

Meyers, P. (2011) 'Missing entry: whither the eBook index?' *A new kind of book: principles and practices*, 2 September, <http://newkindofbook.com/2011/09/missing-entry-whither-the-ebook-index/>

Power eIndexing. IGP:BLOG. www.infogridpacific.com/blog/igp-blog-20120421-power-xhtml-e-indexing.html

PrinceXML, YesLogic Pty Ltd. www.princexml.com/

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How DEXembed and WordEmbed work, and why you might use them

Lucie Haskins

Lucie Haskins describes how the arrival of DEXembed and WordEmbed transformed her from 'refusenik' as far as embedded indexing in Word was concerned into someone who takes such projects in her stride. She explains what is difficult about the Word embedded indexing tool and how DEXembed and WordEmbed come to the rescue.

Indexing in a desktop publishing (DTP) package can take from 50 percent to 100 percent longer than back-of-the-book (BOB) indexing, depending on the package (such as FrameMaker or InDesign). The reason is the limited features and functionality of the indexing modules included in these packages.

Fortunately indexing fee structures typically reflect that reality, and DTP indexing usually commands a higher rate. However, I found that did not hold true for embedded indexing in Microsoft Word, and as a result I always used to decline embedded Word projects. They just were not worth the hassle of fighting with inadequate tools to create an index and then not being compensated appropriately.

All that changed when WordEmbed and DEXembed came on the scene. To my mind, they revolutionized embedding indexes in Word. With these utilities, you can finally have the best of both worlds. You index in the proprietary indexing package of your choice (CINDEX, Macrex or Sky Index: C/M/S), then import your finished index into Word in one fell swoop! You never have to index in Word itself. Suddenly, the price structures have become equitable.

DEXembed¹ and WordEmbed² were both released around 2004, and I reviewed them the following year in a *KeyWords* article, 'Digging in for the long haul'.³ I was blown away by their functionality, and a decade later I am still impressed with the sheer creativity of both utilities.

This article provides an overview of each utility's functionality. (For a more detailed explanation of each task and feature, download the instruction manual provided with each utility.)

