

file) or in the appropriate application (for example, a PPT file opens in PowerPoint). The Show File menu choice opens the folder on your hard drive that contains the attachment.

Article PDFs saved from databases often have cryptic filenames. To easily give an attached file a human-readable filename, right-click it and choose “Rename File from Parent Metadata.” This renames the file according to its parent attachment: for example, from “ELI7041.pdf” to “Educause–2008-7 Things You Should Know About Zotero.pdf”. This is an easy way to give your attachments filenames you can recognize at a glance.

Indexing PDF Attachments

Zotero can search the full text of PDFs in your library if you install an optional component. This is very easy and only takes a couple of clicks. Open your Zotero preferences from the gear/action menu and choose the Search tab.

In the section labeled PDF Indexing, click the Check for Installer button (figure 3.13). Within a few seconds, a confirmation window will appear asking whether you wish to install the PDF indexing components. Click Install and wait for the components to download. This may take a few minutes, but you can minimize the window and ignore it while it sets up.

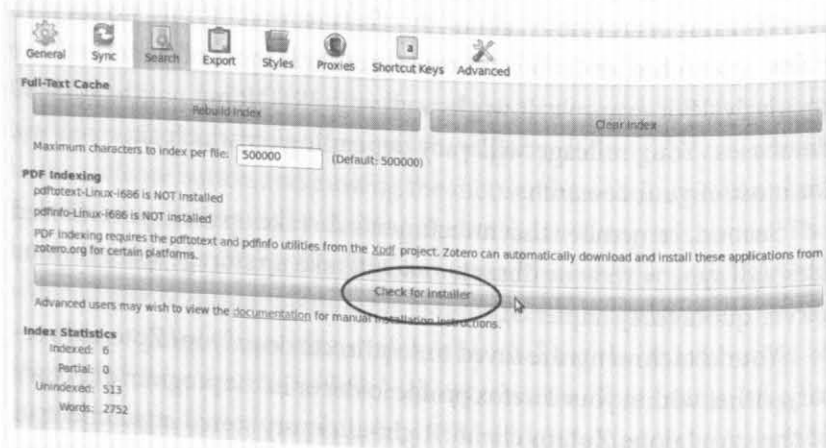


Figure 3.13. To make PDFs searchable in Zotero, click the Search tab on the Preferences screen and click Check for Installer.

Once installed, you can “index” any PDF in your library to make it searchable. Select a PDF attachment in your library. In the right column details you’ll see a line labeled “Indexed: No.” Click the button with two green arrows next to the “No” to index the file. Zotero “reads” the PDF briefly to make its text searchable and changes the “no” to “yes.” You can also index a PDF by right-clicking it in your library and choosing “reindex file” from the menu.

Of course, PDFs must contain text to be indexed. A PDF that contains only images cannot be indexed or made searchable.

File Links

A file link is an attachment that consists of only a link—a pointer—to a file. In other words, the attachment just refers to a file elsewhere on your computer instead of copying it into your library. The advantage of a link is that it takes up no space in your library, but the disadvantage is that if you access your library from a different computer, linked attachments are unavailable. Create a file link by selecting a citation and choosing “Attach link to file.”

Notes

A note is a library item that consists solely of text. Notes may be either standalone items or attached to citations. Create notes in several different ways:

- Click the yellow note button at the top center of the Zotero pane and choose “Add standalone note” or (if a citation is selected) “Add child note.”
- Select the Notes tab in the right column while viewing an item, and click “Add.”
- Zotero often automatically creates notes when saving items from online sources. If an online citation contains information that doesn’t fit into any of Zotero’s fields, Zotero will sometimes save the “extra” information into an attached note.

To edit the contents of a note, just type in the text window (figure 3.14). Use the toolbar above the text window to format your

text (add bold, italics, and so on) if needed. Double-click any note in your library to open it in a new and larger window that can be resized if needed.

The contents of all notes in your library are searchable.

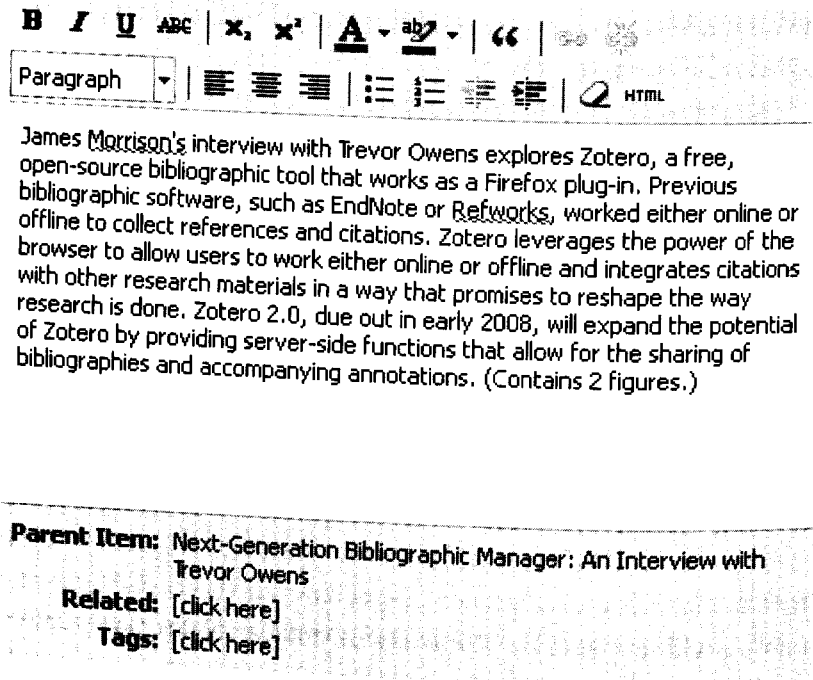


Figure 3.14. The note editor. It's similar to text editors in many other programs.

