

TextMate

Power editor for Mac

Abstract

When editing text or code on a Mac, TextMate is an excellent choice. It offers an abundance of features which makes it a great editor for $\text{T}_{\text{E}}\text{X}$ as well as the macro-packages $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ and $\text{C}^{\text{O}}\text{nT}_{\text{E}}\text{Xt}$. Editing HTML, XML and CSS is also supported, as are many other programming languages. Specially tagged texts are quick and easy to write, thanks to autocompletion and placing of start- and end-tags. Further the editor supports projects — a sidebar to the editing window that shows files belonging to the project. Another useful feature is the column selection method and the (near) end of line selection. TextMate offers a clipboard history, so multiple items can be retrieved. TextMate can be customized to a very large extent.

Introduction

Choosing an editor that suits every project is not easy. While personal taste and required features play important roles, TextMate is a high-end editor for the Mac platform with such a broad featureset that it should make almost anybody happy. It suits many environments from simple text editing to website programming. TextMate has built-in support for both $\text{T}_{\text{E}}\text{X}$ and $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$. $\text{C}^{\text{O}}\text{nT}_{\text{E}}\text{Xt}$ is supported by installing a bundle from Patrick Gundlach, that is also MetaFun aware. A bundle is a collection of shortcuts and automations that make a certain type of text or code editing easier. From TextMate one can run compilers and previews in viewers (e.g. web-browsers, PDF-viewers). To top things off, the editor allows for extreme personalization and customization.

How to get TextMate

The application can be downloaded from <http://macromates.com/> for € 45.63 (single user license including VAT). A 30-day trial is also available and special arrangements can be made for multiple user licenses and site licenses.

Documentation

Manuals and other documentation are available online at http://manual.macromates.com/en/all_pages.html and at <http://manual.macromates.com/en/>.

There is also an exhaustive book written about TextMate: “TextMate Power Editing for the Mac” by James Edward Gray II. The book is available both as paperback and eBook. When buying the eBook, one gets three formats at once: epub (iPhone, iPad, Android and eReaders), mobi (Kindle) and PDF.

Language support

Language is set or extended by using bundles. When editing a file, one can select the bundle to be used from the *editing window*. The bundles menu lists all preinstalled bundles. Via this tab you can start the *bundle editor*, or you can browse through the list. For those who are looking even for more supported languages they can visit <http://svn.textmate.org/trunk/bundles/> (official releases only).

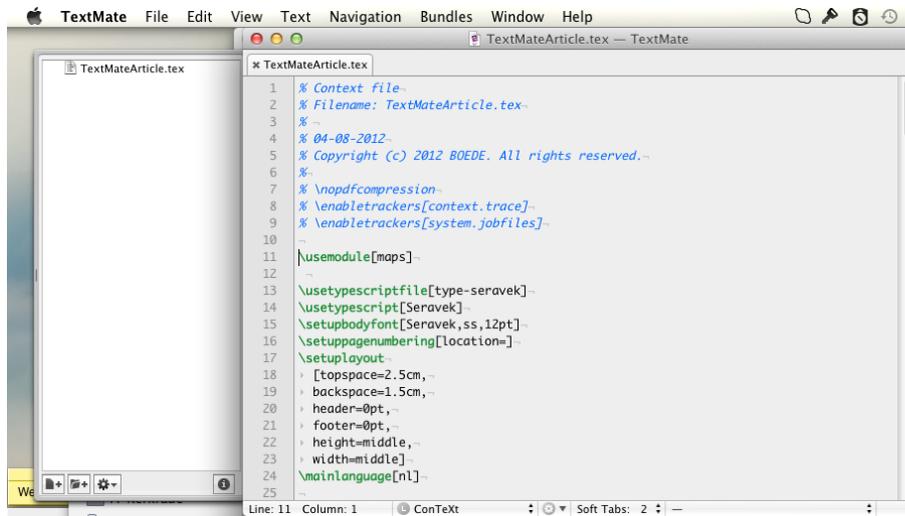


Figure 1. Editing window

The editing window and project drawer

In figure 1 you can see the *editing window* with the *menu-bar* of the application.

On the left side there is the *project drawer*, which is width adjustable to accommodate longer file names. The drawer can be expanded on either side of the *editing window*. The *project drawer* may contain any file or folder from your hard drive that you've associated with the open project. The files can be rearranged in sequence by simply dragging them to another place. The sequence of files and their location on the hard drive are not changed by doing this. Files that are not text files may be marked as binary, and will be opened in their designated application when double-clicked. Projects can be saved for later use, and after reopening the project all files in the project are automatically displayed.