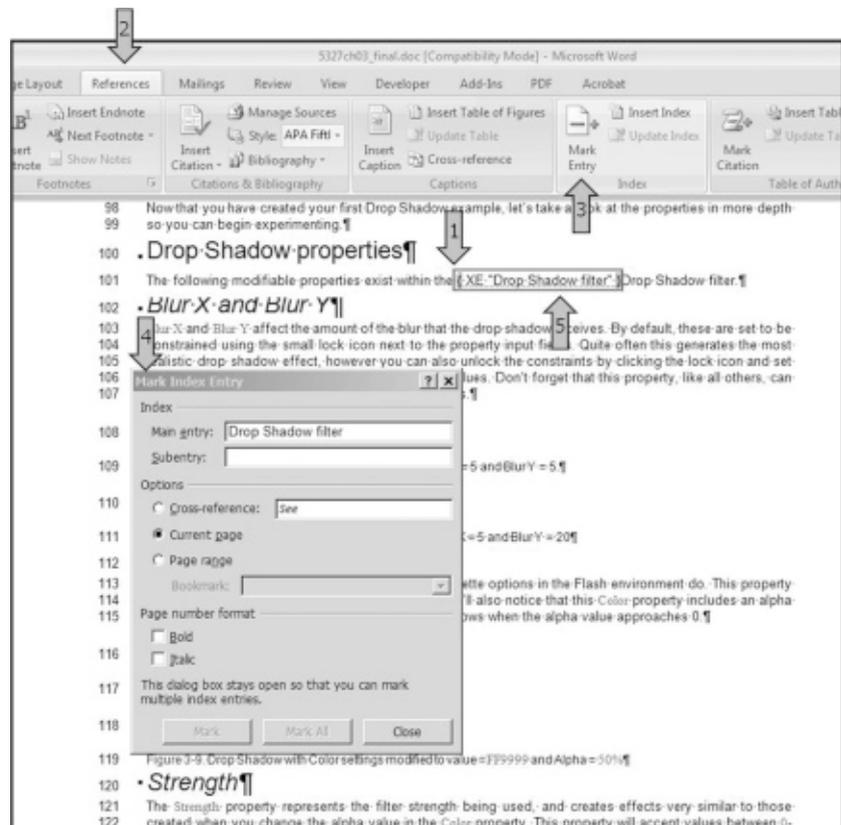


Figure 1 Embedding the index entries in Word

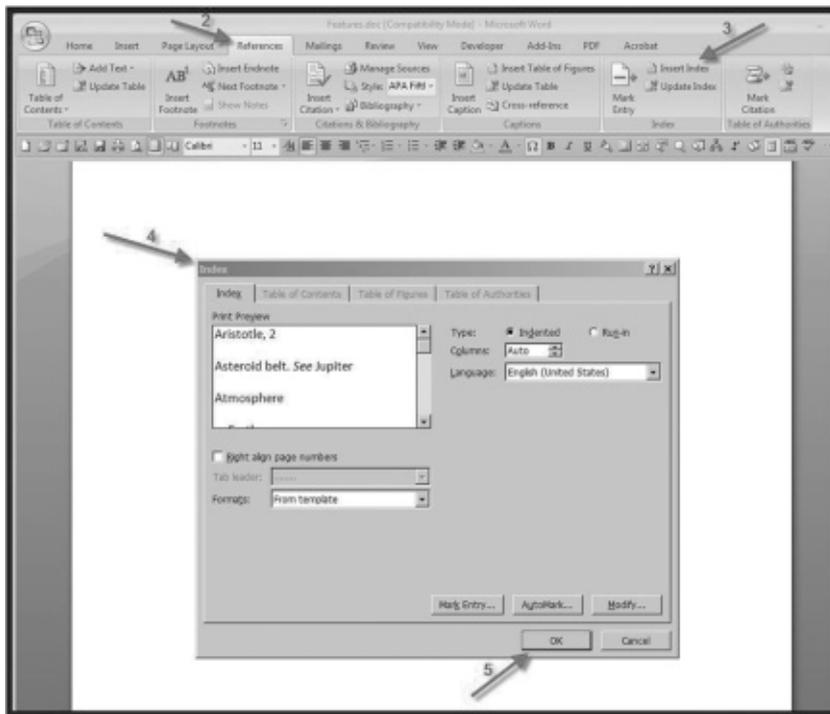


Figure 2 Generating an index in Word

To give a true appreciation of what DEXembed and WordEmbed accomplish, I first review Word’s native indexing module and its capabilities and limitations.

The embedding process in Microsoft Word

Embedding index entries using Word alone is very time-consuming and frustrating, because Word fails miserably in providing the very features that we indexers have come to rely on in our indexing software packages. It has:

- no real-time previews of indexes
- no autocomplete during data entry
- no sophisticated formatting options
- no powerful editing capabilities (such as cascading changes)
- no temporary groupings.

Embedded indexing (regardless of the indexing package used) requires a two-step process. First the index entries must be embedded in the material (Figure 1). Then the index itself must be generated (Figures 2 and 3).

Step 1: Creating embedded index entries in Word

Embedding in Word involves using XE fields (see the XE ‘Drop Shadow box’ in Figure 1). Each index entry is created and embedded individually as an XE field. The steps are:

- 1 Insert the cursor at the desired location to embed the index entry.
- 2 Select the References tab.
- 3 Select the Mark Entry option.
- 4 The Mark Index Entry dialog box opens. Create the index entry within the dialog box.
- 5 The XE field (index entry) is automatically inserted at the cursor location.

MS Word does not have any functionality to tie index entries together. To edit an index entry, you first need to have the XE field visible. You can toggle the visibility with the Paragraph symbol on the toolbar. Once the XE field (index entry) is visible, you can edit it. For cascading changes, you need to go to each index entry affected and manually edit each one separately, a very tedious process.

