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 **verified** 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. Having said that, it's possible that it might work on Windows or Mac OS-X as-is. Somebody needs to try it.

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 stand-alone, according to the instructions given in the README on my github repository:

```
https://github.com/KarlHegbloom/zotero-texmacs-integration
```

Juris-M is available via:

```
http://juris-m.github.io
```

The Juris-M standalone already has the `abbrevs-filter` and other add-ons, such as `zot-file`, installed. The `propachi-texmacs` still must be installed. (See below.)

You should also install the Juris-M "connector" plugin for Firefox, and configure it to use the same data directory as Juris-M standalone. **Always start Juris-M first, wait for it to post a GUI window, and then start Firefox.**

→   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. For now they may depend on versions of Qt5 that are from a ppa, rather than from the primary Ubuntu distribution. **You can always build TeXmacs yourself, from source.** 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 probably not auto-update, and from time to time, you may need to update it by-hand. **The plugin is signed now, so you don't need to make any special settings.** You can reset `xpinstall.signatures.required` to it's default now, if you had it set for an earlier (pre-release) version.

→ If it is not pre-installed, install the OpenOffice plugin for Juris-M / Zotero. This is necessary because it contains the service code that opens the localhost TCP network port and associates it with the protocol handlers that connects Juris-M / Zotero's `xpcom/integration.js` to OpenOffice. The "monkey patch" in `propachi-texmacs` fixes it up so that it can talk to T_EX_{MACS}, primarily by changing the outputformat from RTF, which it uses when integrating with OpenOffice or Word, to a set of L^AT_EX macros, which are readily translated and understood by T_EX_{MACS}.

- Be aware that the OpenOffice plugin won't work right with the `outputFormat` set to `bbl`, which is what this T_EX_{MACS} 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`.

