## $T_{E}X_{MACS} \longleftrightarrow Juris-M / Zotero integration.$



## **Tutorial Introduction**



## **Initial Setup**

During the early stages of development, and for this very early stage... not all of the support it needs is already part of Juris-M / Zotero, and so you must follow the instructions given by the README on my github page. As things progress, hopefully that will no longer be required.

At this time, it is only working on Linux. I don't have Windows or a Mac to develop it on. I will accept pull-requests from anyone willing and able to make it work on those platforms.

Someday this will all be an easily installable package for everyday people who don't have a degree or hobby in computer science. For now, it's a kit.

→ Install the Juris-M xpi plugin for Firefox or Juris-M stand-alone, according to the instructions given in the README on my github repository:

 $\label{lem:https://github.com/KarlHegbloom/zotero-texmacs-integration} \\ \mbox{Juris-M is available via:}$ 

http://juris-m.github.io

Be sure to also install the abbrevs-filter and other add-ons, such as zotfile.

 $\rightarrow$  Install a recent version of  $T_EX_{MACS}$ . There are pre-release builds available for Ubuntu via my github mirror of the upstream subversion repository:

```
https://github.com/KarlHegbloom/texmacs/releases/
```

With those, there are not guarantees; they are very fresh and sometimes crashy. If the latest one does not work right, try a slightly older one. When I discover that it's not working, I'll delete them. They won't harm your computer or lose your work, but might crash in new less-tested code. These are pre-release builds from the trunk of the subversion source code repository!

→ Install my propachi-texmacs plugin for Firefox or stand-alone Juris-M:

```
https://github.com/KarlHegbloom/propachi-texmacs/releases/
```

It will not auto-update, and from time to time, you may need to update it by-hand. Because it is not signed, you must use about:config in Firefox to set xpinstall.signatures.required to false in order for it to work. Someday perhaps it will be signed, or it's functionality rolled into upstream Juris-M / Zotero.

- $\rightarrow$  Install the OpenOffice plugin for Juris-M / Zotero. This is only necessary because the integration.js in Juris-M / Zotero checks for the plugin being installed. I will try and change this later, after I create a configuration GUI overlay to support this  $T_{EX_{MACS}}$  integration.
  - 1. Be aware that the OpenOffice plugin won't work right with the outputFormat set to bbl, which is what this T<sub>E</sub>X<sub>MACS</sub> integration requires. You can switch it back to the setting that OpenOffice requires by changing \*zotero.integration.outputFormat to rtf, or by disabling propachi-texmacs.
- ightarrow Clone the git repository of zotero-texmacs-integration and symlink it into your \$TEXMACS\_HOME like this:

```
mkdir ~/src
cd ~/src
git clone https://github.com/KarlHegbloom/zotero-texmacs-integration.git
mkdir ~/.TeXmacs/plugins || true
cd ~/.TeXmacs/plugins
ln -s ~/src/zotero-texmacs-integration zotero
```

- → Launch Firefox, then click the Juris-M icon to make sure it's working properly. Add a few references to your collection if you have nothing in it yet. Try visiting Scholar.Google.com and searching for a legal case. There will be an icon in the URL bar that you can click to add the case to Juris-M.
- → Launch TeXmacs, and open a new document. At the left end of the toolbar that is just above the document body, it will say "Generic". You may click that for a menu, to set the document type to anything you like. Next click the "+" and from that menu, pick tm-zotero to add it's features to your document. You can also choose the legal-brief document style if you wish.
- → A Zotero menu item will appear in the toplevel menu. You will see that this menu is present while viewing this documentation in front of you now, since I've added the tm-zotero style package to it.
- → Select "addCitation", or type \zcite and push Enter to add a new citation to the document. You may abreviate it to \zc if you prefer. Zotero should open a dialogue for you to set the document settings. Choose the citation and bibliography style you want. To do: endnotes don't work yet, but footnotes do. At any time, you may open that document settings again via the Zotero ⇒ Set Document Prefs menu. You'll find that when you change the citation style, all of the citations in the document change style automatically. They will flip from being in-text to footnote citations depending on what style you choose, and the bibliography will also be automatically updated.
- After the document settings are saved, the citation selection dialog box will be displayed. Type a substring of the item you're looking for to search for it. Click on the various elements to try them. If you have the "Indigo Signals" package installed, pressing Ctrl-S while in the "prefix" box that appears when you click the mouse on a citation will cause a menu of citation signals to appear. The text you type in those boxes may be styled with simple HTML-like tags, such as <i>italic</i>, <b>bold</b>, <sc>small caps</sc>. It may also support entry of LATEX, but you must follow each open brace with a! so it won't be escaped away before it reaches TEXMACS. After you press Enter, your citation will be inserted into the document.
- You may insert a bibliography using either the menu, or the  $\$  variable or  $\$  keyboard shortcuts.
- When the cursor is just to the right of a citation or just inside of the "zbibliography", you can press the Tab key to open the Zotero citation or bibliography edit dialogues. You will also see that there are settings available for each citation when you click the "wrench" icon.
- → When you are using a "note" citation style, you can tell it to make a citation be in-text by clicking the drop-down that will appear when the cursor is just inside the right edge of the citation's footnote number.
- Pressing Backspace will deactivate a \zcite tag, allowing you to hand-edit the text there. Press Enter to activate it again. You'll notice that when you've modified the text of a citation from the value that was automatically produced by the citation processor, that the flag at the left end of the field turns from green to red. If you then activate the "editCitation" by pressing Tab or using the menu item while the citation field is in focus, Zotero will prompt you, telling you that your hand-modifications will be lost if you proceed. It is usually better to adjust the contents of your reference database or abbrevs than to hand-edit individual citations.
- If you cut and then paste a citation into a new location in the document, perhaps moving one from near the end of a paragraph to the start of it or whatever... the formatted citation may no longer be correct for it's new position in the document, since when the same source is cited twice in a row, most styles will return an *ibib* form. Some have a first-citation form as well as a hereinafter form. The Refresh menu item will cause any moved citations as well as the bibliography to be updated. A keyboard shortcut for doing that is to use Backspace followed by Enter to disactivate and then reactivate the tag, which will trigger the refresh. The refresh is fairly efficient, selectively changing only the few that must be changed.

