

The TAB key also performs another of *Emacs*' standard features, 'completion'. Using this, whenever there is input to type (opening a new file, giving the name of an element to insert), you can type the first few letters and press TAB to complete it, provided the abbreviation you have typed is minimally unique. This makes element insertion very fast, even using keystrokes rather than menus, and you can in any case customize frequently-used keystrokes to individual F-keys or control keys.

A character-cell editor is not for everyone: many users feel uneasy without the word processorized 'feel' of a typographical editor. A fuller graphical interface is certainly possible using *Xemacs*, but the portability and robustness of *Emacs* is a big advantage if you are working cross-platform, or in circumstances where commercial software is unavailable.

The *NTEmacs* installation included on the CD-ROM has a special setup program to install a full copy of *Emacs* on Windows 95, with *psgml* included, plus a catalog file and copies of all the publicly-distributable DTDs referred to in chapter 1.5.1.5, so on this platform at least you should have a complete free SGML editor ready to run. There is an enhancement to *psgml* for supporting XML from David Megginson, which is included in the setup. This operates as a major mode of *psgml*, and requires the version of *nsgmls* that comes with *Jade* (the one that does XML parsing and validation).

3.4.2. WordPerfect Suite 8 (Corel)

MS-Windows

<http://www.corel.com/products/wordperfect/cwps8pro/>

Corel are well known in the word processing, graphics, and DTP field, especially in the Macintosh environment. Having taken over from Word Perfect Corporation, Corel took the earlier SGML interface, *WordPerfect SGML Edition*, and created a fully-fledged SGML environment in their revised *WordPerfect Suite* product.

The old DOS/Unix *WordPerfect* was the word processor you either loved or hated. It was robust, reliable, and delivered exactly what it promised; but nothing more, and its interface was forbiddingly unmemorable. A late foray into the MS-Windows environment never caught on.

The new *WordPerfect Suite* series (which started with 7), however, is a quite different animal. A direct competitor to *Word*, it offers similar

facilities, but is also a complete SGML editor, with DTD compiler, stylesheet support, and a graphical DTD viewer.

WordPerfect on CD-ROM

A full copy of the *WordPerfect Suite* editor for MS-Windows 95 is on the CD-ROM, on a 90-day time-lapse trial. To install it, double-click the `setup.exe` program in the Corel folder.

Installing the software with the SGML option checked adds an `|SGML` item to the **Tools** menu, from which you can operate the SGML-related functions. You need to start from here if you want to create an SGML file, as the regular **File|Open** menu is only for non-SGML documents.

The *Graphical DTD Viewer* is a copy of *Near&Far Designer* licensed by Corel. It is only available with *WordPerfect Suite Professional* as it is aimed at the document type designer, not the general user. For an explanation of the functionality of this, see the description in section 2.6.2.

3.4.2.1. Compiling a DTD

As usual, you will probably need to compile a DTD to use, as *WordPerfect Suite* comes with a precompiled copy of HTML 3.2 only: anything else must be added. If you have access to a PC you can use the demonstration version on the CD-ROM to compile any of the DTDs included on the disk.

The system refers to compiled DTDs as ‘Logic Files’ (`.lgc` files), and there’s a directory for them: all the relevant files for a new DTD can be copied into a subdirectory of their own within it: for example `c:\corel\suite8\programs\lgcfiles\recipes`. The installation adds several Corel items to the Start Menu, apart from the word processor itself: among them is the ‘WordPerfect DTD Compiler’ item in the ‘Tools’ menu, which provides a panel where you can give the path and filename of the DTD, where to put the `.lgc` file when it is created, and where to find the SGML Declaration and ‘map file’ (their term for a catalog). Figure 80 shows this panel set up to compile my modified *DocBook* DTD.