→ 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
cd zotero-texmacs-integration
git checkout branch-v1.2a-next-wip
mkdir --parents ~/.TeXmacs/plugins
cd ~/.TeXmacs/plugins
ln -s ~/src/zotero-texmacs-integration tm-zotero
```

→ Launch Juris-M and make sure it's working properly. Always launch Juris-M standalone *before* you launch Firefox. 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.

→ Be aware that sometimes operations between $\mathrm{T_{\!E}X_{MACS}}$ and Juris-M / Zotero can take a while. Be patient, and watch the CPU meter. It does set the status-bar message, but sometimes that doesn't work quite the way I'd like, and there's not really any indication from $\mathrm{T_{\!E}X_{MACS}}$ that it's in the middle of a set of transactions with Juris-M / Zotero. The main message to wait and watch for is the one for Document_complete.

- The reason for this is that for any one of the several commands sent by $\mathrm{T_{\!E}X_{MACS}}$ to Juris-M / Zotero, it's integration program will need to cause the editor to perform a number of integration commands. For example, in order to insert the first citation, the document preferences may be automatically prompted for and set. When any given citation is changed, or a new one inserted into the document, citations nearby must be updated with, *e.g.,* new note-indexes, changing to say "*id.*" or "*supra*" for repeat citations, and then for each field needing updating, it must compel the editor to put the cursor in that citation field, and then set both the visible text as well as the hidden metadata. So once you initiate a command sequence, *i.e.,* addCitation, Juris-M takes control of $\mathrm{T_{\!E}X_{MACS}}$.

  ◦ If you like, you can enable the "Debug: Protocol trace to stdout?" item on the Zotero menu, and then start $\mathrm{T_{\!E}X_{MACS}}$ from a shell command prompt. It will print program trace information from "scaffolding" print statements embedded in the program. When you see it process "Document_complete" and remain quiescent, you know it's done and ready for the next thing.

  ◦ Note that enabling these printouts slows it down. The data printed out will vary depending on where I am with development. I comment off the printout statements when I no longer require them. Similarly, you can use them to inspect the value of variables during various stages of the running of this program, to help figure out what's wrong when it's not working right.

- It's a lot faster to work with when you do not put a zbibliography into the document until very close to the end of production, since when there's a large bibliography to format, it takes a while each time you enter a new zcite or edit one that's already in the document.

- For improved performance while editting a long document, you can use the menu item Document > Part > Show one part or Document > Part > Show several parts to narrow the display to only the sections you are working in, thus giving the typesetter less work to do, making interactive performance better. `tm-zotero` also respects the document part-mode, and so it only tells Juris-M / Zotero the list of fields for those within the visible parts of the document, thus reducing the size of the data-set that Juris-M / Zotero must process before providing the result, as well as the number of fields that any new citation or edited citation might affect and thus also require updating.

→ 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.

- Whether or not citations appear as footnotes (or endnotes) is a function of the CSL style chosen. A "note" style makes a footnote or endnote with the text of the citation within it, and only the normal superscript note number at the point of citation within the text. There are "numbered" styles that do not make a footnote; they instead create an in-text label like "[1]" that is repeated in the bibliography in front of the item being cited. Later citations to the same source will produce the same label in the text, linking to the same bibliography item. There are also "author-date" styles that make a short textual label in-text, which is then used as the item label in the bibliography entry. The `jm-indigobook` style creates an in-text full citation. The `jm-indigobook-law-review` style puts virtually the same citation into a footnote instead.

→ 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 TeX_MACS. After you press `Enter`, your citation will be inserted into the document.

→ I used the add citation dialog to enter this: *Adams v. State*, 2005 UT 62, 123 P.3d 400 (2005). Notice that this is a *parallel citation*. There are two entries in the Juris-M reference database for the same case. I cite one then the other immediately after it in the same reference cluster, and

it outputs as a parallel citation. Citing more than one reference in a citation cluster is always possible. It's only when consecutive items within the citation cluster are of the same *legal case* that they will be collapsed into a parallel citation.