Viewing Attachments And Looking Up Items

To the right of the search box there's a green arrow, the Locate button. This allows you to view attachments, or look up any citation in your university's library or in other search tools like Google Scholar.

Select any reference in your library and click the Locate button. The dropdown list (figure 3.15) gives you a choice of tools to use to view this item. If the item includes a URL, or has PDFs or other attachments, the first choices on the menu may include:

- View PDF/View Snapshot: open the PDF or snapshot attachment in a browser window

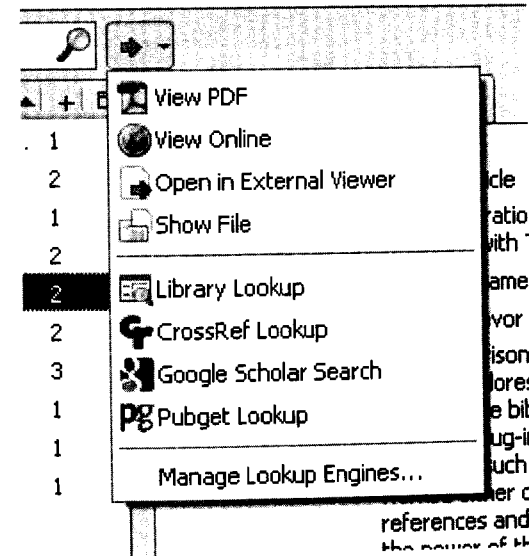


Figure 3.15: The Locate menu provides options for viewing attachments and URLs and for looking up references online.

- View Online: open the associated URL in a browser
- Open in External Viewer: open the attachment in another program (usually Adobe Reader for PDFs, but other types of files will open in the appropriate application)
- Show File: open the folder on your hard drive (inside your Zotero directory) that contains the attachment file

The above choices change depending on what types of attachments the reference has.

The Locate button also allows you to look up books and articles in a library's catalog or database. Choosing Library Lookup from the menu searches for the item (book or article) online. By default, Library Lookup uses the open WorldCat catalog to search for items. You can specify your own university's library, however:

- Click gear menu/Preferences and choose Advanced (figure 3.16).
- At the bottom of this window is an "OpenURL" section. OpenURL is a library server that searches the library's catalog and online journals.

text (add bold, italics, and so on) if needed. Double-click any note in your library to open it in a new and larger window that can be resized if needed.

The contents of all notes in your library are searchable.

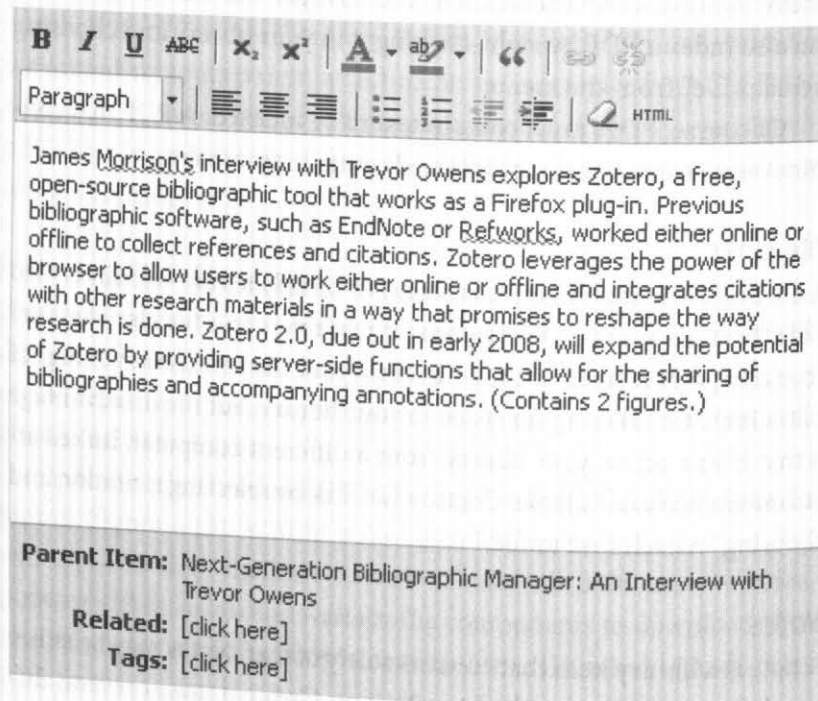


Figure 3.14. The note editor. It's similar to text editors in many other programs.

Viewing Attachments And Looking Up Items

To the right of the search box there's a green arrow, the Locate button. This allows you to view attachments, or look up any citation in your university's library or in other search tools like Google Scholar.