The parser/compiler seems to produce more warnings than anything else, but it is very fast, and compiled my modified DTD in about six seconds on a 200MHz Pentium. Interestingly, it did apply some of its own limitations to some of the quantities in the SGML Declaration,

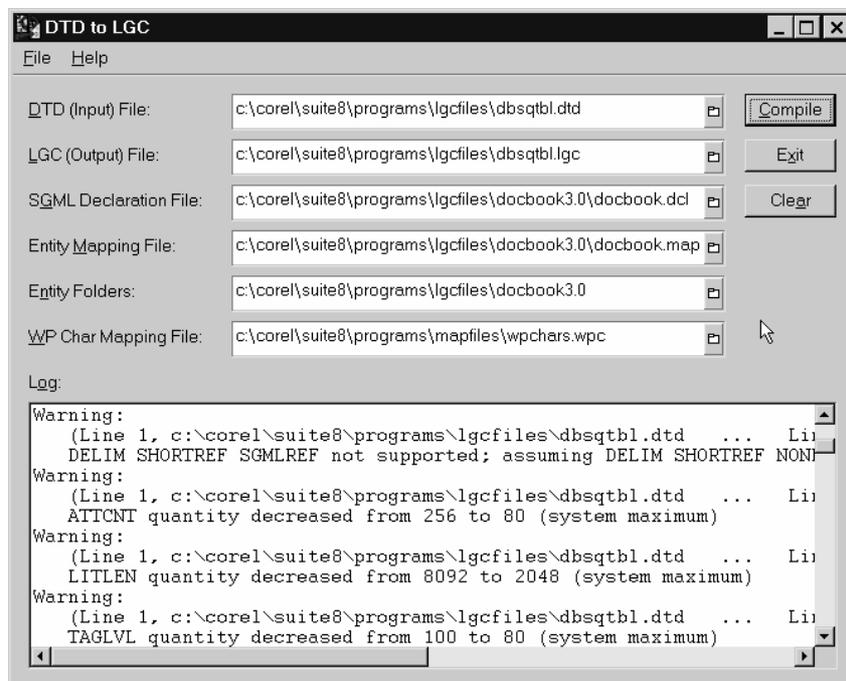


Figure 80. WordPerfect Suite compiling the DocBook DTD

as shown in Figure 80. Saving the compiled DTD makes it available in the **Tools|SGML|Document Types** menu of the actual word processor (all SGML items are under this menu: doing a regular **File|Open** on an SGML file will not bring the SGML modules into action). Once the menu has been used, it creates an **SGML** drop-down button on the toolbar.

The catalog file format is almost OASIS (*Suite 9* will move to full OASIS conformance). It requires the addition of a document type keyword (eg DTD) between the Formal Public Identifier and the System Identifier, so it's not hard to take an existing catalog entry and edit it into this form.

3.4.2.2. Styling

Creating a stylesheet is done with another separate program: the SGML Layout Designer (again from the 'Tools' section of their entry on the Start Menu). This reads an .lgc file and lets you pick each element in turn and specify the formatting items. The formatting window (see Figure 81) has three places for formatting information, rather than two: when the start-tag is encountered; when the end-tag is encountered but before the element is closed; and after the end-tag has been processed.

