LaTeX: an introduction

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LaTeX is a powerful typesetting system, used for producing scientific and mathematical documents of high typographic quality. Unlike WYSIWYG tools such as FrameMaker and Word, it uses plain text files that contain formatting commands. It's big, open source, stable and used by many technical publishing companies. It's also relatively unknown in the technical writing community. This article overviews LaTeX, and directs you to sources of information.

History

Donald E Knuth (www-cs-faculty.stanford. edu/ knuth) designed a typesetting program called TeX in the 1970s especially for complex mathematical text. LaTeX is a macro package that allows authors to use TeX easily, and uses TeX as its formatting engine. It is available for most operating systems; for example, you can use it on low-specification PCs and Macs, as well as on powerful UNIX and VMS systems. There are many different implementations of LaTeX.

Who uses it?

I first came across LaTeX in 1992, when fellow students were using it to write academic papers and theses. These days, it is widely used in the technical publishing industry for academic journals, particularly by mathematicians, physicists and other people who have complex notational requirements. For example, Elsevier, IEEE and the Royal Society all provide author guidelines for people who use LaTeX. One of my clients uses LaTeX to produce software documentation (see pages 1820 of the Autumn 2005 Communicator) and so I needed to learn it.