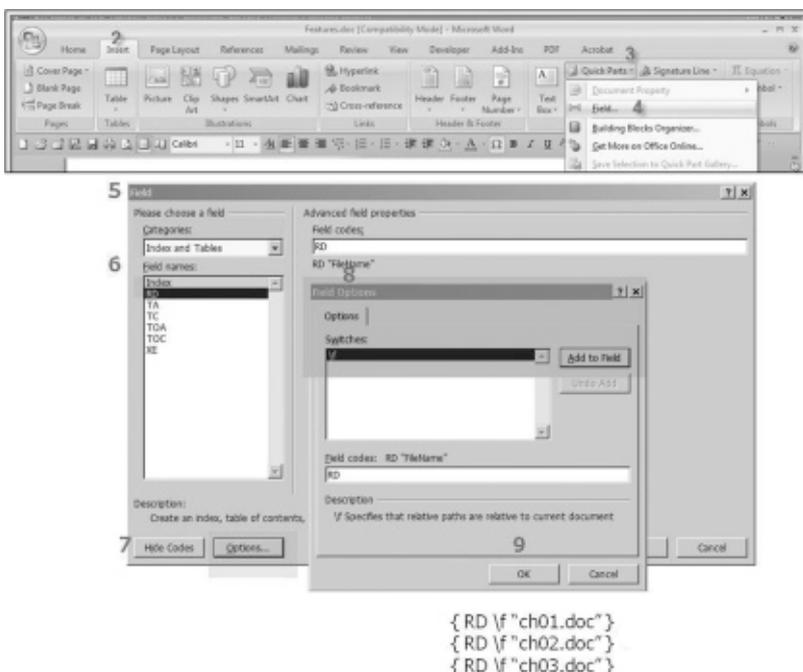


Figure 3 Generating a Word index in a separate file

Step 2: Generating an index in MS Word

You can generate an MS Word index as a separate file or at the end of the current document. To generate the index at the end of a single document (see Figure 2):

- 1 Position the cursor at the very end of the document.
- 2 Open the References tab.
- 3 Select the Insert Index option.
- 4 In the Index dialog box, select the format options desired.
- 5 Click OK to generate the index.

You can also generate the index in a separate file, which could be useful for multiple documents. The process is much more involved (see Figure 3):

- 1 Create the new file (as a Word document).
- 2 Open the Insert tab.
- 3 Select the Quick Parts option.



Figure 4 Defining locators with DEXembed

- 4 Select Field from the dropdown box.
- 5 The Field dialog box displays.
- 6 From the Field names: section, select the RD field.
- 7 Click on Field Codes (which turns into Hide Codes) and then click Options.
- 8 The Field Options dialog box will identify supported switches for the Index field.
- 9 Select the switches desired, add the file name and extension in quotes, click Add Field, and click OK.
- 10 Repeat steps 6–9 for each file to be included for indexing.
- 11 Position cursor at end of the RD lines you created and follow the instructions for generating an index at the end of a single document.

Remember that the generated index only serves as a snapshot in time. If index entries are then modified or deleted, or if new index entries are later embedded, the generated index does not register these changes. You will need to manually regenerate the index to incorporate any modifications made after index generation.

The DEXembed and WordEmbed embedding process

DEXembed and WordEmbed both import existing indexes into Word, but their approach in doing so differs.

Unlike with C/M/S there are not many screens to interact with, since most processing is done behind the scenes. The most noticeable difference between the two utilities is in how they interpret and work with locators. It will be a matter of individual preference which of the two utilities suits your work style best.

The major steps are the same for both:

- 1 Index as usual in C/M/S software using various locator options (DEXembed) or bookmark locators (WordEmbed).
- 2 Save the index file for import as a tab-delimited file (DEXembed) or a RTF (CMS) or MBK file (WordEmbed).
- 3 Import the index file into your Word document(s) and embed the index entries.
- 4 Remove the temporary locators.
- 5 Generate the MS Word index.

The next sections describe each step in the process, identifying the differences in each utility's approach.

STEP 1: Index as usual in C/M/S software using 'locators'

Because embedding an index entry means that the index record is actually inserted (embedded) into the document at a specific insertion point, DEXembed and WordEmbed need to know just what insertion point in the document the locator refers to. For example, they need to know if



Figure 5 A Word document with DEXembed's temporary paragraph numbers

a '2' in the locator field means 'page' 2, 'paragraph' 2 or 'bookmark' 2. Before indexing begins, these associations need to be defined.

Defining and using locators with DEXEmbed

Locators can be defined as any of the options in the DEXEmbed Options box (see Figure 4). The steps involved in defining locators with DEXEmbed (shown in Figure 4) are always completed prior to starting indexing:

- 1 Select the Add-Ins tab from the Word ribbon (see Figure 5).
- 2 From the DEXEmbed dropdown menu, select Set DEXEmbed Options.
3. The DEXEmbed Options dialog box displays (Figure 4).
- 4 Select the option desired (typically paragraph number).
- 5 From the Add-ins tab on the DEXEmbed dropdown menu, select the Prepare Document dropdown menu, then the Add Paragraph Numbers option (Figure 5).
- 6 DEXEmbed will then generate temporary paragraph numbers in the open Word document.
- 7 The indexer uses these numbers as locators.

Figure 5 shows the Word document after DEXEmbed has added the temporary paragraph numbers (at the beginning of each new paragraph).