→ *Brady v. Maryland*, 373 US 83 (1963); *United States v. Golub*, 694 F.2d 207 (10th Cir. Ct. of App. 1982); *Mooney v. Holohan*, 294 US 103 (1935). Notice that in this citation cluster, the first four characters of each citation are a hyperlink to the bibliography entry that corresponds with that citation. That link appears only when the document has a zbibliography, since otherwise, the link would not have a valid target.

→ Inside the zbibliography (at the end of this document) you'll find that some of the entries have the first four characters as a hyperlink to the on-line URL associated with that Juris-M/Zotero reference database entry. Whatever URL you place in that entry's "URL" field will appear here as the target of the hyperlinked first four characters of the bibliography item. The same hyperlink will appear in the resulting PDF document. It is possible to create relative links to other PDF documents stored near the final PDF of the document being created. To do: Someday there ought to be a way to fix up links to attachments or exhibits…

→ You may insert a bibliography using either the menu, or the `\zbibliography` or `\zb` 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.

- press `Shift-Space` to toggle the suppress trailing punctuation flag for that zcite.

- press `Backspace` to disactivate the tag, which will allow you to move the cursor inside of it to:

  ○ Make arbitrary edits, which will change the flag from green to red, and next time you invoke Juris-M / Zotero integration for that zcite, it will prompt you with the question of whether to overwrite your by-hand modification, or to keep it.

  ○ Cut, Copy, or Paste sub-cite's. When you highlight one or more `\zsubCite`'s within a disactivated `\zcite`, you can clipboard-cut, clipboard-copy, or clipboard-paste them. You can delete them from the citation cluster, cut them out of this zcite, and then paste them as zcite's into the primary text, or paste them into another disactivated zcite, adding them to that citation cluster. This is faster and more convenient than using copy + paste to make a copy of a zcite, then using editCitation to remove some from the first one, and the others from the second one, in order to split a zcite cluster into multiple zcite's. Instead, just disactivate the zcite, cursor-arrow in, use `Ctrl+SPC` to set the "mark", cursor-arrows to widen the selection to encompass one or more `\zsubCite`'s, `Ctrl+W` to "wipe", `Enter` to reactivate that tag,

cursor-arrow over to where you want to paste, then `Ctrl+Y` to "yank" the primary clipboard contents, inserting a zcite with the subcite's you just cut from the other one, or, alternatively, cursor-arrow over to another zcite, use `Backspace` to disactivate it, cursor-arrow inside of it, then `Ctrl+Y` to paste those subcite's in to become part of this zcite.

→ You will also see that when a zcite or zbibliography is in focus, there are settings available for each citation when you click the "wrench" icon. You can make your bibliography 1 or 2 columns, you can set it's relative text size, and you can control whether or not to render hyperlinks or ref-lists.

→ The appearance of the ref-list can be modified by changing the zbibItemRef macro. Look in the preamble to this document for an example, and also find it in the `tm-zotero.ts` file. The default assumes that you have sections in the document.

→ 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. The refresh is fairly efficient, selectively changing only the few that must be changed. You may also use `Meta+Ctrl+R` (or `Esc Ctrl+R`) to call for the refresh operation.

→ 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$_{\text{E}}$X$_{\text{MACS}}$.

• `!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 $T_{\!E}X_{MACS}$ 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` ⇒ `01#@Sup. Ct.Sup. Ct.X-X-X` and `Court of Appeals` ⇒ `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` ⇒ `01#@USUSX-X-X` or `US|Utah` ⇒ `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.

- `000000000@#\ztbibSubHeading{!Title of Subheading Here}` or `000000000@#<ztbibSubHeading>Title of Subheading Here</ztbibSubHeading>` is for creating a category subheading in your bibliography. Notice that there are exactly 9 zeros, followed by `@#`. It is used in the `title` field in the Juris-M / Zotero database. The zeros make it sort to the top of the list of titles in it's sort category. 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… it all depends on the (possibly categorizing) sort macro inside the CSL style file you are using. You *may* prefix that with a sorting-prefix, *e.g.,* "`01#@`", as described above, to fine-tune the sort order to ensure that the heading appears where it belongs in your completed bibliography.

