Bijlage 32

Contending with Office suites

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abstract
The author is tried beyond endurance by current Office software.

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Even a diehard TEX user cannot always disregard the World of Windows. I regret to admit that Windows NT still is my primary operating system. Now and then I am forced to contend with Office suites, and invariably am appalled at the shoddy engineering, the amount of silliness and the terrible PostScript support.

Quality engineering

Implementing a letterhead in Word and WordPerfect

The other day we had to implement our department's letterhead in the major wordprocessing applications in use at our department. My colleague Erik Frambach took care of the LATEX version, and I did the commercial word processors: two versions each of Word and WordPerfect.

I used to be quite enthusiastic about the desktop-publishing capabilities of WordPerfect 5.1. Eventually, though, print- and file corruption problems forced me to abandon WP for TEX. I find it hard to believe that people entrust their theses to such a house of cards, but they do, and they even manage to get their theses into print. So I had some hope that this would be a reasonably straightforward job. But it wasn't. The layout required exact positioning of items on the page and placing graphics in headers and footers close to the margin. Wordprocessors aren't designed for this. Neither is LATEX, but there the workarounds still work the next day.

With the newer Windows versions of Word and especially WordPerfect I ran into all the old aggravations: erratic printer output, file corruption, misbehaving graphics and also program crashes. It also turned out that neither Word nor WordPerfect were capable of creating a reasonable export for older versions. In the case of WordPerfect I even had to recreate the template for the older version from scratch. I ended up spending most of my time working around bugs and shortcomings in program design.

After I thought I was done with the job, I got a mail from a Word user that whenever he reopened an old letter, the logos had resized themselves to something enormous. Since there was an obvious and convenient workaround, I made no attempt to solve this problem.

Corel's latest and greatest: WordPerfect 8

WordPerfect 8 defeated me altogether. I managed to sort of import the WP 6.1 version but that was the end of my luck; crashes prevented me from making any headway.

The problems had started with installation of the program. It proved impossible to put together a consistent but reasonably compact installation. The Borland Database Engine, requiring about 8MB of disk space, was considered an essential component, as was the address book utility. In spite of all the unwanted installed items which were deemed essential, I still ran repeatedly into missing files, which had to be copied manually from the CD. And the number of registry entries was mind-boggling (but still a good deal less than those for Microsoft Office). The File/New dialogue presented me with a long list of templates which I hadn't installed and didn't want to know about. Attempts to clean up this list caused more program crashes. I know, this flame won't pass as a serious bug report. I just had to get it off my chest.

Exchanging graphics

Exporting from Excel

A question which crops up now and then on TEX-NL is how to get a chart from Excel into TEX. The trouble is that Excel relies on the clipboard and OLE exclusively for export. There are some workarounds: you can copy–and–paste to a vector drawing program such as CorelDRAW, and export from there to eps (Encapsulated PostScript). Or you can print to an eps file[1]. Such an eps file gets the full page as bounding box, so you should make sure beforehand that the chart covers as much of the page as possible, and that there are no unwanted page headers or -footers.

1. The Microsoft PostScript driver for Windows NT doesn't offer this option, but an Adobe PostScript driver with this option has finally become available. This driver only supports PostScript level 2 and higher.

About a year ago, I needed this, or so I thought. I needed to import them into a vector drawing program to edit colors, line style and type style.

Both the printer route and the clipboard route resulted in total fragmentation: each line segment of each graph and each letter of each word had become a separate object. Since the charts concerned were line graphs with lots of data points, usually two or three thoroughly intertwined line graphs per chart, rejoining the fragments was not practical: the converted files were useless.

Luckily, in this case I could bypass MS Office: the charts were also available as eps files created by a non-office application. The ps2ai untility bundled with Ghostscript turned these into perfectly good Illustrator files.

OLE

The O-word is OLE, Microsoft's protocol to make one program behave as a module within another. OLE is a very expensive but nevertheless ineffective way to let programs exchange data. Expensive, because use of OLE requires both the calling and the called program to be loaded in memory at the same time. Ineffective, because it is limited by the clipboard formats both programs understand. As to graphics, Bézier curves are likely to be reduced to polylines, and colors to rgb or worse. Between programs from one suite, it is usually not a problem, since they can support additional common proprietary formats. But exchange between a suite program and an external application can be very problematic indeed. I already cited my troubles with exporting charts from Excel.

Contrast this with exchange of graphics data via the eps (Encapsulated PostScript) format. For the exporting program, creating an eps file should be no more complicated than printing to a PostScript printer, which it must be able to do anyway. All that the importing application needs to understand about the file is its bounding box. For all its simplicity, this scheme allows import and printing of externally-generated graphics with all features intact, and works very well for TEX and for serious publishing applications. PostScript-hostile Office applications still manage to screw this up.

Exporting from Presentations

Although Presentations[2] does support eps export, this option is of limited use. If you create simple charts from spreadsheets in Presentations and export them in Encapsulated PostScript format, you have a fair chance of success. Even so, you may find that the size and placement of objects in the eps file is far from exact. Any font which is not Times or Helvetica though, even Symbol, gets replaced with Helvetica.

You may be tempted by Presentations' powerful drawing features to use it for other diagrams than spreadsheet charts. Be forewarned that more often than not, eps exports of such drawings are corrupted in some way, for example:

- lost rotation of text objects
- bogus rotation
- invalid PostScript
- stray objects
- altered line and fill attributes

You may have less trouble creating an eps file with the PostScript driver.

The role of the press

If computer magazines would be doing their job, they would put new software through some stress testing and check the software against lists of known bugs. Inevitably they would then in their reviews demolish the newer Office programs, and so force software vendors to produce better quality. Instead, they complain that Presentations has fewer multimedia gadgets than PowerPoint.

There is the story that if you put a frog in cold water and then you proceed to boil the water, and the frog with it, then the frog won't have the sense to jump out of the pan and save himself. This is how I feel with respect to Windows software. Bugs and bloat are making our work impossible, but since it happens incrementally, we fail to realize what is being done to our computing environment.

2. I am talking about versions 2 and 3. I have barely looked at version 8. I noticed, though, that there still were problems with fonts.