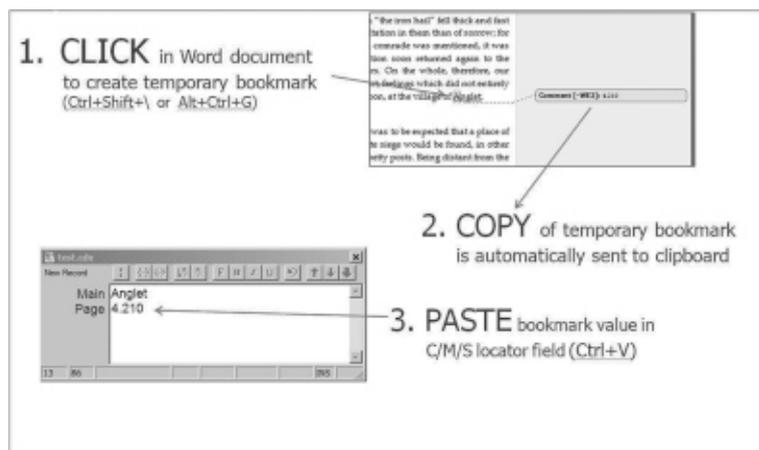


Figure 6 WordEmbed's click-copy-past process



Figure 7 Saving the index in DEXEmbed

Defining and using locators with WordEmbed

WordEmbed uses a three-part click-copy-paste process (see Figure 6) to create a unique locator for each distinct location. Multiple index entries can use the same locator if they will be embedded at that same location.

- 1 Click to the desired insertion point in your Word document. Create a temporary bookmark there, using a shortcut key combination defined in the WordEmbed user manual.
- 2 WordEmbed copies the temporary bookmark number created (in Figure 6 for example it is 4.210) to the clipboard.
- 3 Toggle to your C/M/S program and use the Paste command to copy the temporary bookmark number into the index entry's locator field.

Differences between the two approaches

DEXEmbed adds all the temporary locators to the Word document before indexing begins. These locators are on display in the Word document during the indexing process (Figure 5). The precision of index entry placement depends on the locator selected.

WordEmbed creates locators individually as needed, on demand. While multiple index entries can reuse the same bookmark number, each new embedded index entry location requires another application of the click-copy-paste process (Figure 6). Locator creation (in the form of temporary bookmarks) is ongoing throughout the indexing process.

Apart from this difference in locator assignment, the remaining steps are similar for the two utilities.

STEP 2: Save index files for import

Once the index is finalized and ready for import into Word, save the index in the format needed based on which C/M/S program was used and which utility you are using.

Saving the index as a tab-delimited file for import into DEXEmbed

DEXEmbed requires a tab-delimited file as input into its import process. All C/M/S programs have the option to save indexes as tab-delimited files (in either DAT format or TXT format). Figure 7 shows the DAT format saved from my CINDEX program. Notice the tab characters between the various fields.

Saving the index as a RTF (CMS) or MBK file for import into WordEmbed

WordEmbed (Figure 8) requires either an RTF file (available from all C/M/S programs) or an MBK file (available as a Macrex option) as input into its import process.

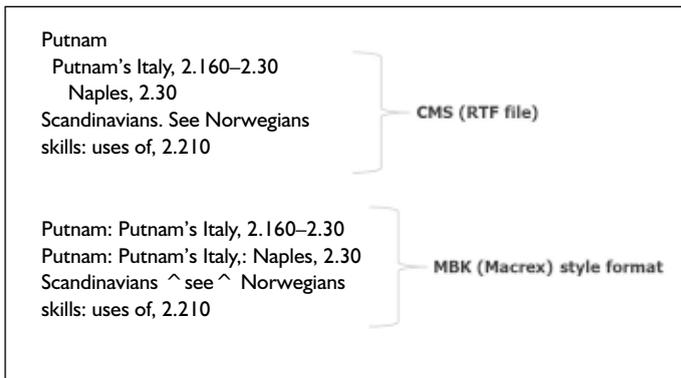


Figure 8 Saving the index in WordEmbed

STEP 3. Import the index file into the Word document(s) and embed entries

This is where the magic happens! Once you invoke the 'embed' (import) option, all processing occurs quickly (within minutes) behind the scenes and you have XE markers embedded in the Word document.