  ○ Notice the `!` which preserves the preceding `{` which would otherwise be "escaped" before being sent to $T_{\!E}X_{MACS}$ in order to *prevent* it from being parsed as a $L^A T_{\!E}X$ 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 L^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.)

  – A `\ztbibSubHeading` type item *may* have a URL or DOI associated with it. If it does, then the first 4 characters will be made into a hyperlink to that URL or DOI, just as with other items in the zbibliography.

  – The parsing code inside of `zotero.scm` looks for the regexp `/.ztbib[A-Za-z]+/` and keeps whatever macro that is. It must begin with "`\ztbib`" for it to work, but you may define whatever macro you like to use for that.

  – If you see an error in the bibliography where there's something that looks like `<ztbibSnowFooting>` then that means that macro is not defined. Look for a typo in the Juris-M / Zotero database entry, or define the macro in your preamble or style package.

- Those special entries are designed to work with the included `jm-indigobook-cat-sort-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: URL[1]... and by opening the sample document found in the `~/src/zotero-texmacs-integration` directory.

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1. https://www.youtube.com/watch?v=4Ssik5qyt5w

SAMPLE BIBLIOGRAPHY

UNITED STATES SUPREME COURT CASES

Blakely v. Washington, 542 US 296 (2004).

Brady v. Maryland, 373 US 83 (1963).

DeShaney v. Winnebago County Dept. of Social Servs., 489 US 189 (1989).

Doggett v. United States, 505 US 647 (1992).

Douglas v. California, 372 US 353 (1963).

ex parte Young, 209 US 123 (1908).

Friends of Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc., 528 US 167 (2000).

Giglio v. United States, 405 US 150 (1972).

Joint Anti-Fascist Refugee Comm. v. McGrath, 341 US 123 (1951).

Mooney v. Holohan, 294 US 103 (1935).

Wall v. Kholi, 131 S. Ct. 1278 (2011).

Gonzales v. City of Castle Rock, 307 F.3d 1258 (10th Cir. Ct. of App. 2002).

United States v. Golub, 638 F.2d 185 (10th Cir. Ct. of App. 1980).

United States v. Golub, 694 F.2d 207 (10th Cir. Ct. of App. 1982).

OTHER JURISDICTIONS' COURT CASES

Wright v. Wright, 54 NY 437 (N.Y. Ct. of App. 1873).

Dr. Bonham's Case 1861, (1861) 77 ER 646 (Masters).

UTAH SUPREME COURT CASES

Adams v. State, 2005 UT 62., 123 P.3d 400 (2005).

State v. Rees, 125 P.3d 874 (2005).

UTAH COURT OF APPEALS CASES

State v. Hegbloom, 2014 UT App 213 (Utah Ct. of App. 2014).

State v. Rees, 63 P.3d 120 (Utah Ct. of App. 2003).

State v. Sery, 758 P.2d 935 (Utah Ct. of App. 1988).

Wiscombe v. Wiscombe, 744 P.2d 1024 (Utah Ct. of App. 1987).

OTHER COURT CASES

Commissioner of Probation v. Adams, 65 Mass. App. Ct. 725 (2006).

Wallace v. Van Pelt, 969 S.W.2d 380 (Mo. Ct. of App. 1998).

UNITED STATES CODE

Definition of "scheme or artifice to defraud," 18 US Code § 1346.

Old-age and survivors insurance benefit payments, 42 US Code § 402.

CONSTITUTION OF UTAH

Courts open—Redress of injuries, Utah Const. Art. I, § 11.

Rights of accused persons, Utah Const. Art. I, § 12.

Uniform operation of law, Utah Const. Art. I, § 24.

Fundamental rights, Utah Const. Art. I, § 27.

Private laws forbidden, Utah Const. Art. VI, § 26.

UTAH CODE

Construction, Utah Code § 68-3 (1953).

Statutes in derogation of common law not strictly construed—Rules of equity prevail, Utah Code § 68-3-2 (2010).

Purposes and principles of construction, Utah Code § 76-1-104 (1973).

Arrest by private persons, Utah Code § 77-7-3 (1980).

Dismissal of Protective Order, Utah Code § 78B-7-115 (2016).

Post-conviction remedies act, Utah Code § 78B-9 (2008).

Preclusion of relief—Exception, Utah Code § 78B-9-106 (2008).

Statute of limitations for postconviction relief, Utah Code § 78B-9-107 (2008).

Definitions, Utah Code § 78B-9-401.5 (2008).

UTAH RULES OF CIVIL PROCEDURE

Signing of pleadings, motions, and other papers; representations to court; sanctions, URCP 11.

Findings by the court; correction of the record, URCP 52.

New trial; altering or amending a judgment, URCP 59.

Relief from judgment or order, URCP 60.

Post-conviction Relief, URCP 65C.

UTAH RULES OF CRIMINAL PROCEDURE

Proceedings before a magistrate, URCrP 7.

UTAH RULES OF APPELLATE PROCEDURE

Appeal as of right: how taken, URAP 3 (2015).

Appeal as of right: when taken, URAP 4 (2015).

Discretionary appeals of interlocutory orders, URAP 5 (2014).

Motion for Summary Disposition, URAP 10 (2012).

The record on appeal, URAP 11 (2015).

Extraordinary writs, URAP 19 (2015).

Habeas corpus proceedings, URAP 20 (2012).

Briefs, URAP 24 (2015).

UTAH CODE OF JUDICIAL CONDUCT

Rules of Professional Conduct, UCJA Ch. 13.

Terminology, UCJA ch. 13, Rule 1.0 (2015).

UTAH LEGISLATURE BILLS

SB0263 SB0263, Utah State Senate (2013).

BOOKS, JOURNAL ARTICLES, AND OTHER DOCUMENTS

SAVE, An Assault Upon Our Civil Rights (Stop Abusive and Violent Environments 2013).