

software

4Project: a project manager for T_EX

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abstract

A new project manager, 4Project, analyses your T_EX document and gives you easy access to any item in it.

keywords

project management

Introduction

When writing large documents that contain many chapters, sections, figures, tables, references, citations, etc., it can be difficult to keep track of the overall structure. Furthermore, large documents are often divided into multiple files, possibly written by different authors.

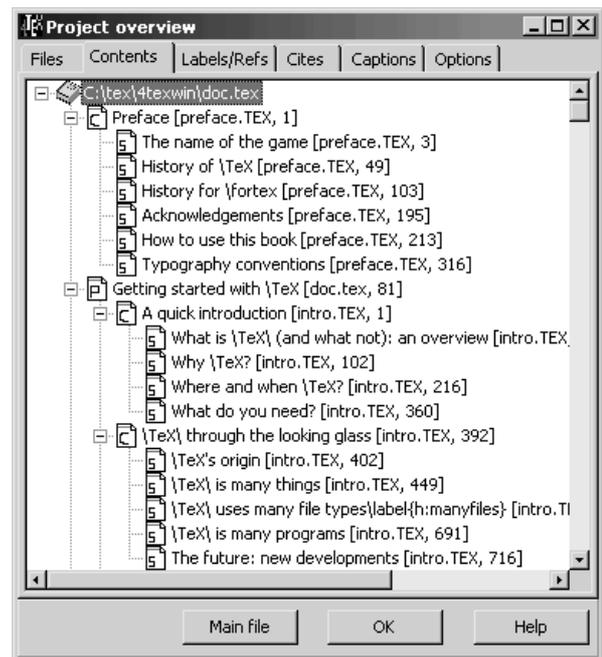
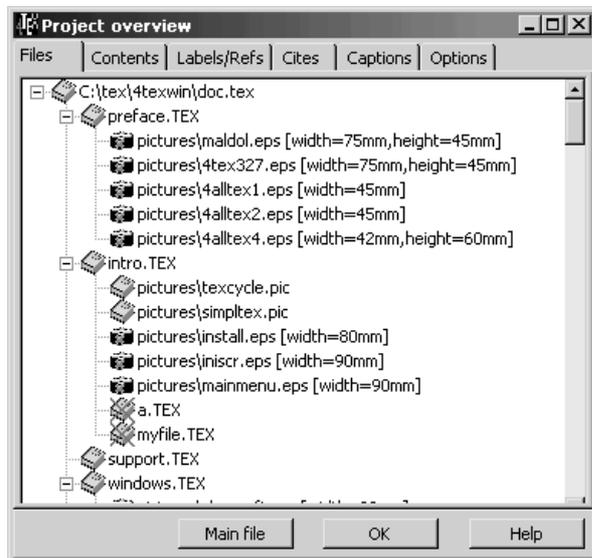
In such cases a good project manager can be helpful. It will assist you in analyzing the structure and content of a document, and it will give you easy access to any part of the document, be it a file, a section, a graphic, a label, a cite, or whatever. It will also show potential problems such

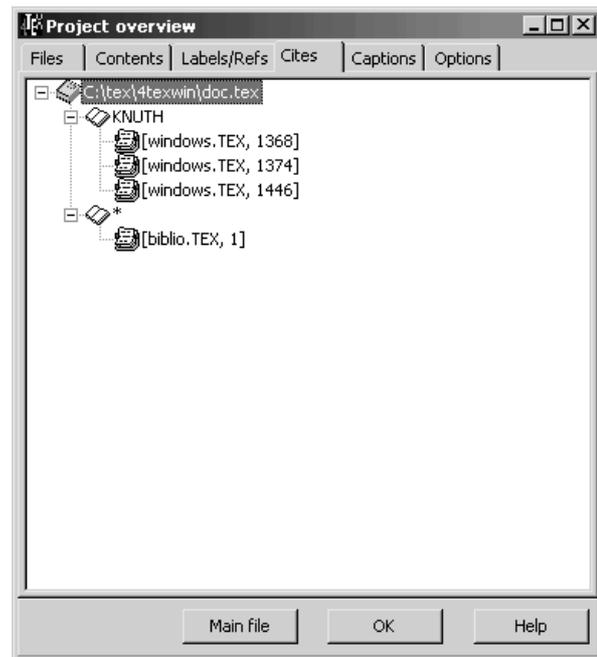
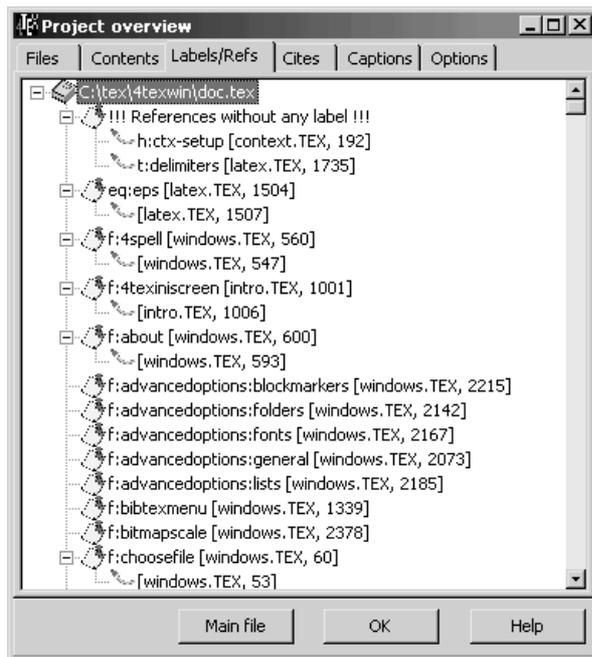
as resources (files, graphics, etc.) that it was unable to locate, references to undefined labels, multiple defined labels, labels that were never referenced, inconsistent sectioning, etc. A graphic representation of these analyses will give you a detailed yet easy to manage overview of your document.

