emDEX: Tremendous Functionality for This FrameMaker Plug-in by Lucie Haskins

FrameMaker's indexing functionality is very basic and doesn't provide features that back-of-the-book indexers rely on, such as being able to preview the index, autocompletion of entries, change propagation, and temporary grouping.

emDEX is a very useful FrameMaker plug-in that I've been using to help me with the FrameMaker embedded indexing process. I've found that emDEX goes a long way in minimizing (and, in some cases, even eliminating) FrameMaker's lack of indexing functionality.

emDEX has two powerful components: the emDEX window and the emDEX marker box. I've found that these provide much needed functionality (missing from FrameMaker) that has helped me:

- decrease the time needed to edit my index entries and
- improve my overall pages/hour rate by 50%.

Purchase and Installation Information

emDEX 2.0 (tentative release date of 11/05 for next version) is available for \$100 USD for a single-user license and is worth every penny. It is compatible with Windows 98/NT/2000/XP and FrameMaker 5.5, 5.5.6, 6.0, 7.0, and 7.1. Additional purchase information is available on <u>http://www.emdex.ca</u>. A demo version is available for download from the web site or contact <u>info@emdex.ca</u> to order.

emDEX installs as an option on the main FrameMaker toolbar (figure 1) and in the Windows system tray (figure 2).

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Figure 2. emDEX in system tray.

Figure 1. emDEX plug-in in FrameMaker toolbar.

emDEX Window

The biggest boost to indexing productivity that emDEX provides is the emDEX window. This special window shows the index *real-time* as it is being built (figure 3)! (Remember, with FrameMaker, you have to generate the index each time you want to view changes that have been made.)

It's unbelievably helpful to have instant visual verification of what's going on.

Opening emDEX Window

The emDEX window can be built at the book level or the chapter level. (Multiple emDEX windows can be open at the same time.)

Opening at the book level:

(to include index entries from *all* chapters in the emDEX window)

- Make sure the book file is the active window (figure 4).
- From the emDEX menu option on the FrameMaker toolbar, select the **Open emDEX window** option (figure 5).
- emDEX will cycle through all files in the book and generate the emDEX window (figure 3).

Opening at the chapter level:

(to include index entries from a single chapter in the emDEX window)

- Make sure that the chapter you are working with is the active window.
- From the emDEX menu option on the FrameMaker toolbar, select the **Open emDEX window** option (figure 5).
- emDEX will open an emDEX window for this file only (figure 3).



Figure 3. emDEX window.

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Figure 4. Sample book window.



Figure 5. Open emDEX window option.

Customizing the emDEX window

Customizing the emDEX window is possible by right-clicking the emDEX icon in the system tray (figure 2). A pop-up menu appears (figure 6), with the following options:

- Set font, font style, and font size
- Set background color (See figures 3, 7, and 9 to view the yellow background color I selected.)
- Set alerts (audio, visual, both, or none) to sound when the emDEX window encounters an unmatched locator range (<\$startrange>/<\$endrange> combination)
- Set sort order so entries display either letter-by-letter or wordby-word
- Identify characters to be ignored when sorting entries for the emDEX window
- · Identify character for range separators if not the default hyphen
- Toggle on/off for real-time updates of the emDEX window
- Toggle on/off to keep the emDEX window always on top
- Select usage of emDEX marker box instead of FrameMaker marker box

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Figure 6. Customizing emDEX window.

Performance Considerations

The emDEX window slows down considerably in responsiveness as its content increases. I've found that, in a typical project, I can use the book-level approach for about the first three or four chapters. Then, I switch to a combination approach. Using my two-monitor setup (figure 7), I build the emDEX window just for the current chapter I am working in. I also display the generated index (of the previously indexed chapters) in my auxiliary window.

While not the optimum solution, I find that this two-pronged approach is still very viable and helps me immensely by providing me with a mechanism to track the consistency of my index entries. I can view *all* my index entries:

- in the dynamic "current chapter" emDEX window and
- in the generated "static" index for the previous chapters.

Between these two locations, I have easy access to all the index entries I've created. Being able to view and manipulate all these entries as I'm creating them and knowing exactly how the terms are spelled, whether they contain subentries, etc., saves hours of editing time later in the process. On average, I've decreased my editing time by about 50% since I started using emDEX in this manner.



Figure 7. Two monitor setup. Left-to-right: emDEX window (with yellow background) displaying index entries for current chapter; Generated index for all previous chapters; book window; emDEX marker box; current chapter being indexed.

Options available within the emDEX Window

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Display s <u>t</u> ats	
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<u>Save window position</u>	•
Close window	

The emDEX window, in addition to displaying the real-time index, also has a variety of other options available from its dropdown menu (figure 8).

Some of the options on this menu (and reviewed in this section) include:

- tracking and modifying entries
- editing index entries
- deleting index entries
- finding/replacing index entries
- finding orphan ranges
- checking cross-references
- displaying statistics
- Update window option
- saving window position

Figure 8. emDEX window menu options.