Active files are shown in the top row of the *editing window* as tabs. Files that have been edited but not yet saved are marked by a dark grey dot at the left edge of the tab next to the filename.

At the bottom edge of the *editing window* there is a *status bar* with several fields. The first field indicates the line and column numbers of the cursor position. In the second field the type of file is shown. The type of document can be set by using a drop down menu. Behind the third field is a drop down list containing your bundles, presented in a menu structure for performing actions. The fourth field is used for the tab stop configuration. A nice feature are so called *soft tabs*; while editing they behave like tabs, but show up as spaces in the file.

For languages that support this, the rightmost pop-up in the status bar shows the current “symbol” e.g. a function prototype.

Gutter

Along the left edge of the *editing window* (see figure 1) there is a *gutter*, which displays various information about the file you are currently editing. On the far left there is the column for placing *bookmarks*, which TextMate represents by a star. When clicking in this column the mark is placed, clicking again removes it. Jumping forward or backward through these bookmarks works via shortcuts (F2 or SHIFT-F2) or through the navigation menu.

The second column in the *gutter* shows *line-numbers* and, if turned on, dots for indicating soft-wrapped lines.

The third column contains upward and downward arrows, which allow the collapsing/folding of sections between a downward and an upward arrow. Collapsed paragraphs are shown as the first line of the paragraph with an ellipsis at the end, and a right pointing arrow on a light red background in the *gutter*. Clicking on this arrow or the ellipsis will expand the paragraph. Collapsing paragraphs can also be done through the menu. There are in total 9 levels at which paragraphs can be (un)folded.

Features

Key-bindings are available for all actions, generally speaking. TextMate offers also key-bindings as they are known in emacs.

Selections

Beyond normal *block selections* where whole lines are selected, TextMate offers a *column selection* method. This method can be used e.g. for inserting information on multiple lines at the beginning of the line. This is very handy when e.g. coding a table in \TeX using a preexisting table-text. For preparing a zero-width *column selection*, place the cursor in the first position of the last row of the selection. Make the selection you want with the mouse or keys. Then press ALT. Now you see a thin blue line in front of the text. You may now insert information on all selected lines, beginning at the blue line.

Another feature is the possibility to make *end of line selections*. This again is very useful while coding tables in \TeX , or while adding the same text several times at once in a data set. Select the lines to be edited. Press ALT-CMD-A, edit the end of the lines.

Editing

Clipboard history

TextMate keeps a history of text fragments which were copied to the clipboard. CMD-V pastes the last copied fragment. If you want to paste an older fragment, pressing CTRL-ALT-CMD-V reveals the history in a pop-up window which then can be scrolled through. Pressing ENTER places the fragment.

Freehand (insert) or overwrite mode is provided as in any other editor. ALT-CMD-E enables the freehand mode, ALT-CMD-O switches to overwrite mode.

Change case

The case of a selection may be changed by using the shortcuts for uppercase (CTRL-U), lowercase (SHIFT-CTRL-U), title case (CTRL-ALT-U) and opposite case (CTRL-G).

Goto line

Jumping to a specific line in the file is done by pressing CMD-L, which prompts a small window for entering the line number. This is especially advantageous when searching for a line number from the compiling window in a \TeX run.

Goto file

Pressing CMD-T pops up a window, where the files of the project are listed. The most frequently used files appear at the top of the list. Looking for a specific file is made easy by typing the first letters of the filename, or by typing the first letters of words contained in a filename. Clicking the filename opens the editing window of the chosen file.

Search and replace

TextMate can search and replace within a file. Both a graphical interface and shortcuts are available for this action. Besides regular search and replace in a file, TextMate can also perform search and replace in an entire project. While doing this, TextMate presents a list of files, where the keywords are found. Double-clicking such filenames switches the editor window for that file.

Yet another way of looking for keywords in a file is by scanning. By pressing CTR-S, the status bar changes into a field for entering a search term. Pressing CTRL-S repeatedly moves from one found entry to the next.

□ **Power of regular expressions**

TextMate uses the Oniguruma library for regular expressions. This enables you to do all kinds of operations on the text. Regular expressions are especially beneficiary while coding \TeX from a given text. Many things can be found and replaced this way, saving a lot of time in the process.

