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Editor's View

A Little Bit of COM

You don't have to use all the new technologies to gain from them.

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Last month's Editor's View talked about COM—what it is and why it's important. I also explained that you don't have to use all the aspects of COM to get benefits. This month, I'll provide a practical example.

Many of you know that Contributing Editor Ted Roche and I have been working on a new version of our Hacker's Guide to Visual FoxPro. By the time you read this, it should be available. (For information, www.hentzenwerke.com.)

The editing of our first Hacker's Guide used the traditional paper publication system. We completed the manuscript and submitted it on paper and disk to our publisher. A while later, we received paper galleys that had been marked up by a copy editor. We edited those on paper and, a few weeks later, received final proofs on paper for a last check.

This time around, we've pushed the paper back one step. Our copy editor started reviewing sections of the book as soon as we'd finished writing them. Like us, she worked in Microsoft Word and simply returned edited files to us.

While this was much better in terms of time management and flexibility, it left us with a big problem. Some decisions about style (like "textbox" vs. "text box") weren't made until after many sections had been edited. In fact, the exact name of the product (Visual FoxPro 98 or Visual FoxPro 6) wasn't known when we started. So, before we could turn the parts into a book, we needed to do some search-and-replace.

In addition, our book points out bugs in the product. We did our original testing with beta versions. Before we could publish it, we needed to find all those bug reports and retest them to see if they were fixed in the shipping version.

We had a number of other tasks like this, as well, things like making sure none of our notes to ourselves remained in the document, ensuring that all the graphics were linked rather than embedded, and so on.

None of this would have been a big deal, except that we had over 800 source documents to deal with. And, once we'd done all that, we needed to assemble all those documents into a book in the right order.

Enter COM. Naturally, we'd tracked the progress of the book with a set of VFP tables. Using Automation to Word, we were able to search for our special bug icon to log all the documents that needed checking, perform search-and-replace for all the items that needed it, and do all the other necessary bookkeeping chores. Automation also let us consolidate the documents into a final product. (We actually used Automation to assemble the original Hacker's Guide as well. See our article on the Advisor web site.) But it goes farther. This version of the Hacker's Guide is also available as an HTML Help file. We used Automation to convert the clean documents to HTML and do a number of post-processing tasks to prepare the files for compilation in HTML Help format.

I doubt that many of you have 800-odd documents that need the kind of processing ours did, so the particulars probably don't interest you that much. But there are two key points here.

First, some tasks are tremendously easier in the COM world than they were before. Imagine manually searching through 800 documents for 15 or 20 different strings. Even with macros, what a horrible task.

Second and perhaps more important, you don't have to reserve COM for the times when you want to build state-of-the-art, multi-tier, web-enabled, choose-your-favorite-buzzword applications. It can fit into many applications today.

Read them all

My older son is taking Chemistry this year. Listening to him talk about it has brought back memories of my high school Chemistry class twenty-five years ago. Though I have vivid mental pictures of the classroom and the teacher, I only remember two things from the course content. The first is Avogadro's number (6.02×10^{23}), though I no longer remember what it represents.

The second is a technique called dimensional analysis for converting from one unit of measure to another, in order to figure out whether to multiply or divide by the relevant conversion factors. To this day, when I need to go from pounds to kilograms or centimeters to feet, I use it.

What's striking about this is that dimensional analysis isn't Chemistry. It's a tool we learned to make learning Chemistry easier. Yet it was one of the most useful things I learned in High School.

I think a lot of learning is like this. We don't know when we're learning which items we'll need later and which we can forget immediately (or at least, after the test). We also don't know which ones we'll store up for no reason only to find later on that they're valuable. (I'm still waiting for the chance to use Avogadro's number.)

As a developer, one of the benefits of being the editor of FoxPro Advisor is that I read every article at least twice. If I were a subscriber, I'd probably pick and choose and read only those that seem relevant to what I'm working on at the moment, or discuss topics of general interest to me. I would rarely read an article more than once.

But, I *have* to read them all and read them more than once. The result is that I'm exposed to a lot of things I wouldn't otherwise be, so I acquire at least passing familiarity with all kinds of topics. (Writer Rick Strahl is the king at stretching me to my technical limits and beyond.) It's amazing how often something in an article I probably wouldn't have read on my own proves useful.

I can't recommend highly enough that you try doing it my way. Read all the articles. Come back a week or two later and read them again. Down the road, it'll pay off.