, c,... or A, B, C,...), a roman number (i, ii, iii,... or I, II, III,...), or one of many other formats. It is also possible to have **None**, where no value will be displayed. Deleting the gray-shaded value in **Number format** for a level will also set the **Number style** for that level to **None**.
- **Start at** displays the value of that heading level of the first heading in the document to use that heading level. For example if heading level 1 starts at 2 and heading level 2 starts at 2, then the first heading level 2 in the document will be 2.2. This can be used to split up large documents, but there is actually a better technique—see below!

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- **Previous level number** is used for inserting the value of a previous heading level into the number format. For example, let's suppose that heading level 4 number format is blank. We could recreate the default value by clicking **Previous level number 1**, followed by typing a period, followed by clicking **Previous level number 2**, etc. As I said, it's easy to get these things messed up.
- **Number position** displays where the automatically generated heading number will appear on the line, i.e. left, center or right aligned. You will normally want to select **Left**.
- **Aligned at** is the distance between the left margin (for left aligned numbers) and the actual numbers, e.g. 0.5" indents the numbers 0.5" from the left margin.
- **Tab space after** is the tab stop position where, if you follow the number with a tab character (see **Follow number with** below), the heading text will start. You will have to set this to allow for the text length of the largest number you are likely to use.
- **Indent at** is the indent of the second and subsequent lines of the heading text from the left margin. This equivalent to a hanging indent on the **Paragraph** dialog, and you will normally want to set this to the same value as **Tab space after**.
- **Link level to style** is used for tying a particular heading level numbering scheme to an actual style. Conventionally, heading level 1 is tied to the **Heading 1** style, heading level 2 to the **Heading 2** style, etc. Of course, there is nothing to stop you doing something else, so beware...
- **Legal style numbering**, when checked, will disable the **Number style** dropdown and override the setting to Arabic numerals, i.e. 1, 2, 3,...
- **Follow number with** selects the character between the automatically-generated heading number sequence and the actual heading text, and can be a tab, a space or nothing.

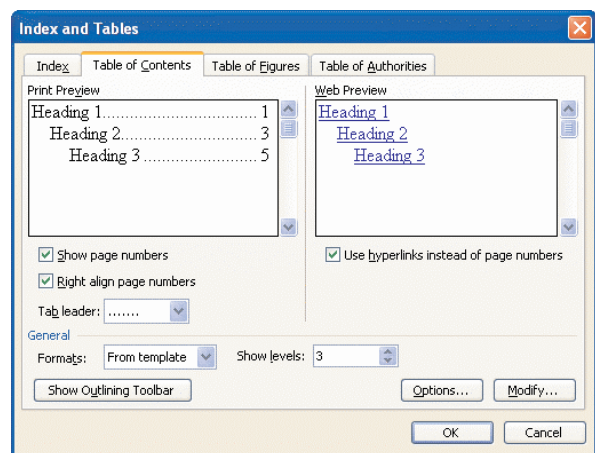
- **Restart numbering after** should be checked to make sure that each level restarts from the Start at value when the higher-level heading value changes to ensure you get the correct sequence. Thus, heading level 4 resets to its **Start at** value after a new heading level 3.
- **ListNum field list name** allows you to give your numbering scheme a name.

Hopefully, that sheds a little light on what is a very busy dialog box! Once you have set up your headings, click **OK** to close the dialog. You will see that your **Heading X** styles have been updated with the numbering scheme you set up. What you must not do at this stage is to reenter any of the Heading styles through **Modify > Paragraph**, otherwise Word will mess up all the heading styles!

Now you have set up automatic numbering, you can create your document headings simply by applying the relevant style.

Creating a Table of Contents

Now you have automatic numbering, this couldn't be easier! Create an empty page at the start of the document where you want to place your table of contents (ToC). Go to **Insert > Reference > Index and Tables...**, and select the **Table of Contents** tab on the **Index and Tables** dialog:

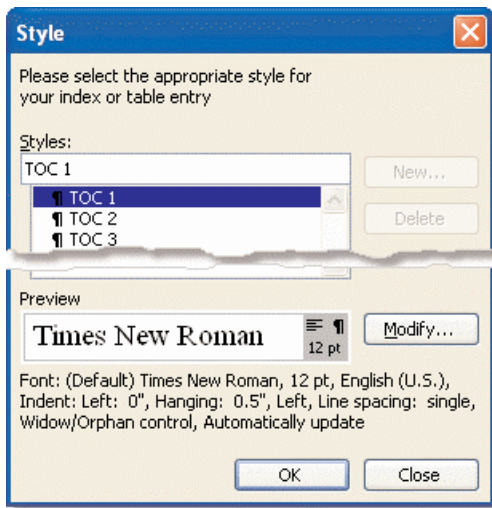


By default, if you simply click **OK**, you'll get a table of contents containing hyperlinks to the first three levels of