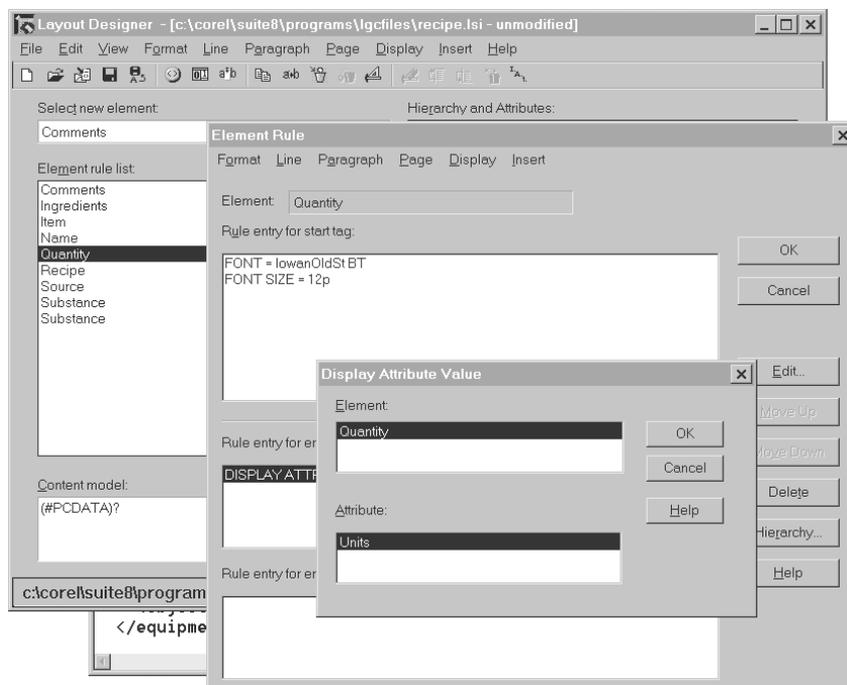


Figure 81. Creating a stylesheet in *WordPerfect Suite*

The styles are fairly comprehensive and easy to apply, but as the word processor display is not synchronized with the stylesheet, you have to save the stylesheet and go to the editor window and re-pick the stylesheet again from the SGML menu to make it re-read the file and apply changed styles. This means a chicken-and-egg situation for a new DTD, in that it's useful to have an instance to use for testing the stylesheet — but it's nice to have the stylesheet set up before editing an instance. In fact you can edit an instance without a stylesheet: you just get unformatted stream SGML.

3.4.2.3. Editing

Having got the DTD and stylesheet set up, and added to the Document Type and Stylesheets menu items, picking a Document Type opens a new file (there's a separate item for opening an existing file). The editing interface to *WordPerfect Suite* uses the standard word processor 'document layout' screen but you can pick the **Elements...** menu item which places a floating DTD-based element menu on the screen (see Figure 82).

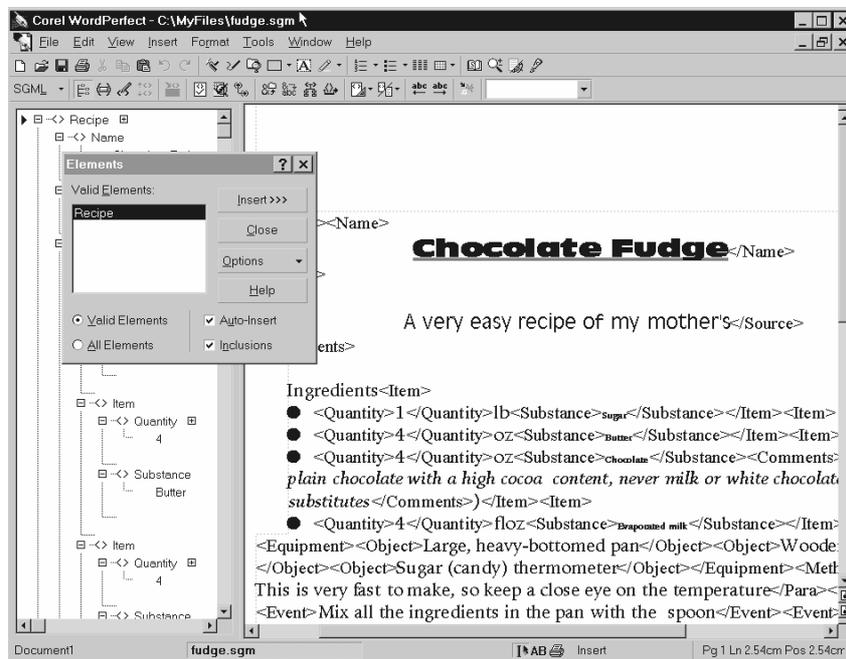


Figure 82. Editing SGML in WordPerfect Suite

The tags appear on the screen in a sans-serif font but not in graphical form: you can hide them or shrink them to nested square brackets, in the same way that *Frame+SGML* does. The DTD structure, however, remains on display in the adjacent window, so you can see where you are in the hierarchy at any time. Provided you remember not to stray back to the word processor menus for formatting, and stick to the elements provided by the DTD, this makes a very easy and comfortable edit interface.

Element insertion can be done in two ways: one is to position the cursor at the point where you want the element inserted, which causes the element menu to reflect the valid elements at that point, and then picking the right element from the menu. The other is the 'Enter key' method also used in *STiLO's SGML Document Generator* and *WebWriter*, and in *GriF's SGML Editor*, and in some other editors: press the **Enter** key, and (if allowed by the DTD) a new instance of the current element will be created (this would be the case if you were editing a paragraph, for example); if no further instance of the element is allowed by the DTD, a new instance of its parent will be created (for example, you were editing a list `<item>` this would have created a new, empty `<list>` container).