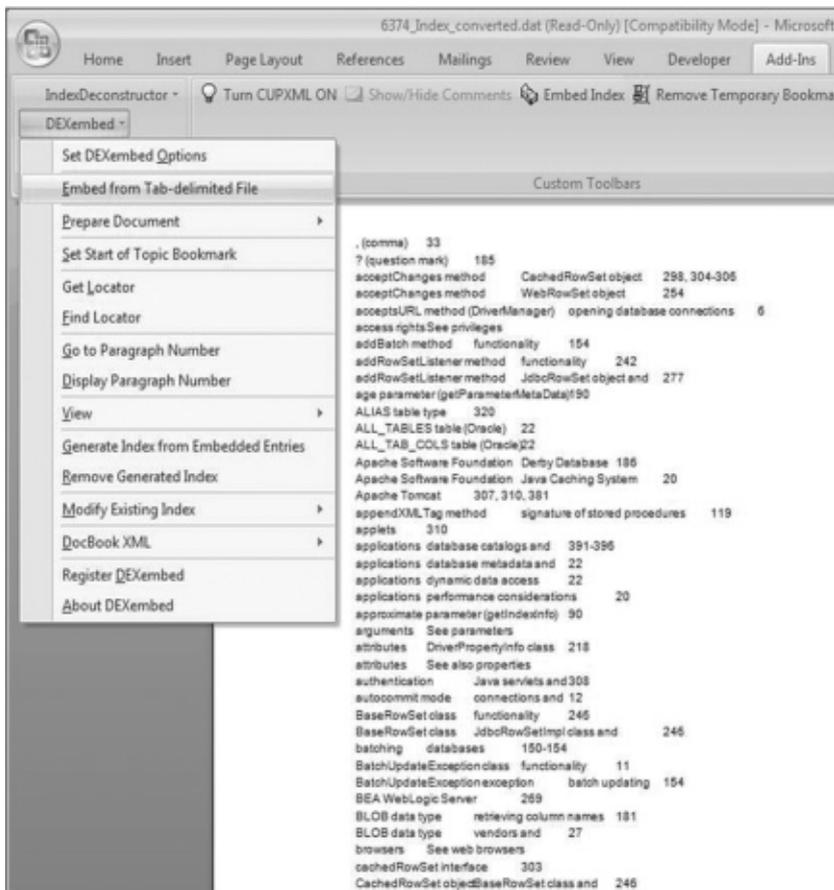


Figure 9 The DEXembed import process

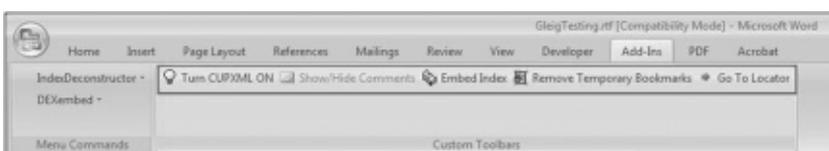


Figure 10 Selecting Embed Index in WordEmbed

The DEXembed import and embedding process

To embed your index using DEXembed:

- 1 Open the Word document.
- 2 Open the tab-delimited file that contains the index entries.
- 3 Set focus on the Word document (make sure it is active.)
- 4 From the Word Add-ins tab, select the DEXembed dropdown menu.
- 5 Select Embed from the Tab-delimited File option (Figure 9).
- 6 DEXembed processes behind the scenes and completes within a few minutes.

The WordEmbed import and embedding process

To embed your index using WordEmbed:

- 1 Open the Word document.
- 2 Open the tab-delimited file that contains the index entries.
- 3 From the Word Add-ins tab, select the Embed Index button from the WordEmbed menu bar (Figure 10).
- 4 The Embed Index dialog box displays (Figure 11).
- 5 Select the format desired and click OK.
- 6 WordEmbed processes behind the scenes and completes in a few minutes.

The embedded index in Microsoft Word after import

Figure 12 shows the Word document containing the XE fields (index entries) after embedding has completed. It is always a sound practice to spot check the placement of index entries after the embedding process has completed.

STEP 4: Remove the temporary locators

Once you are satisfied the import process embedded the index entries accurately, you can remove the temporary locators. Use the highlighted options for this step as displayed in Figure 13. This process works behind the scenes and takes less than a minute. Afterwards, spot check potential problem areas such as figure identifiers, notes sections and table cells to ensure the temporary identifiers have been removed.

STEP 5: Generate the MS Word index

If you would like to see how the index looks with the newly embedded entries, generate the Word index by following Step 2, 'Generating an index in MS Word (page 114).



Figure 11 The Embed Index dialog box in WordEmbed

Learning curves

Of course, there is a learning curve in mastering these two utilities. I think the most effort is involved in:

- familiarizing yourself with how DEXembed and WordEmbed work
- establishing new viable work processes
- a client version control system
- project prep work
- training your eye to ignore visual clutter in documents
- indexing and submitting one chapter at a time
- the final editing process.