Select any reference in your library and click the Locate button. The dropdown list (figure 3.15) gives you a choice of tools to use to view this item. If the item includes a URL, or has PDFs or other attachments, the first choices on the menu may include:

- View PDF/View Snapshot: open the PDF or snapshot attachment in a browser window

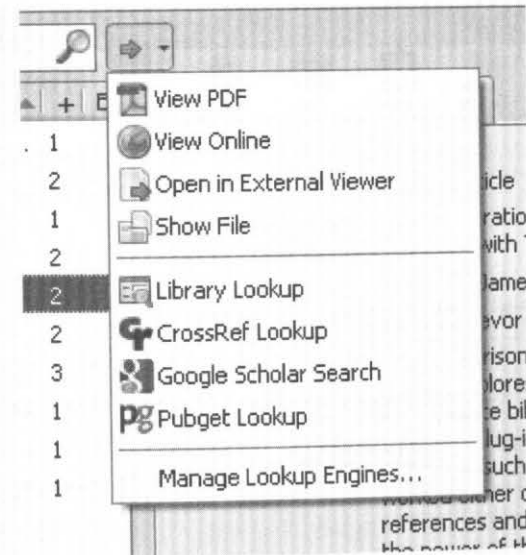


Figure 3.15: The Locate menu provides options for viewing attachments and URLs and for looking up references online.

- View Online: open the associated URL in a browser
- Open in External Viewer: open the attachment in another program (usually Adobe Reader for PDFs, but other types of files will open in the appropriate application)
- Show File: open the folder on your hard drive (inside your Zotero directory) that contains the attachment file

The above choices change depending on what types of attachments the reference has.

The Locate button also allows you to look up books and articles in a library's catalog or database. Choosing Library Lookup from the menu searches for the item (book or article) online. By default, Library Lookup uses the open WorldCat catalog to search for items. You can specify your own university's library, however:

- Click gear menu/Preferences and choose Advanced (figure 3.16).
- At the bottom of this window is an "OpenURL" section. OpenURL is a library server that searches the library's catalog and online journals.

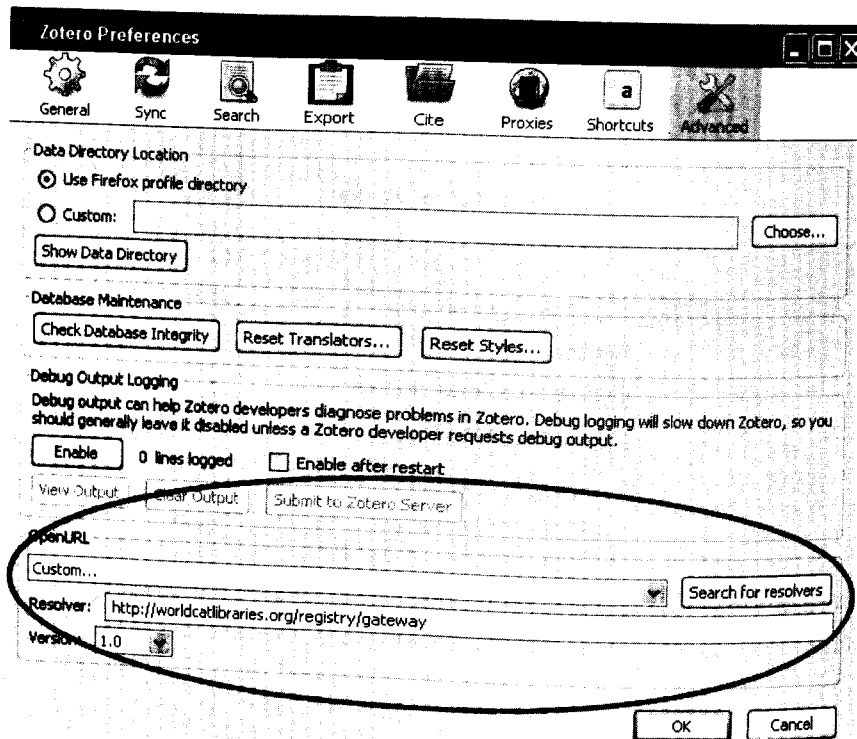


Figure 3.16. Use the “Search for resolvers” button or enter your library’s OpenURL address in the Advanced tab of Preferences.

- If you’re on campus, click “Search for resolvers” and Zotero may be able to find your library’s server automatically. Choose your institution from the drop-down menu.
- If you’re not on campus, check with your reference desk or web/systems librarian to see if they can provide you with your OpenURL address.

Once this preference has been set, Library Lookup will check your own university’s library holdings to locate the item you’ve selected. It should open in a new window with links to your catalog or online databases.

Other search tools available from the Locate menu include Google Scholar, CrossRef (for looking up items with Digital Object Identifier [DOI] numbers), and the Pubget article search engine. Choose which

searches appear on this menu by choosing Manage Lookup Engines from the Locate menu.

Searching Your Library

Of course, one of the main advantages to saving all your research materials into a library is so that you can find them again easily.

Basic Search

Simply start typing a word or name into the search box at the top of the center column. As you type, the center column will display all matches from the currently viewed library or collection.

The basic search shows matches from everything in your library: author names, titles, subjects, tags, and the contents of notes and indexed attachments. (When searching a large library or collection, this can sometimes be slow because Zotero searches each character as you type it. To speed up the search, put quotation marks around your search. Zotero will not search for each letter individually but will wait until you close the quotation marks.)

Remember that PDFs are not searchable unless you index them: see “Indexing PDF attachments” above.

Advanced Search

For a more precise search, click the magnifying glass to the left of the search box. This opens the advanced search window. Don’t let the name scare you: as in most search tools, “advanced” just means it provides more options.

The most common use of the advanced search is to search one or more fields specifically: just to search author names or titles, for example. The first search box defaults to a title search, which you can change by clicking Title to bring up a drop-down menu. You can specify a search of any field, and search multiple fields at once by clicking the plus sign at the right of the screen to add more search boxes.