Tracking and Modifying Entries

The emDEX window provides unbelievable assistance in allowing you to track and modify your index entries as they are being created instead using of the cludgy FrameMaker mechanism that requires:

- generating the index from the book level,
- selecting the index document,
- scrolling to the location where the new entry should reside,
- using the Ctrl-Alt-left mouse combination to jump to the index entry,
- opening the index marker box if not already opened.

What could be easier than selecting/clicking on the index entry in the emDEX window itself? emDEX then jumps to the correct location in the document, even opening the emDEX marker box if it isn't already open (something that FrameMaker does *not* do when you jump from the index).

If an entry has multiple locators, right-clicking the entry in the emDEX window will provide a dropdown list of the individual locators (see figure 9). You then select the desired locator and off you go!

If you simply click an index entry with multiple locators—without selecting the desired locator—emDEX will default to jumping to the *first* locator for the entry (figure 10).

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AdCreated event 217, 218, 219, 221			
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Figure 9. emDEX window with multiple locators shown

Figure 10. Jump to first locator for highlighted entry in Figure 9.

Editing Index Entries

To edit an index entry:

• Select the **Edit** option from the emDEX window menu (figure 8). emDEX will jump to the document location of the highlighted entry in the emDEX window.

-or-

 Highlight, then left mouse-click an index entry in the emDEX window. emDEX will jump to the index entry location in the document.

Deleting Index Entries

To delete an index entry:

• Select the **Delete** option from the emDEX window menu (figure 8). The highlighted entry will then be deleted.

-or-

• Press the *Delete Marker* button in the emDEX Marker box (figure 19).

Finding/Replacing Index Entries

The **Find** option (figure 8, figure 11) allows you to search for text in index entries within the current the emDEX window, one entry at a time.

The **Replace** option (figure 8, figure 12) provides a *GLOBAL search and replace capability!!* That's right!! This option will *replace* (in one fell swoop) *ALL occurrences* of whatever is entered in the **search text** field. As with any powerful function, care is needed when using. Once the **OK** button is pressed, all occurrences of the text that are found in the **search text:** field will be replaced. Tah dum!

ction
Down C Up
Cancel

Search text : Replace with :	Replace	
Replace with :	Search text :	
Replace with :	<u></u>	
	Replace with :	
	OK	Cancel

Figure 11. Find option.



Finding Orphan Ranges

The **Find orphan ranges** option (figure 8) searches the current emDEX window for unmatched <\$startrange>/<\$endrange> pairs. Once you view the index entry, you are well on your way to determining how to correct it.

Checking Cross-References

The **Check cross-references** option (figure 8) searches the current emDEX window for entries containing "see" or "see also."

Displaying Statistics

Statistics	×	The Display state option (figure 8) is
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	Number of entries 372	
	Number of lines 356	Statistics are generated based on the current emDEX window and include:
	Number of cross-references 7	 number of entries
	Number of page ranges 33	number of lines
	OK	 number of cross-references number of page ranges (See figure 13.)

Figure 13. Display stats option.

Update window option

The Update window option (figure 8) is used to manually update the emDEX window. (It is only available if the Real-time updates option [figure 6] was not selected during customization.)

Save window position option

emDEX will remember the last size and position of the emDEX window and default to those settings in the future (figure 8).

emDEX Marker Box Functionality and Options

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The emDEX marker box is another wonderful and extremely helpful feature, providing a whole slew of capabilities and customization options (figure 14):

- selecting marker type(s) to include in the emDEX window •
 - opening the emDEX marker box
- creating markers for page ranges ٠
- customizing marker buttons •
- customizing marker size •
 - customizing marker font

Figure 14. emDEX marker box options

Selecting marker type(s) to include in emDEX window

The emDEX window can be customized to view any defined—not just "index"—marker types via the **Include marker types...** option (figure 14). I have found this flexibility to be very handy if I've accidentally created a bunch of index marker entries as "cross-reference" or "hypertext" instead of "index." I can quickly search and correct my errors based on these other types.

To track down the errant entries, I simply change the **Include** marker type (figure 15) to **Cross-Ref**, re-open the emDEX window to view the **Cross-Ref** entries, jump to each errant index entry, and correct its type from the pulldown list in the emDEX marker box. When all the corrections have been made, I change back the **Include** marker type to my normal type(s) and re-open the emDEX window. The missing entries have been fixed and now appear together with all the other index entries!

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Figure 15. Select marker types to view in emDEX window.

Opening the emDEX marker box

To open the emDEX marker box, select the **Marker** option from the emDEX dropdown menu (figure 14). The emDEX marker box will pop up and be ready for input (see figure 19).

Creating markers for page ranges

The **Range marker** option (figure 14) allows you to quickly enter in the start and end ranges for index markers that span multiple paragraphs or pages by highlighted the relevant text and then invoking this option.

Customizing marker buttons

The two rows of marker buttons in the emDEX marker box shown in figure 16 are customized via the **Marker** buttons option.