Familiarizing yourself with how DEXembed and WordEmbed work

The best way to learn something is just by doing. Both utilities have helpful tutorials and both have very helpful manuals. You might find it useful to create cheat sheets identifying shortcut keys. Document each step you need to take and exactly what you need to do in detail. It will save time particularly if you need to use the utility again after an extended period of time.

Start with a small project and give yourself plenty of time. You will be slow in your first few projects but your efficiency should increase dramatically as you gain expertise and a familiarity with the software and processes.

Establishing new viable work processes

In addition to the obvious time investment needed to learn the utilities, you might need to understand and adapt to new client processes. Unlike most back-of-book indexing projects where the final index is not submitted until all the manuscript pages have been indexed, some clients might want only one chapter at a time indexed, embedded in Word, and returned. Often deadlines are as little as a day, with final index edits performed at the tail end of the project.

Quick turnarounds and dealing with largely unedited and uncohesive index structures can make these projects unattractive for some indexers. It is important to recognize what process flow the client uses and decide whether it is compatible with your style.

Starting with a new client and a new process is always interesting. As you become familiar with the client needs, you find out if you already have a process in place that will work for this new client or if you will need to create a process. There will probably be a lot of give and take and experimentation until your new process is tweaked into place.

A client version control system

If you have never worked with embedded indexing projects before, you are probably not familiar with the concept of the 'hot potato'. Just consider the fact that you are using the client's 'live' files – that hot potato – to embed your index entries into. You will not want anyone else modifying their copy of the files while you are working on them, since this would cause havoc with changes not recognized in the index.