Use the middle drop-down list to choose the type of match: “contains” matches any part of the field, “is” requires an exact match, and “does not contain” and “is not” do the opposite, of course, excluding anything that matches the text you enter.

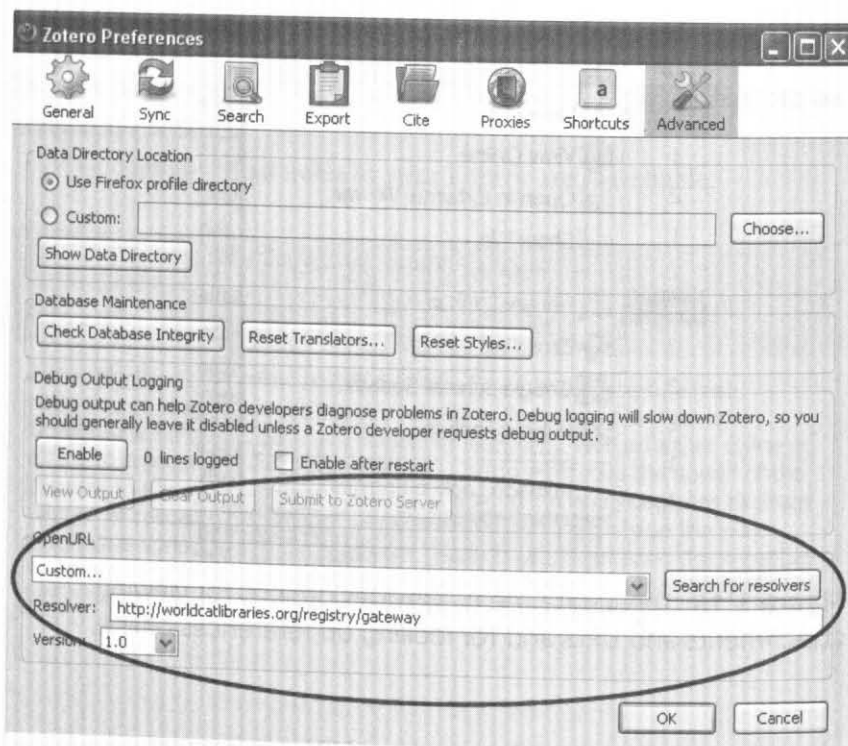


Figure 3.16. Use the “Search for resolvers” button or enter your library’s OpenURL address in the Advanced tab of Preferences.

- If you’re on campus, click “Search for resolvers” and Zotero may be able to find your library’s server automatically. Choose your institution from the drop-down menu.
- If you’re not on campus, check with your reference desk or web/systems librarian to see if they can provide you with your OpenURL address.

Once this preference has been set, Library Lookup will check your own university’s library holdings to locate the item you’ve selected. It should open in a new window with links to your catalog or online databases.

Other search tools available from the Locate menu include Google Scholar, CrossRef (for looking up items with Digital Object Identifier [DOI] numbers), and the Pubget article search engine. Choose which

searches appear on this menu by choosing Manage Lookup Engines from the Locate menu.

Searching Your Library

Of course, one of the main advantages to saving all your research materials into a library is so that you can find them again easily.

Basic Search

Simply start typing a word or name into the search box at the top of the center column. As you type, the center column will display all matches from the currently viewed library or collection.

The basic search shows matches from everything in your library: author names, titles, subjects, tags, and the contents of notes and indexed attachments. (When searching a large library or collection, this can sometimes be slow because Zotero searches each character as you type it. To speed up the search, put quotation marks around your search. Zotero will not search for each letter individually but will wait until you close the quotation marks.)

Remember that PDFs are not searchable unless you index them: see “Indexing PDF attachments” above.

Advanced Search

For a more precise search, click the magnifying glass to the left of the search box. This opens the advanced search window. Don’t let the name scare you: as in most search tools, “advanced” just means it provides more options.

The most common use of the advanced search is to search one or more fields specifically: just to search author names or titles, for example. The first search box defaults to a title search, which you can change by clicking Title to bring up a drop-down menu. You can specify a search of any field, and search multiple fields at once by clicking the plus sign at the right of the screen to add more search boxes.

Use the middle drop-down list to choose the type of match: “contains” matches any part of the field, “is” requires an exact match, and “does not contain” and “is not” do the opposite, of course, excluding anything that matches the text you enter.

Checkboxes below the search boxes allow you to search subfolders of a collection, limit your search to only top-level items (that is, excluding attachments), or to show both parent and child items.

The percent sign (%) is a “wildcard” character that will match any characters in a search. For example, searching for “environment%” will match environment, environmental, environmentalists, and anything else that starts with “environment.” “s%d” would find “sad,” “started,” “solid” and anything else that starts with S and ends with D, no matter how many characters in between.

Saved Searches in Use

Kate has asked her grad student assistant Anita to track down all the sources listed in a published literature review. While she works on this project, Anita has to keep track of which sources the library has, which she has already obtained and which ones she needs to request via interlibrary loan.

Anita first searches for all the citations online and saves them to her Zotero library. She adds a custom tag to all the citations: “#needed” (she decides to add a hashmark to her custom tags for her own convenience, just to visually distinguish them). Then she sets up a saved search for “Tag is #needed”.

