

Subject: A Story
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REGARDING A Story
All about "LabVIEW The Book" -- (this is a long post)

It's story time again... but first, an advertisement. As many of you know I wrote a book on LabVIEW and it's coming to a bookstore near you (soon). Here, once again, are the particulars:

"LabVIEW Graphical Programming", Johnson, Gary W. NY:1994, McGraw-Hill. ISBN 0-07-032692-2. Hardcover, 500 pages, 350 illustrations. Cost: about U.S. \$45.

It SHOULD be on the store shelves sometime in *LATE JUNE*, assuming that there are no more printing problems. It will have broad distribution, so place an order at your local bookstore if you want it, or place an order by calling McGraw-Hill at 800-722-4726. There will eventually be translations, probably into French, German, and Japanese, but that remains to be seen. Topics covered include the history of LV, all about signal conditioning, how to write an application, how to write a driver, how to write a data acquisition application, using the DAQ library, physics applications, process control applications, data visualization and image processing, and automated test applications. All very practical stuff based on real-world experience. Definitely not a rehash of the LV manuals. It is platform-independent (even though I'm a MacHead), is written around LV 3.0, and includes a diskette (DOS format with .LLBs) with a bunch of utility VIs.

Enough with the facts. I was thinking that some of you might be interested in the story behind the book, so here it is.

Once upon a time, I was minding my own business, playing LV consultant, and having fun helping people at LLNL and elsewhere with their LV applications. Then one day, Jack MacCrisken (one of the LV authors and a friend of mine) suggested that I might write I book. "Unthinkable!" said I. "I was in bonehead English in high school!" But, he pointed out, my tech writing style is okey-dokey, and actually fun to read. So he dropped by my house one evening with a quick outline and I decided to go ahead with the project.

National Instruments helped a great deal with the project. They helped me find a publisher by making it clear that this is a serious product that needs a book-- BADLY. Once we landed McGraw-Hill, we set up an agreement that the book would be desktop published, hopefully saving production time (I'm not convinced that it did, but we sure had tighter control of the layout and review process). And yes, I will receive royalties for each copy sold; that's standard publishing practice. Trouble is, you don't make much on technical books (not enough of a market). Only the Stephen Kings and Tom Clanceys of theworld get rich.

So I started writing in April of 1992. LabVIEW was shipping version 2.2.1 (Mac only at that time), so that's what I started writing about. A few months later, version 2.5 (PC and Sun) appeared, so my target shifted to that. A few months later, version 3.0 beta appeared, so my target shifted to THAT. And the target kept on moving... Not only did the LabVIEW application keep changing, but all the indispensable third-party stuff kept coming out in new versions, and the driver library standards kept changing, and... I ended up completely rewriting one chapter three times, and a couple of others twice, which was rather frustrating.

It took about a month to write a typical chapter, working maybe 25 hours a week in my "spare time." Actually, all I did was go to work, then come home and sit at the computer all evening for two years. No consulting jobs at all during that period, so my "toy budget" had to suffer. During the whole time, I kept collecting ideas from this mailgroup and anywhere else I could obtain input. I gotta say, gang, that info-labview is the most polite, helpful, and enjoyable mailgroup I've ever heard of, and the book is a much more valuable product as a result.

Here are some technical production details. I started working with Mac IIfx, then moved up to a Quadra 950 about halfway through. I have 40 MB of RAM (I boot from RAM disk for better performance), a 1 GB disk, and a 16" display. Text entry and all draft page layout was done in Microsoft Word. Screen captures were taken with ScreenShot, pasted into Deneba Canvas, annotated and/or modified, then exported as Adobe Illustrator files. Line art was

created in Illustrator by Katharine Decker at NI. After fixups were applied, Illustrator EPS files were then dropped into the main document which was managed by FrameMaker. All production was done on the Mac. Draft output came from a LaserWriter IIg. The whole mess was shipped on three 128 MB optical disks to the publisher for Linotronic output at 1200 DPI. We sent many things back and forth between me and NI via FTP, saving much time and expense. New-Age publishing in action.

Reviewers were mostly NI folks, particularly Monnie Anderson, who is an incredible nit-picker, and by far my most valuable resource. I would always dread the big Fed-X package on my doorstep; there were HUNDREDS of marked-up pages for each chapter. I also had the help of some reviewers here at LLNL. We were originally going to send out review copies to other outsiders, but ran into a horrible time crunch. The editor, Tom Chamberlain at NI, was overloaded with LV3 and LabWindows/CVI manuals, which complicated our schedule to no end. Realize that the LV manuals alone encompass about 2000 pages!

So we edited. And we reviewed. And we modified. Month after month. And keep in mind that the "target" kept changing all the time; I would add a paragraph about some new feature, then find out it was deleted or modified, which affected something else, etc. It's a real challenge, this software documentation business. I have TREMENDOUS admiration for other authors who have gone before me.

Finally, out popped a pretty good-looking final draft. You can blame me for the indexing job: I put the index entry codes right into the Word document, and FrameMaker picked them up. Trish Hill at NI did the page layout work and fixed up the index as best she could.

So I survived "swallowing the elephant," as Jack MacCrisken called it. Next up: a revised edition when LV 4 is ready to go. Funny, I suddenly feel very tired...

But there's more. Remember that technical illustrator I mentioned, Katharine Decker? We're getting married on May 21 in Austin, Texas, then moving back here to Livermore, CA. How's that for a long-distance, high-tech romance?

I want to thank all of you on the info-labview mailgroup for your valuable input, and especially Tom for running this on-line party. And thanks to the LabVIEW development team at NI. They're the brightest, most creative, fun-loving bunch of hackers I've ever met. Here's to 'em!

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