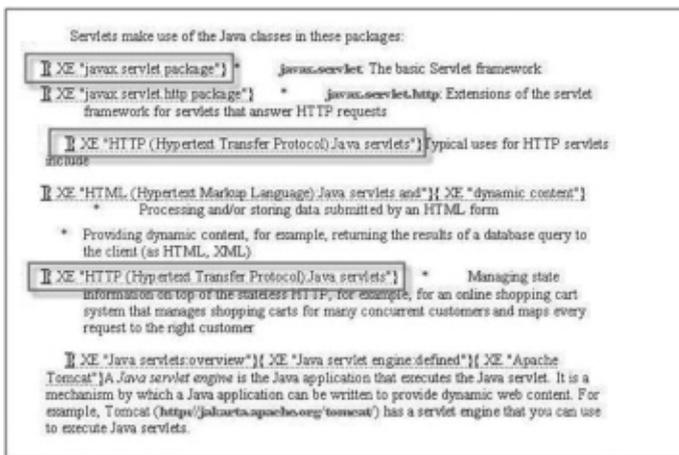


Figure 12 The embedded index in Microsoft Word

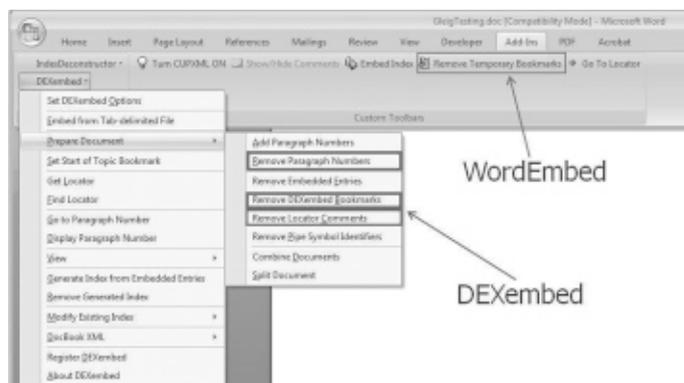


Figure 13 Removing the temporary locators

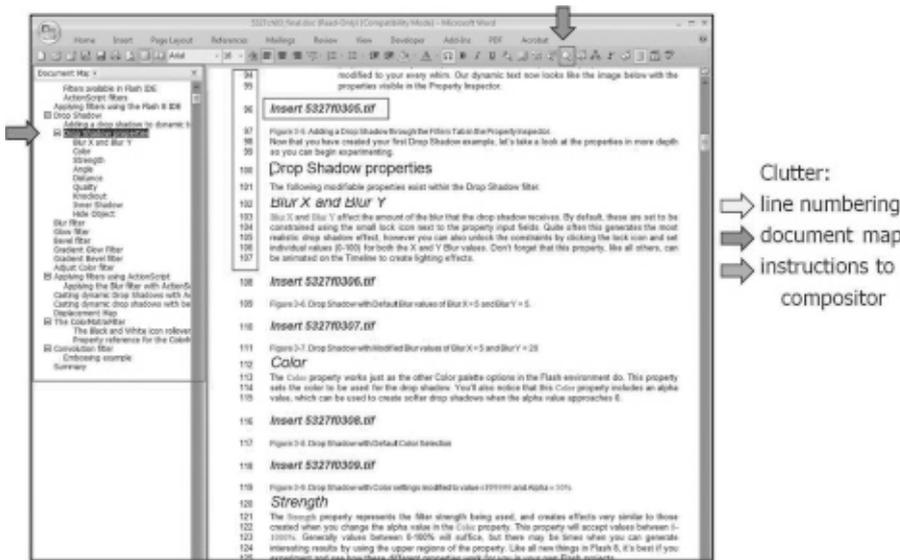


Figure 14 Using the Word Document Map

That is why clients have version control systems. Make sure you find out your client's procedures and guidelines.

Make sure to identify the sign-out and check-in process for your files. The files might also need to be renamed once you have modified them. You will need to get all this information from the client.

Project prep work

It is always helpful to have a client sheet for each project, to identify client preferences regarding page range usage, insertion point restrictions, locator formatting guidelines, Word template usage, and naming conventions for updated documents. Again, create cheat sheets if your client uses unfamiliar commands in their version control

system. Document your processes in detail (again, this is particularly useful if you pick up these types of project after a long period away from them).

Training your eye to ignore visual clutter in documents

When I started these projects, I found it really difficult to wade through the rough, unformatted pages (see Figure 14, right pane) and much too easy to lose my place. Then I discovered the Document Map (Figure 14, left pane). Navigating through it, I could tell at a glance what topics were covered, how they related to other, and how long each discussion was. If I lost my place or lost my train of thought, I could just revisit

- Clutter:
- line numbering
- document map
- instructions to compositor

the Document Map and get a course correction.

I also trained myself to ignore the visual clutter – the line/paragraph numbers, instructions to the compositor, placeholder notations – so I could concentrate on the content. This was much more difficult, but once I had managed it, life and indexing with Word documents became much easier.

Indexing and submitting one chapter at a time (for some clients)

I also found indexing one chapter at a time difficult initially because of how fragmented my indexing process became. Whereas I had always edited as I indexed, now I had reverted to a kitchen sink approach (throw everything into the index and sort it out later). It made me cringe every time I thought of the final edit step. I knew there had to be a better way, one that let me exert some vocabulary control over the separate indexes.

I started to combine all the chapter indexes into one comprehensive index (for my personal use only). For this to work, I first had to manipulate the locator information because the individual chapter-index line numbers would be meaningless once they were dumped into the composite index. How could I tell if locator '1' was from Chapter 1 or from Chapter 2? I put the chapter number before each line number, and that kept the information unique and retrievable.

Figure 15 displays my solution. It shows the boxes in both the current chapter file (on the left) and in the combined file (on the right).

The final edit process

When it came to the final index edit, I wanted to be able to edit with all the convenience of my indexing software. The problem was that my clients would just provide the final index in an RTF format