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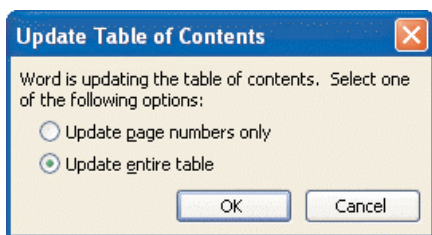
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headings. You can adjust the levels by selecting the value of [Show levels](#). By all means play with the values of the [Formats](#) dropdown, but I suspect that you will rapidly come back to [From template](#) as the best option. You may want to change the format of the ToC entries—once upon a time, ToC styles were listed along with all the other styles, but since Word 2002 have been accessed through this dialog. Click [Modify...](#) to display the [Style](#) dialog:



The one change you should make to your TOC styles is to base the [TOC 1](#) style on ([no style](#)), the [TOC 2](#) style on [TOC 1](#), etc. Click [Modify...](#) to change the style's parameters. You only need to fix the TOC styles that you're going to be using in your ToC.

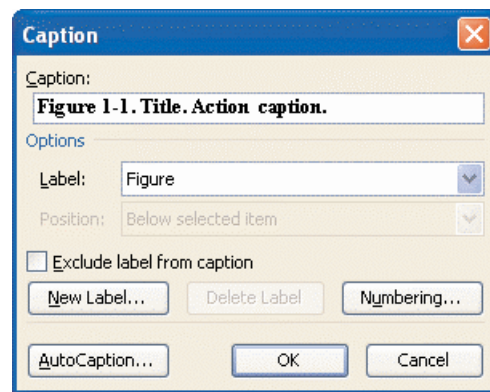
After your ToC has been created, you can update it by placing the cursor inside the ToC and pressing [F9](#) (update fields). Word will display the [Update Table of Contents](#) dialog:



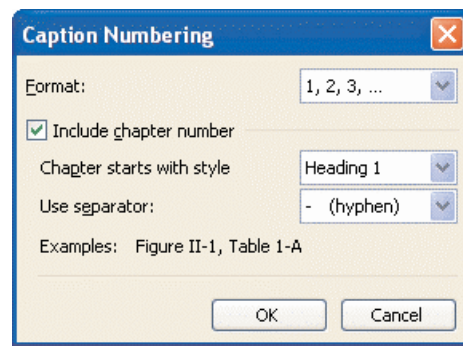
Select [Update entire table](#) (even if you haven't added more headings since the last time you updated the ToC) and click [OK](#).

Figure Captions

Now you have automatic numbering in your headings, you should also be using automatic numbering in your figure captions. To insert an automatically numbered caption, go to [Insert > Reference > Caption...](#) Word displays the [Caption](#) dialog:



You can select [Figure](#) or [Table](#) from the [Label](#) dropdown, or create your own by clicking [New Label...](#) If you count tables as artwork, then you can use [Figure](#) for all captions—check the RFP instructions and your company style guide for clarification. You will probably also want to include the major heading number, so click [Numbering...](#)



To include the major heading number, or 'chapter' as Word calls it, check [Include chapter number](#) and select the heading level from the [Chapter starts with style](#)

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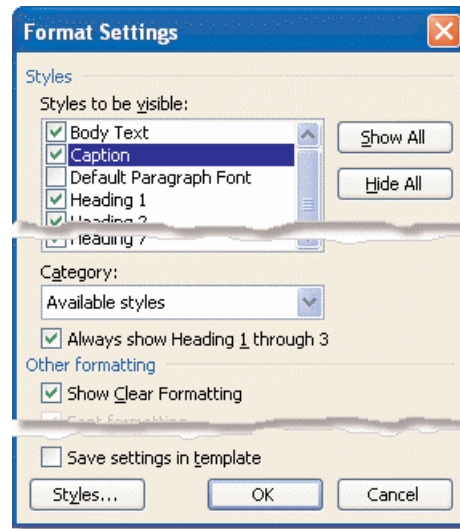
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dropdown. You can insert each caption with a different heading level, or one consistent level throughout. The caption will have the heading value of the immediately preceding ‘chapter’ number. For example, with **Heading 1** selected as the **Chapter starts with style**, the first caption following section 4.2 in your document will be **Figure 4-1**, the second **Figure 4-2**, etc.

A note about captions in frames. For those of you who have attended any of my APMP presentations or workshops, and are using frames to place your art at specific location on a page, there is an extra wrinkle. Word numbers the captions by the location of the paragraphs to which the frames containing the captions are anchored. So, if you see that the first framed caption has higher figure sequence number than the second framed caption, you will have to swap the anchors around.

