

ERCOT_EX

Yet another database publishing application of L^AT_EX

Stephan Lehmke

QuinScape GmbH, Thomasstraße 1, 44135 Dortmund, Germany

Stephan.Lehmke@QuinScape.de

<http://www.QuinScape.de>

January 31, 2003

Abstract In the talk, a *database publishing system* for paper-based product presentations using `pdflatex` is presented which was developed to provide

1. top-quality typography;
2. completely automated document generation;
3. high flexibility for design and specification of documents from product ‘specsheets’ to complete catalogues;
4. multi-language support;
5. efficient production of very high volumes (number of documents, number of pages).

While some of the features (typographic excellence, multi-language support, support for high volumes) are provided by `pdflatex` ‘out of the box’ and at most require appropriate tweaking of T_EX’s parameters, to provide the optimal combination of completely automated document generation and high flexibility for document design and specification, a dedicated system consisting of several macro packages and document classes was created.

The heart of the system consists of a macro package for managing a *layout grid* which is placed behind every page. Several pages can be constructed in parallel by placing objects (graphics, text, tables) in the grid. Grid cells are reserved according to measured dimensions of the placed objects.

It is possible to inspect the grid of a given page for free cells and continue construction accordingly. Text can flow between pages, either on a path which is calculated automatically, or through a predefined sequence of grid cells. Objects can be grouped and the group placed as a composite object (including the possibility for multi-column placement and page breaks). Dimensions of objects and groups can be measured, providing case distinctions for switching between design variants.

The automated production of a document requires a *data record* (T_EX file in key-value syntax) and a *document description* (say, for a product specsheet) formulated in a special *document design language*, where data contents are placed in the grid.

First results of the system can be found on <http://www.ercocom.com> (go to “Systemoverview PDF”; other pdf documents on this site will follow in due time).