4Project

The program 4Project is an attempt to implement such a project manager for MS-Windows T_EX users. The program is part of 4T_EX version 5 for Windows, but it can be used 'stand-alone' just as well. 4Project is highly configurable, which is necessary to make it work with, e.g., L^AT_EX, ConT_EXt, plain T_EX, or whatever dialect you use. These dialects all use different commands to include files, graphics, citations, etc., that 4Project needs to know in order to analyze such a document.

4Project will display the results of its analyses in 5 sections that we will discuss below.





Files analysis

The first ‘tab sheet’ in 4Project is called ‘Files’. It displays a tree of all the T_EX files that the document includes through, e.g., `\include` commands. It also shows which external graphics files are included.

Any file that could not be found will be indicated by a red cross through its icon. If you click on a file displayed in this tree, 4Project will start the editor (which you can specify) and load this file. If you click on a graphic file, that file will be displayed by a suitable graphics program such as GSview or IrfanView (which is of course configurable). If you *right*-click on a file, the program 4Spell will be started to spell-check that file.

Contents analysis

The ‘Contents’ tab sheet displays a table of contents in which chapters, sections, subsections and subsubsections are listed. File names and line numbers where these items are defined are also displayed.

By clicking on an item, the editor will be started, and the file will and the editor will jump to the given line number.

Labels/Refs analysis

The ‘Labels/Refs’ tab sheet displays all labels and references used in the document.

If there are any references to undefined labels, they will appear at the top. Similar to the contents analysis, all file names and line numbers are given as well. By clicking on an item the editor is started. By right-clicking on an item, the label name will be copied to the Windows clipboard. From the editor you can then paste it into a file.

Cites analysis

The ‘Cites’ tab sheet displays all citations in the document.

By clicking on an item the editor will be started. By right-clicking on an item, the citation name will be copied to the Windows clipboard, so you can paste into a document from the editor.

Captions analysis

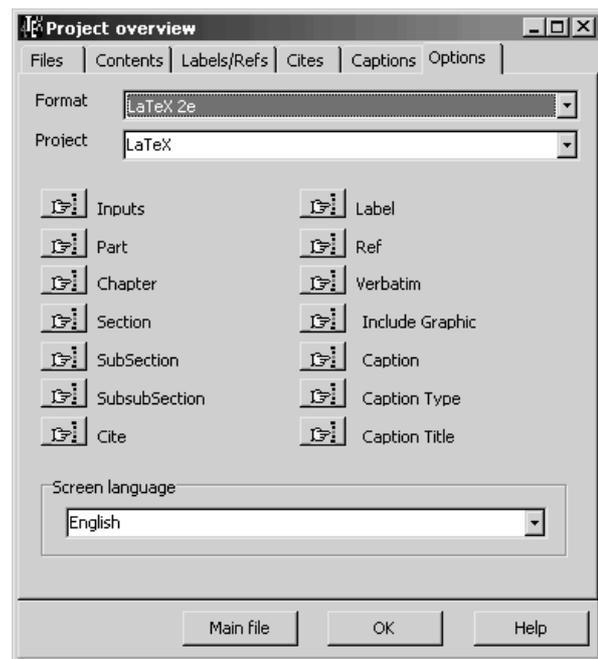
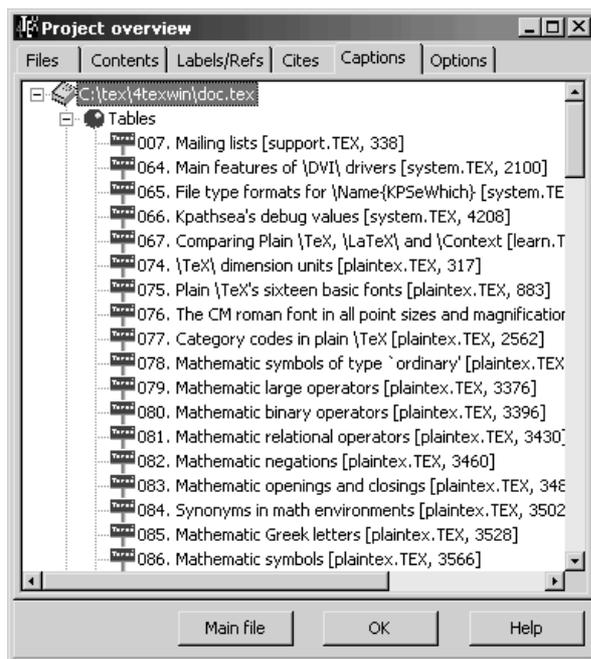
The ‘Captions’ tab sheet displays all captions used in the document. The tree view is much like a list of figures and list of tables.

By clicking on an item the editor will be started.

Options

4Project is highly configurable. The ‘Options’ tab sheet gives you easy access to all major parameters.

You can specify what commands 4Project should scan for to find, e.g., input files, chapters, references, figures.



As an example, here is a definition for input files in \LaTeX :

```
\input
\include
```

A definition for figure/table captions in \ConTeXt could look like this:

```
\placefigure
\startfiguretext
\placetable
```

All these settings and some more are stored in the file `4tex.ini`.

4Project is free software, which means that you don't have to pay for using it. The standard GNU license applies. You can download it from any CTAN (mirror) site (e.g., `ftp.ntg.nl`). It is part of 4 \TeX , (`systems/win32/4tex/`) but you can throw away anything you don't want. Later, 4Project will be made available as a separate distribution on CTAN.