Another wrinkle is that, unlike automatically numbered headings, captions will not automatically update themselves if another caption is inserted earlier in the document, or if an earlier caption is removed. To update all the captions in one go, press **Ctrl+A** to select all the document text, and then press **F9** to updates the fields used in the captions.

Having inserted your first caption, you will see that the **Caption** style is used. If you want to modify this style, go to **Format > Styles and Formatting...** If **Caption** is not in the list of **Available Styles in use**, select **Custom...** in the **Show** dropdown at the bottom of the **Styles and Formatting** task pane. Word will display the **Format Settings** dialog:

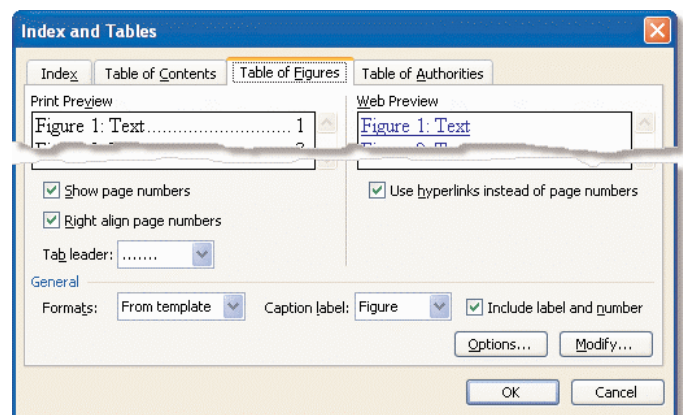


With **Available styles** in the **Category** dropdown, check **Caption** in the **Styles to be visible** list and click **OK**.

You can also use this dialog to exclude styles that you don’t want other people, e.g. contributing authors, to see in your template. Now the **Caption** style is visible in the list of available styles, you can modify its properties.

Creating a Table of Figures

Similar to creating table of contents, you can easily create a table of figures. Go to **Insert > Reference > Index and Tables...** and select the **Table of Figures** tab:



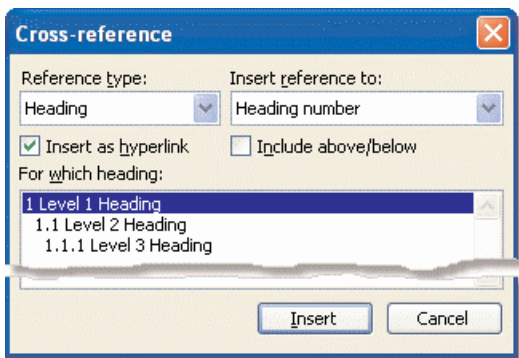
Again, you will probably want to modify the appearance of the table of figures. There is only one style, **Table of Figures**, which you can access by clicking **Modify...** A simple setting is to base this style on the **TOC 1** style.

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Press **F9** to update the table of figures, as you did for the ToC.

Inserting a Cross Reference

Automatic numbering allows you to create cross references to headings and figure captions that you can maintain by simply updating the fields. To insert a cross reference to a heading, go to **Insert > Reference > Cross-reference...** Select **Heading** in the **Reference type** dropdown, and **Heading number** in the **Insert reference** to dropdown:

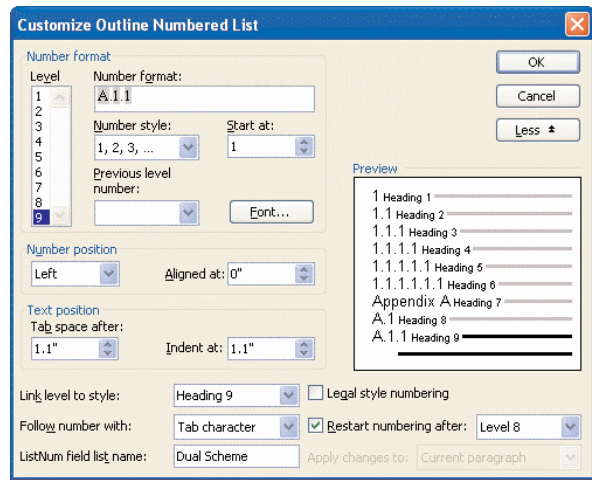


Select the heading that you want to insert a cross reference to, and click **Insert**. To insert a cross reference to a figure, e.g. “Figure 1-1 shows...,” select **Figure** in the **Reference type** dropdown, and **Only label and number** in the **Insert reference** to dropdown.

To update all the cross references (and figure captions) in one hit, press **Ctrl+A** to select all the document text, and then press **F9** to updates the fields. If the target heading or caption for a cross reference has been removed, Word will display the “Error! Reference source not found.” message in place of the cross reference, so check your document carefully.