She adds additional tags as she works: #library for articles her university library has, #requested for the ones she requests via ILL, and changes #needed or #requested to #obtained for the ones she has actually gotten her hands on. She sets up saved searches for each tag so she can keep track of the status of each item. Over the next few days, she updates tags as she works and her citations move from the #needed list to #library or #requested as she tracks them down, until they are all in the #obtained list and ready to give to Kate.⁴

Saved Searches

From the advanced search screen you can also save a search to your library. Saving a search makes a new list of all matches to your search, and automatically updates that list as new matching items are added to your

collection. Click Save Search on the advanced search screen to create a new saved search. Saved searches appear in the left column below your collections (the icon for a saved search is a folder with a magnifying glass).

For example, if I am researching podcasting, I might search for all items in my library that have “podcast%” in the Title or Tag fields. If I save this search, it creates a list of all matching items. From then on, any time I save an item with “podcast” (or “podcasting” or “podcasts”) in the title or tags, it automatically appears in the saved search list.

Deleting and Undeleting Items

To delete an item from your library, right-click it and choose “Delete Selected Item From Library.” To remove it from a collection you’re currently viewing but not delete it altogether, right-click the item and click “Remove Selected Item” (“...from this collection” is implicit).

The Delete key is a shortcut: when viewing a collection, pressing delete removes the selected item from the collection but not the library. When viewing My Library, pressing delete removes the item from the library entirely and moves it to the Trash.

All deleted items go into the Trash folder, located below your library and below all of your collections. The Trash works like the trash or recycle bin on your desktop. Items stay in the Trash until you empty them. If you change your mind about deleting an item, just drag it from the Trash back into your library. Empty the Trash by right-clicking it and choosing Empty Trash from the menu. Your Trash folder does synchronize with your library online, and attachments in the Trash do take up quota space (see chapter 5).

Saving a Copy of your Library

You may want to save your library (or just one collection or specific items) in order to give a copy to someone, to have it available on a flash drive, move it to another computer or just to have a backup copy. (Synchronizing your library, chapter 5, does keep an automatic backup for you, but you might want a redundant copy.)

Exporting a copy of anything in your library is easy. Select either My Library, a collection, or individual items and right-click. Choose

“Export” from the pop-up menu. If you’ll be using the exported items in Zotero, choose “Zotero RDF” from the drop-down list. (Selecting “Export Notes” and/or “Export Files” will include notes and/or attachments.) If you’ll be using the items with another program, you probably want to export in RIS format (see “Moving to (and from) Zotero” below).

Click OK and save. Exporting to Zotero RDF creates a folder containing an .RDF file. To import this file into Zotero on another computer, select “Import” from the gear menu and browse to that .RDF file.

Moving to (and from) Zotero

Experienced researchers who use other reference managers like EndNote, Mendeley or RefWorks often ask about moving their personal library from their former software of choice into Zotero. This is usually easy, with a few caveats. The same is true for transferring citation data from Zotero to another program, for example to share citations with a colleague using EndNote.

Since Zotero is built on open standards, it can import and export references in a number of file formats that are common to most bibliographic software. This gives the two programs a “common language” to read each others’ data.

Zotero can import any of the following formats:

- Bibliontology RDF
- MODS (Metadata Object Description Schema)
- BibTeX
- RIS
- Refer/BibIX
- RDF
- CTX
- MAB2
- MARC

...but don’t worry if these acronyms don’t mean anything to you. The most commonly used file format among bibliographic software is RIS. Most users can ignore the other formats unless they have a specific need for them.

Nearly all reference manager software can read and write a format called RIS (which stands for Research Information Systems, the former publisher of a bibliographic program called Reference Manager now made by Thomson Reuters). This makes it a useful common format for reference managers; in fact many online databases use the RIS format for downloading citation data since it is so widely used.

The general steps to transfer citations from another program into Zotero are:

- Use the other program’s Export feature to save your library into RIS format. The details of this step vary from program to program, of course. In EndNote, click the File menu and click Export. In RefWorks, click References and then Export.
- You should have a choice of file format to export. Look for a choice labeled RIS, RefMan, or Reference Manager. Save the file.
- This generally creates a file with a .TXT or .RIS extension. (The RIS format is just a text file containing citations formatted in a standard way. You can open it with a text editor if you’re curious about what the contents look like.)
- Open Zotero. Click the gear/action menu and choose Import, and simply browse to the RIS file you just saved. When you open that file, Zotero will import your citations into your library in a new collection labeled with the current date and time.

Important note: Exporting a RIS file into Zotero will not import PDFs and other attachments—just the citations and metadata! Users with a large library of PDFs may want to try the “Retrieve metadata for PDF” feature (see “Indexing PDF attachments” above).⁵

Several libraries have created excellent step-by-step guides to importing and exporting between the reference managers they support.^{6,7} The audience for such a guide might also be interested in information like feature comparisons or other ways in which different programs can interact, such as Zotero’s ability to import EndNote bibliographic styles.

Notes

1. Center for History and New Media, “proxies [Zotero Documentation].”
2. Unfortunately for legal researchers, at this writing neither Lexis-Nexis nor West-law work with Zotero. Hein Online, however, does, and the latest version of the Bluebook style was written by an attorney.
3. If you have both EndNote and Zotero installed on your computer, Zotero will usually “take over” and import any exported citations, preventing them from going to EndNote. You can disable the Zotero add-on and restart the browser to allow EndNote to receive exported citations. Re-enable the add-on to use Zotero again.
4. Mullen, “How to Create a Work Flow in Zotero.”
5. In some cases it may be possible to transfer a large EndNote library with PDFs by using scripts to rewrite the RIS file, but this may be more trouble than many users want to take. See Center for History and New Media, “kb:importing_records_from_endnote [Zotero Documentation].”
6. George Mason University Libraries, “Citation Migration.”
7. Princeton University Library, “Export to RW/EN/Zotero.”