□ **Customization: bundles**

TextMate is already powerful out of the box, but it can be further improved by bundles. By studying the manual, you can easily build your own automations and place them in a personal bundle. This is good for things that repeatedly need to be inserted into a file. For example, even simple things such as complicated words which are therefore prone to typos can be placed into such a snippet, making it easy to have that word spelled correctly throughout the text.

□ **Customization: templates**

It is easy to add a customized template file to the *File menu* \rightarrow *New from Template*. figure 1 shows part of the template file I use for Con \TeX t. One advantage is that all your files have the same header information. In my particular template the standard font and the standard layout I use are placed together with $\backslash\text{starttext}$ and $\backslash\text{stoptext}$. Because Con \TeX t comes with an impressive list of trackers I inserted the most important ones as comments just beneath the standard header.

Starting TextMate from the terminal

TextMate can be easily started from the terminal. The only thing necessary is a symbolic link in /usr/local/bin . This link is generated during installation or can be installed later on through the help system.

Built-in bundles

It would be beyond the scope of this article to discuss all the included/available bundles.

Basically, TextMate bundles ensure the best for editing in a specific environment. This is evident especially while working with tagged text, where bundles enable the automatic insertion of the start- and end-tag. Syntax highlighting is supported and normally spellchecking does not interfere with commands and tags.

TextMate comes standard with bundles for \TeX . There is a \TeX – Plain- \TeX – and a \LaTeX bundle. In the status bar of the editing window file types can be assigned to \LaTeX Beamer or Memoir packages. There is also a bundle covering Bib \TeX .

It is worthwhile to mention that there is also a bundle for working with Subversion. This makes editing a lot easier because the common commands can be issued within TextMate.

Con \TeX t bundle

TextMate does not natively support Con \TeX t. There is however a very good bundle available, written by Patrick Gundlach. The source of the bundle can be downloaded from <http://wiki.contextgarden.net/TextMate>. At the bottom of the Wiki page you will find links to the download section.

This bundle allows syntax highlighting for Con \TeX t (see figure 1) and MetaFun. There are many automations (snippets) with command-completion. From this bundle you can run Con \TeX t-MkII as well as Con \TeX t-MkIV. The compilation can be followed in a window (see figure 2). Through CTRL-2 the result can be viewed in the preferred viewer, which can be changed in the bundle editor.

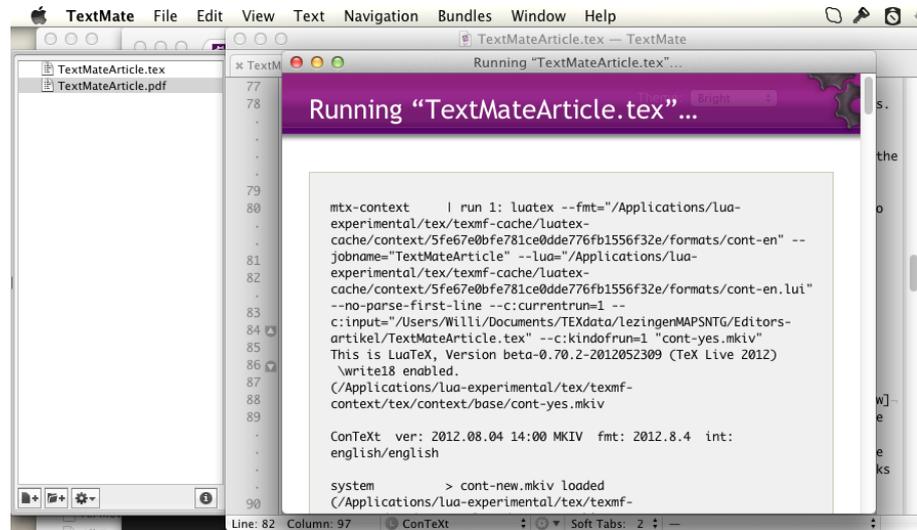


Figure 2. Compilation window

Summary

TextMate is one of the most powerful text editors available today. It offers a vast list of supported text-editing environments and many features that other editors are lacking. One of the most powerful tools is the *project drawer* which makes it easy to keep track of the files in a project. Another convenient feature is that the editor can be customized and adapted to whatever a workflow may require. Some might say that the fact that the editor requires a paid license is a drawback. However, considering what the application has to offer, the price is very reasonable. This article is in no way a comprehensive overview of TextMate's many features, and only highlights a small selection of gems in this editor. There is much, much more to be explored.

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