- $\rightarrow$  When the citation dialog is open, there is an Abbrevs button available that will open up the abbreviation editor. There are some special abbreviations and field name prefixes that can be applied when using Juris-M / Zotero with  $T_E X_{MACS}$ .
  - !here>>> in any Juris-M / Zotero reference database field will cause that field to be ommitted from citations and bibliographies. This is an internal part of citeproc.js.
  - X-X-X as an abbrev will cause the thing abbreviated and any trailing space to be removed. If empty parentheses are left behind, they will be removed as well.
  - Sup. Ct. Sup. Ct. X-X-X any string repeated twice and followed by X-X-X will be removed along with any trailing space. Use this when the result of the abbreviation must be used to determine the item's sort-order within the bibliography, but you don't want it to appear in the final output. If empty parentheses are left behind, they will be removed as well.
  - 00#@ is a sorting prefix. It consists of two numeric digits, followed by #@. The zotero.scm program inside of TEXMACS will remove it prior to display, but Juris-M / Zotero will have used it during the bibliography sorting process. This hack was designed to make it possible to sort "Sup. Ct." legal cases ahead of "Ct. of App." legal cases in a category-sorted bibliography. This sorting-prefix may be combined with any of the other abbreviations except for !here>>>, since it's internal to citeproc.js rather than to zotero.scm.

So, for example, to sort Supreme Court cases ahead of Court of Appeals cases, but not have "Sup. Ct." or "Ct. of App." appear in the output, I define abbreviations: Supreme Court  $\Rightarrow$  01#@Sup. Ct.Sup. Ct.X-X-X and Court of Appeals  $\Rightarrow$  04#@Ct. of App.Ct. of App.X-X-X and now both that prefix number as well as the "Sup. Ct." and "Ct. of App." strings are part of what citeproc.js uses internally when sorting the items, but they don't appear in the displayed result within your document.

With the jm-indigobook-catsort-bib.csl style, combined with an abbreviation like United States | US  $\Rightarrow$  01#@USUSX-X-X or US | Utah  $\Rightarrow$  02#@UtahUtahX-X-X, a citation to a United States Supreme Court case will display only the year inside of the parentheses, rather than e.g., "(US Sup. Ct. 2016)" or "(Utah Sup. Ct. 2016)", yet the categorized table of authorities will have tossed those into the correct bins according to the abbreviated jurisdictions user-defined sort-order—in this example, placing United States federal cases ahead of Utah state cases.

00000000@#\ztbibSubHeading{!Title of Subheading Here} is for creating a category subheading in your bibliography. It is used in the title field in the Juris-M / Zotero database. The item type should be set to an appropriate type to match one of the item types for the particular category. For legal cases, you must also set the jurisdiction and court in order to make the subheading appear in the right part of the bibliography.

Notice the ! which preserves the preceding { which would otherwise be "escaped" before being sent to  $T_EX_{MACS}$  in order to *prevent* it from being parsed as a  $I^AT_EX$  syntactic element, for the braces that surround the argument to a macro. Normally we want certain characters to be escaped, so we can write them as we please into bibliography annotations or titles, but sometimes we might want to pass  $I^AT_EX$  through to  $T_EX_{MACS}$  in this fashion to achieve special effects.

The ztbibSubHeading macro is defined in the legal-brief.ts style. You may visit that file to see what it looks like, and you may redefine it in your document preamble if you like. There are other "settings" sort of macros to be found in there that can also be overrided in your document preamble when you need that.

- Those will work with the included jm-indigobook-catsort-bib.csl, which must be installed into Juris-M / Zotero via it's configuration dialog, and then selected as the document's bibliography type. If you look inside of that file, way down at the bottom you will find the bibliography CSL macro, and at the top of that macro, you'll find the sort definition, which has a key calling a macro that categorizes the bibliographic items. The same sort of sorting prefixes and subheadings can of course be defined for your own modified versions of other CSL styles. It is not difficult to define a categorized sorting macro for any CSL style you desire to utilize.
- To insert the subheadings into your bibliography, use Zotero ⇒ Edit Bibliography, and select the dummy reference database items that have their titles defined as shown. They should be inserted into the correct place in the bibliography.
- You can see what I'm talking about by watching the screencast:

link to youtube here

... and by opening the sample document found in the ~/src/zotero-texmacs-integration directory.

© 2016 by Karl M. Hegbloom <arl.hegbloom@gmail.com>

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.1 or any later version published by the Free Software Foundation; with no Invariant Sections, with no Front-Cover Texts, and with no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".