Further Reading

- Center for History and New Media. “Attaching files.” *Zotero*, 2010. http://www.zotero.org/support/attaching_files.
- . “Getting stuff into your library.” *Zotero*, 2010. http://www.zotero.org/support/getting_stuff_into_your_library.
- . “Zotero—Quick Start Guide”, 2009. http://www.zotero.org/documentation/quick_start_guide.
- . “kb:importing_records_from_endnote [Zotero Documentation].” *Zotero*, 2009. http://www.zotero.org/support/kb/importing_records_from_endnote.
- . “proxies [Zotero Documentation].” *Zotero*, 2010. <http://www.zotero.org/support/proxies>.
- Clark, Brian, and John Stierman. “Identify, Organize, and Retrieve Items Using Zotero.” *Teacher Librarian* 37, no. 2 (December 1, 2009): 54–56.
- George Mason University Libraries. “Citation Migration”, 2008. <http://citationmigration.gmu.edu/>.
- Morrison, James L., and Trevor Owens. “Next-Generation Bibliographic Manager: An Interview with Trevor Owens.” *Innovate: Journal of Online Education* 4, no. 2 (2008). <http://www.innovateonline.info/index.php?view=article&id=540>.
- Mullen, Lincoln. “How to Create a Work Flow in Zotero.” *Backward Glance*, August 28, 2009. <http://lincolnmullen.com/2009/08/28/how-to-create-a-work-flow-in-zotero/>.
- Princeton University Library. “Export to RW/EN/Zotero.” *Using RefWorks at Princeton*, 2011. <http://libguides.princeton.edu/content.php?pid=30227&sid=230429>.
- Puckett, Jason. “Zotero [GSU Library guide]”, 2010. <http://research.library.gsu.edu/zotero>.

CHAPTER 4 Creating Bibliographies and Writing with Zotero

The previous chapter covered putting “stuff” into Zotero: saving citations, attaching files, and organizing and searching what you’ve put into your library. This chapter covers the reverse situation: once the references are saved to the library, using them to produce bibliographies and other forms of output.

Zotero can produce bibliographies in two basic ways. First, you can easily make a bibliography by simply selecting items from the library, choosing a style, and saving or pasting them to a file. This method allows you to create bibliographies that can go into any type of file: documents, text files, web pages, Google Docs or anywhere else. One advantage to creating bibliographies in this way is that they contain the data needed for Zotero to save citations: that is, if a Zotero bibliography is posted to the web, anyone else can save the citations from that bibliography.

The second method of building bibliographies requires the word processor toolbars mentioned briefly in chapter 2. The toolbars for Microsoft Word, OpenOffice and NeoOffice allow writers to insert in-text citations or footnotes from a Zotero library into the document and build the bibliography automatically as new citations are added. In other words, each time you cite a source in your text, Zotero adds that citation to the bibliography in the correct order.

Zotero includes fifteen different bibliographic styles when first installed, including MLA, APA, Turabian and four variants of Chicago style, which probably covers the needs of most writers. Approximately 1400 additional styles are available for download from zotero.org/styles.

Quick and Easy Bibliographies

Creating a bibliography from the library is simple and can be done in just a couple of clicks. Bibliographies created in this way can be inserted into any document or text file.

The two ways of creating quick bibliographies (which I call “click and paste” and “drag and drop”) are useful for creating simple bib-

liographies for short papers, or bibliographies to go into a web page. For longer writing projects, the “Zotero and Word Processors” section below may be more useful: it outlines how to create in-text citations and footnotes, and bibliographies that automatically update themselves as citations are added to the document.

Use one of the following two methods when you need to create an annotated bibliography, since they simply create citations as regular text in the document to which you can add your own annotations.

Click and Paste

This is perhaps the most basic way to create a bibliography with Zotero. Just select the citations, choose the style, and paste the bibliography into your document (or save or print it).

First, select the references in the library. Either select individual items from the center column, select everything in the center column with control-A/command-A, or select a collection in the left column. Right-click your selected items and choose Create Bibliography.