Advanced Numbering Schemes

With a bit of experimentation and practice, you can set up two schemes within one numbering list. Here is an example of a scheme using conventional legal numbering for **Heading 1** through **Heading 6**, and an appendix scheme using for **Heading 7** through **Heading 9**:



This was set up as described in the sections above up to and including **Heading 6**. To create the **Appendix A** format for **Heading 7**:

- Click **7** in the **Level** list
- Delete the contents of the **Number format** text box. The **Number style** dropdown value will change to **(none)**
- In the **Number format** text box, type **Appendix** followed by a space
- Select **A, B, C,...** in the **Number style** dropdown. This will insert a grey-shaded **A** at the end of the **Number format** text box, representing the value of the level 7 heading

- Uncheck **Restart numbering after**
- Select **Heading 7** in the **Link level to style** dropdown

Now click **8** in the **Level** list, and delete the contents of the **Number format** text box.

- Select **Level 7** in the **Previous level number** dropdown. This will insert a gray-shaded **A** in the **Number format** text box, representing the value of the level 7 heading
- Type a period after the **A** in the **Number format** text box
- Select **1, 2, 3,...** in the **Number style** dropdown. This will insert a grey-shaded **1** at the end of the **Number format** text box, representing the value of the level 8 heading

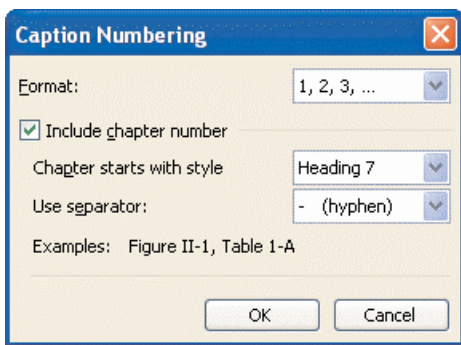
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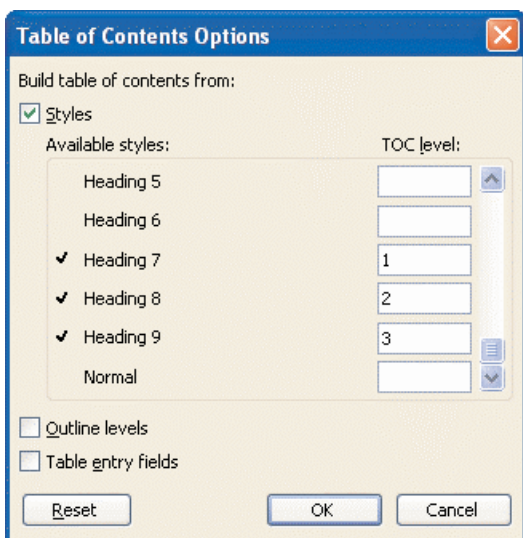
- Check **Restart numbering after**, and select **Level 7** in the dropdown list
- Select **Heading 8** in the **Link level to style** dropdown

Now you have the idea, you should be able to create the level 9 heading, which should display as **A.1.1** etc. You now have three levels of headings for your appendices.

When you insert a figure caption in an appendix, change the numbering such that the chapter starts with style is **Heading 7**. You will then get figure captions such as **Figure A-1**, etc.



To get the appendix headings into the table of contents, click **Options...** on the **Table of Contents** tab of the **Index and Table** dialog. In the **Table of Contents Options** dialog, scroll down the list of **Available styles**, and type **1** in the **TOC level** box next to **Heading 7**, **2** next to **Heading 8** and **3** next to **Heading 9**:



Click **OK**, and then **OK** again to create the ToC. You will see that **Appendix A** appears as if it was a level 1 heading. Creating a table of figures requires no extra effort, as it is only based on the **Figure** label.

Summary

I hope that you now feel confident to set up your proposal templates using automatic heading numbering, and to be able to explain how to use your new template to your contributing authors. I'm sure that you will find that it will save you time and energy at proposal end game!

Many thanks again to those of you who attended our sessions at the recent APMP Conference in New Orleans. Those of you who attended both (four and half hours worth) should get a medal. But, once again, we got some really interesting questions and learnt a few things ourselves! The first question in the “Wordman and Acrobat Girl’s Q&A” session was on preventing artwork from moving around the page. Traditionally this has been the first question in every Wordman session at a conference since 2003! A tutorial article on the subject is long overdue, and will feature in a future Wordman column.

I also had some feedback by email regarding my “Logectomy” article in a recent Wordman column. Some readers expressing their concerns about me the third-party use of logos whose use is restricted by their owners. Please note that my intention was merely to demonstrate a useful technique. However if you are in any doubt, please contact the owner of the logo.

If there’s a problem you’d like a solution for, or a subject you’d like more information on, you can reach Wordman via Dick Eassom, Director of Competition Management Standards and Systems, at SM&A, Newport Beach, California—e-mail Dick at dick.eassom@smawins.com. Wordman is ©2001–2006 SM&A, and used with permission by APMP. ■