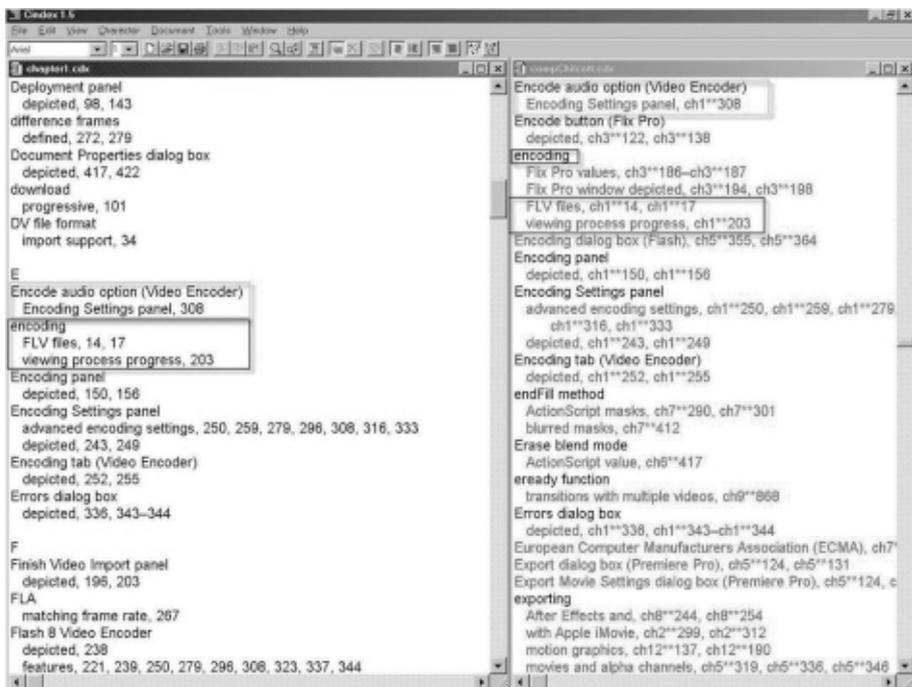


Figure 15 Separate and combined chapters

which could not be inserted into my C/M/S program. The final index did not re-embed the index entries.

My clients did not want me to re-embed my index edits back into the Word documents. They were using the embedding only as a timesaver to allow indexing to occur much earlier in the production process. For that purpose it served its function well, but my indexes usually required a significant final edit in spite of my comprehensive index approach.

I discovered that IndexDeconstructor4 did exactly what I needed. It massaged indexes in RTF format and output tab-delimited files that were accepted as input into my C/M/S program. I was so delighted that I wrote an article for *Key Words* on it in 2010 ('Demystifying IndexDeconstructor' available on my website).

Conclusion: real world clients

Being able to use C/M/S software to provide a robust, well-formatted index allows the indexer to concentrate on index content rather than index mechanics. And using DEXembed or WordEmbed to import that robust final index easily into Word documents further extends our efficient and effective use of time and tools.

The majority of my embedded indexing clients specialize in publishing computer books, something that has held true for the 14-plus years I have been indexing. However, with the growing popularity of digital publishing and ebooks, I can foresee other specialty areas growing interested in what embedded indexing has to offer.

Embedded indexing has always provided the ability for indexers to work from draft pages before pagination. Final pagination is irrelevant because as the pages reflow, the index entries (embedded right in the documents) reflow with them. It is not just in the computer industry that time has become more compressed. I think it's imperative for today's indexers, particularly those who plan to remain in this field for many years to come, to get a good working knowledge of and experience with embedded indexing.

Working with DEXembed or WordEmbed provides a new entrant into this subfield with a less expensive entry point and a shorter learning curve than working with the major DTP packages. It would be a good option to use one of these utilities as a springboard to more complex and involved embedded indexing packages such as FrameMaker and InDesign. So I believe many indexers will find DEXembed and WordEmbed to be essential parts of their toolkit.

Notes

- 1 DEXembed was created and is maintained by Jack Lyon (www.editorium.com/dexembed.htm). It is available on a 45-day free trial basis for both Mac and Windows users. The single-user US purchase price (in 2014) is \$79.95. A thorough and helpful user's manual is provided with the product.
- 2 WordEmbed was created and is maintained in England by James A. Lamb (www.jalamb.com/wordembed.html). A demo version is available and supports Mac and Windows users. The single-user US purchase price (in 2014) is \$130. The user manual is helpful and provides short tutorials on use with all three major indexing programs.

- 3 Articles I have written and links to many other useful information can be found on my website: <http://luciehaskins.com/resources.shtml>.
- 4 IndexDeconstructor was created and is maintained by Jack Lyon (www.editorium.com/indexdeconstructor.htm). It is available on a 45-day free trial basis for both Mac and Windows users. The single-user US purchase price (in 2014) is \$29.95. A thorough and helpful user's manual is provided with the product. Note that while IndexDeconstructor performs like a workhorse in converting indexes from RTF files to a format ready for importing to C/M/S packages, there is no free ride. There will always be some conversion difficulties, and some things will always need to be manipulated manually, but the conversions are much quicker than rekeying the index by hand.

Lucie Haskins became an indexer in 2000 after a long career in corporate America, with roles spanning the computer industry and management consulting. She specializes in embedded indexing and in computer- and business-related topics, and enjoys discovering and applying tools that optimize her indexing process. She believes strongly in giving back to a profession that has been so generous to her, and has presented workshops on various indexing topics, instructed for UC Berkeley's online indexing course, and served ASI in chapter and national positions as well as on its webmaster team. Email: luciehaskins@gmail.com

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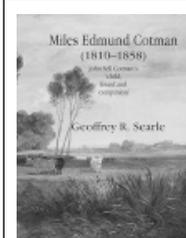
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