

Definitions

TeX

TeX

MetaPost

Portable Document Format

JavaScript

eXtensible Markup Language

ConTeXt

TEX

- * We use the word TEX for both a programming language and a program. The language can be used to describe a document and its layout.
- * Both are collected in a so called document source. The program interprets this source and produces a typeset version of the document.
 - * Although TEX originates in the beginning of the eighties, it is
 - * still one of the most powerful tools available for typesetting complex documents.
 - * Its strength is partly due to the fact that TEX can adapt itself so easily.

TEX

We use the word TEX for both a programming language and a program. The language can be used to describe a document and its layout. Both are collected in a so called document source. The program interprets this source and produces a typeset version of the document.



Although TEX originates in the beginning of the eighties, it is still one of the most powerful tools available for typesetting complex documents. Its strength is partly due to the fact that TEX can adapt itself so easily.

MetaPost

This program is derived from MetaFont. Like $\text{T}_{\text{E}}\text{X}$, both represent a language and a program. Where MetaFont produces bitmap font files, MetaPost is strong in non-artistic graphics.



The graphic capabilities of both programs are limited. One cannot for instance produce free hand drawings. On the other hand, MetaPost has analytical capabilities. This means that we can use the program for those graphics that have a certain logic in them.

Portable Document Format

Professional printers and raster image processors often have a built-in capacity to interpret the graphic page description language PostScript. Its relative PDF, the portable document format, lacks the language capabilities, but adds an object oriented way of describing a document.



Fast (random) access, compression, reuse of information, and support for annotations like hyperlinks and widgets, make this self-contained format a good candidate for distributing documents across hardware architectures and software platforms.

JavaScript

Also known as the ECMA scripting language, JavaScript is an object oriented, interpreted programming language that is primarily meant to be embedded in documents.



Although it lacks certain features, JavaScript is powerful enough to deal with user input as well as providing additional navigational functionality. Unfortunately JavaScript lacks some basic features for communicating with the outside world, like file access.

eXtensible Markup Language

Ever since computers started being used, people have been trying to describe their documents in such a way that computers can deal with their structure and content. Currently the SGML related descriptive languages like HTML and the extensible markup language XML are favoured.



These languages can be recognized by the `<angle>` `</bracketed>` `<tags/>`. An important element in using this descriptive language is the Document Type Definition, in which the rules for a specific class of documents are laid down.

ConT_EXt

A collection of general purpose macros written in the T_EX macro language is referred to as a macro package. Among others, ConT_EXt is such a package. ConT_EXt offers a wide range of features, and can be used for typesetting paper and screen documents.



MetaPost support is tightly integrated into ConT_EXt, providing the users advanced graphics capabilities. As an output format, PDF is supported to a far extend, including support for embedded JavaScript. Also, ConT_EXt can handle information encoded in XML.