

The *DECUS Proceedings* have traditionally been published from copy supplied by the authors, prepared according to rules devised for typewritten material. The power of the computer typesetting language TEX, through the macro package LATEX, has now been applied to this task, and a formatting package, named DEPROC, has been submitted to the DECUS Program Library for use by authors who have access to a working TEX system. (The TEX program and related software, created by Donald Knuth of Stanford, are in the public domain.)

This paper presents the important features of the LATEX implementation of DEPROC and, through examples, shows how it is to be used. Use of DEPROC, which is encouraged, will produce the author's work, nicely typeset, in the standard format. There is a general description of how the package works and of the mechanical requirements for camera copy of articles, which will be created on the author's local output device.

No prior knowledge of TEX or LATEX is required, but authors using DEPROC will be expected to learn some rudiments, especially if their papers contain special notation or formats such as tables.

## Typesetting Articles for the DECUS Proceedings with LATEX

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04/18/21

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The *DECUS Proceedings*, like the conference proceedings of many other organizations, is rushed to publication as quickly as possible so that the material will reach the conference participants and other interested readers before its value is diminished by time. Reproducing author-prepared copy eliminates the considerable bother and expense of typesetting, proofreading and corrections. The published document should be compact, uniform in appearance, and readable, regardless of the kind or quality of printing device available to the author. For these reasons, instructions to authors have heretofore assumed that nothing more elaborate is available than an ordinary typewriter or dot matrix printer.

To enforce uniformity, the author is provided with kmodel paperl, on which are printed (in non-reproducing ink) column and page borders, alignment marks, and instructions for placement of title, author, and the other parts of a proceedings article. The dimensions of the model paper are almost always larger than those of the published Proceedings this permits more text to be packed onto each page, and also improves its appearance or kqualityl when photographically reduced, smoothing out the rough edges of letters and symbols generated by a typewriter, dot-matrix printer or other klow-resolutionl device.

Within the past few years, advances in laser-printer technology have made good-quality output accessible to a growing number of users, through a widening selection of low-cost output systems based on print engines with 300 dot-per-inch resolution and (relatively) easy-to-use interfaces. Such devices have been attached to most kinds of DEC computers, and drivers now exist to print the output from many programs including TEX and Troff. Most low-end laser printers cannot use paper wider than 8 1/2", however, so even if both a good

composition program and output printer had been available, until now an author would have been discouraged from using them for mechanical reasons.

The editor of the *DECUS Proceedings* has now agreed to accept typeset copy printed on such a system at 100% on 8 1/2\*11" paper, provided it conforms to the published format. This article (which has itself been produced by the technique it describes) introduces a package, DEPROC, designed to prepare articles using LATEX.

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