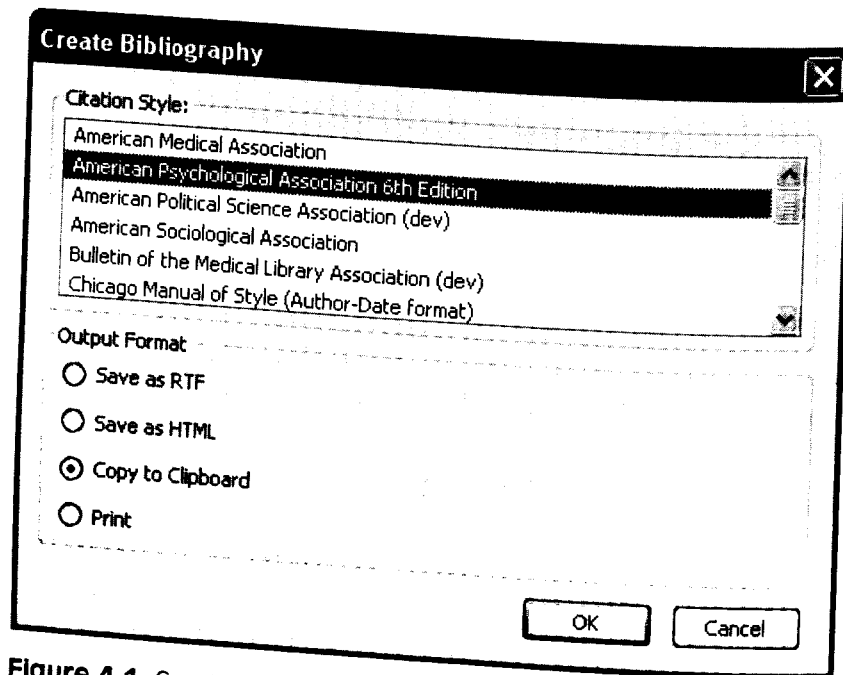


Figure 4.1. Create Bibliography dialog

Next, select the style you want. Zotero remembers the last style you used and will select it by default. (If you need a style not in this list, see the “Bibliographic Styles” section below for instructions on downloading more styles.)

Finally, choose “Copy to clipboard,” click OK, and simply paste it into your document. The bibliography will appear in the style you chose. This is a good moment to check it for accuracy! If you notice any mistakes in the citations, it is a good idea to correct them in the Zotero library itself so that the reference will be accurate for future bibliographies.

Using Zotero Bibliographies on the Web

Nathan is creating a research guide on the web for an undergraduate journalism class. He’s including some citations to some recommended books. He creates a Zotero collection for the class, saves the citations from the library catalog, right-clicks the collection and saves it as an HTML file. He adds that bit of HTML code to his web page and sends Kate, the professor, the URL to share with her class.

Ian opens the research guide on his laptop at home. He notices that Zotero shows a folder icon, clicks it, and is presented with a list of references to save. He selects them all and saves them to *his* Zotero collection for the class.

When you choose Create Bibliography, notice that there are options besides copying and pasting. Under Output Format, there are also choices to save to RTF, save to HTML and print.

Save your bibliography to Rich Text Format (RTF) if you want to create it as a file for use in a word processor. RTF is a standard format that all word processors on any operating system can read. It retains formatting like bold, italics and underlining. Double-clicking an RTF file on most computers opens it in Word or OpenOffice.

Zotero can also save bibliographies to HTML for use on the web. This includes all the markup tags needed to preserve the correct formatting. It also includes all the citation metadata—the code that Zotero

liographies for short papers, or bibliographies to go into a web page. For longer writing projects, the “Zotero and Word Processors” section below may be more useful: it outlines how to create in-text citations and footnotes, and bibliographies that automatically update themselves as citations are added to the document.

Use one of the following two methods when you need to create an annotated bibliography, since they simply create citations as regular text in the document to which you can add your own annotations.

Click and Paste

This is perhaps the most basic way to create a bibliography with Zotero. Just select the citations, choose the style, and paste the bibliography into your document (or save or print it).

First, select the references in the library. Either select individual items from the center column, select everything in the center column with control-A/command-A, or select a collection in the left column. Right-click your selected items and choose Create Bibliography.

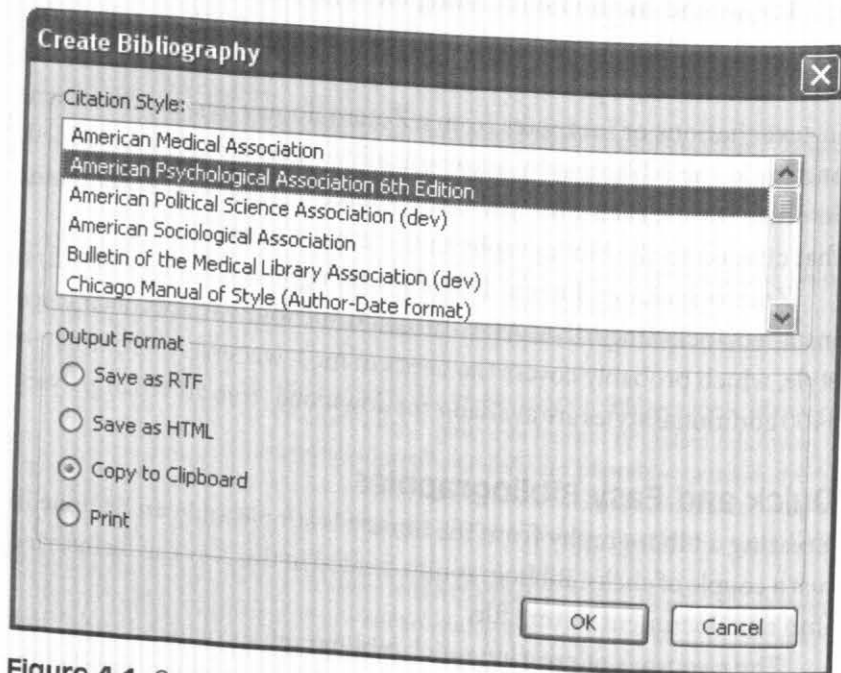


Figure 4.1. Create Bibliography dialog

Next, select the style you want. Zotero remembers the last style you used and will select it by default. (If you need a style not in this list, see the “Bibliographic Styles” section below for instructions on downloading more styles.)

Finally, choose “Copy to clipboard,” click OK, and simply paste it into your document. The bibliography will appear in the style you chose. This is a good moment to check it for accuracy! If you notice any mistakes in the citations, it is a good idea to correct them in the Zotero library itself so that the reference will be accurate for future bibliographies.