As anyone familiar with indexing in FrameMaker knows, applying special formatting to index entries is a tedious procedure fraught with opportunities for error. Typing in <\$startrange> or <\$nopage> or <Emphasis> or <Default

Para> is necessary to identify the start of a page range, a cross-reference locator, italics, or the normal/default font. Doing this on a repeated basis is very awkward, with plenty of opportunities for mistakes to creep in.

The emDEX marker box is a wonderfully logical and time-saving feature that eliminates:

- the awkwardness of entering dollar signs and angle brackets associated with these character strings and
- eliminates the data entry errors for these strings.

Up to ten marker buttons (figure 17) can be predefined to contain customized character strings!

Once I've customized these buttons, whenever I need one of my predefined character strings, I can simple press the appropriate marker button—such as <\$startrange> (figure 16)—and the relevant string will be automatically added to my index entry.

What a great time and error saver!

Button 1	<u></u>	Button 2	
Display Text	&Bold	Display Text	&Emphasis
Action	<bold></bold>	Action	<emphasis></emphasis>
Button 3		Button 4	
Display Text	&Default	Display Text	&No Page
Action		Action	<\$nopage>
Button 5		Button 6	
Display Text	&Page	Display Text	See &Also
Action	<\$singlepage>	Action	<\$nopage> <empha< td=""></empha<>
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Button 9		Button 10	
Display Text	end⦥	Display Text	BoldE&mph
Action	<\$endrange>	Action	<bold><emphasis></emphasis></bold>

Figure 17. Customizing marker buttons for emDEX marker box.

emDEX Marke	91			X
Marker Type:				
Index				•
Bold	Emphasis	<u>D</u> efault	<u>N</u> o Page	Page
See <u>A</u> lso	<u>S</u> ee	startrange	endrange	BoldEmph
Marker Text:		£		
				<u>k</u>
Edit Marker				Delete Marker

Figure 16. Customized marker buttons.

Customizing marker size

Setting the **Marker size** option (figure 14) to **Large** saved my eyesight! Look at the difference between figures 18 and 19. Figure 18 shows the typically-sized index marker box in FrameMaker and figure 19 shows the customizable emDEX marker box.

Marker	×
Marker Type: Index	•
Marker Text:	
index entry	*
	-
Edit Marker	

Figure 18. FrameMaker marker box.

mDEX Marke	91			
Marker Type:				
Index				-
Bold	Emphasis	Default	<u>N</u> o Page	Page
See <u>A</u> lso	See	startrange	endrange	BoldEmph
Marker Text:				
				-
Edit Marker				Delete Marker

Figure 19. customized emDEX marker box.

The emDEX marker box (figure 19) is customizable as to size, font, and marker buttons. I can enlarge the size of the marker box—but more importantly—I can enlarge the font size of the *text* in the marker box. That means I can actually **see** what I'm typing!

Working late at night was a nightmare for me before I had this functionality. I would strain to see what was in the FrameMaker box (figure 18) and often just give up trying to identify every single letter. This inability to **see** what I was inputting led to a lot of extra cleanup during the editing process. I've found that using the large emDEX marker box *and* the emDEX window has saved me hours of time during the editing process.

The **Delete Marker** button (figure 19) on the lower right-hand side of the emDEX marker box is quite a timesaver when deleting entries. I no longer need to find the *exact* "tickmark" in FrameMaker before I can delete my entries.

Customizing marker font

The **Marker font** option (figure 14) allows you to change your font, font style, and font size for your emDEX marker box via the dialog box shown in figure 20.



Figure 20. Marker font option.

AutoComplete option

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<u>O</u> pen <u>I</u> ncluc	emDEX le marke	window r types			
<u>M</u> arke	er				
<u>R</u> ang	e marker				
Marker buttons					
Mar <u>k</u> er size					
Marke	r font	-	_		
A <u>u</u> toC	Complete				
<u>H</u> elp .					
A <u>b</u> out					

The *AutoComplete* option (figure 21) is currently in beta testing and will be released in a future upgrade. This option can be toggled on or off.

When it is on, it autocompletes words based on other index entries already entered. The more entries entered, the more the autocomplete has to work with—to a point.

This feature has been very helpful to me during the early stages of index entry but I found that, the larger the number of entries, the more annoying it became and the more it didn't assist me.

Now, if we could only get an autocomplete feature that completed *entire entries (main or subentries)*, not just words -- that would be heaven!

Figure 21. AutoComplete option.

Conclusion

As you can see, emDEX packs a lot of features into a few simple menus and marker boxes. For anyone indexing in FrameMaker, this is a must-have plug-in.

Lucie Haskins became a freelance indexer in 2000 after a long career in the computer industry. She is the current chair of the Colorado Area ASI Chapter, a director on the ASI national board, and a member of the ASI Webmaster team. For more information on embedding indexing, visit her web site, http://www.luciehaskins.com, especially the Resources page.