Using Zotero Bibliographies on the Web

Nathan is creating a research guide on the web for an undergraduate journalism class. He’s including some citations to some recommended books. He creates a Zotero collection for the class, saves the citations from the library catalog, right-clicks the collection and saves it as an HTML file. He adds that bit of HTML code to his web page and sends Kate, the professor, the URL to share with her class.

Ian opens the research guide on his laptop at home. He notices that Zotero shows a folder icon, clicks it, and is presented with a list of references to save. He selects them all and saves them to *his* Zotero collection for the class.

When you choose Create Bibliography, notice that there are options besides copying and pasting. Under Output Format, there are also choices to save to RTF, save to HTML and print.

Save your bibliography to Rich Text Format (RTF) if you want to create it as a file for use in a word processor. RTF is a standard format that all word processors on any operating system can read. It retains formatting like bold, italics and underlining. Double-clicking an RTF file on most computers opens it in Word or OpenOffice.

Zotero can also save bibliographies to HTML for use on the web. This includes all the markup tags needed to preserve the correct formatting. It also includes all the citation metadata—the code that Zotero

needs to *save* an item from the web. In other words, when a bibliography created by Zotero is viewed in a web browser, the browser displays capture icons in the address bar so that the reader can save those same citations to her own library.

The final choice, below Copy to Clipboard, is Print. No surprises here: this opens a standard print dialog box.

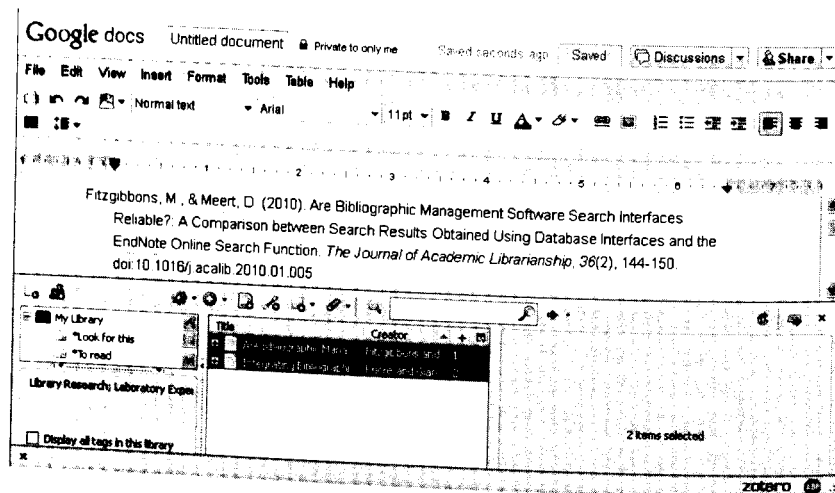


Figure 4.2. Drag and drop references from Zotero to Google Docs to create a bibliography in the default style.

Drag and Drop and Default Styles

Perhaps even simpler, you can literally drag references from the Zotero library into any text field in your web browser. This is particularly useful when writing in Google Docs (figure 4.2).

The citations will appear fully formatted in the default style. To set your default style, open Zotero's preferences window (from the gear menu), click the Export tab (the clipboard icon), and choose the style you use most from the drop-down menu. All drag-and-drop bibliographies will be formatted in this style. (Keyboard shortcut: control-alt-C copies selected references to the clipboard in the default style, for pasting anywhere.)

The default style can be customized on a per-site basis, so that drag-and-drop bibliographies appear in different styles on different sites.

On the same Export preferences window, click the + button below the Site-Specific Settings window, type in part of a URL and choose the style from the Output Format menu.

For example, if you usually use Chicago style but need to use APA on a PBworks site you're building, set your default style to Chicago, click the + under Site-Specific Settings, type pbworks.com as the domain and choose APA under Output Format for that site. Any references you drag into a pbworks.com page will be formatted in APA, and any you drag into other sites (like Google Docs) will be in Chicago style.

Zotero and Google Docs

The click-and-paste or drag-and-drop methods are the best ways (the only ways, really) to use Zotero with the online Google Docs word processor. There is no way to install a Zotero toolbar into Google Docs since it exists only on the web.

I do a great deal of my writing, at least first drafts, in Google Docs. It's convenient since all of my documents are accessible from any computer. Creating drag-and-drop bibliographies from Zotero is easy (both tools are in the browser window if I'm using Firefox) and works well. When using Zotero with Docs, remember to set the preferences to reflect your desired bibliographic style.

Using Google Docs with Zotero carries a few disadvantages. Zotero has no way to interact directly with Docs the way it can with Word or OpenOffice. This means that there is no way for Zotero to create in-text citations in a Docs document, nor can it create bibliographies that update automatically as you write.

RTF Scan

If you add citations within a document file in a special way, Zotero can scan the document, add citations and format the bibliography when you're done writing. This feature is called "RTF Scan." It's not as intuitive or easy as using the word processor toolbars (see the next section of this chapter), but it doesn't require installing any additional plugins besides Zotero itself.

Type in-text citations within curly braces as you write: for example, "{Puckett, 2010}." See the list at right for the citation formats

needs to *save* an item from the web. In other words, when a bibliography created by Zotero is viewed in a web browser, the browser displays capture icons in the address bar so that the reader can save those same citations to her own library.

The final choice, below Copy to Clipboard, is Print. No surprises here: this opens a standard print dialog box.

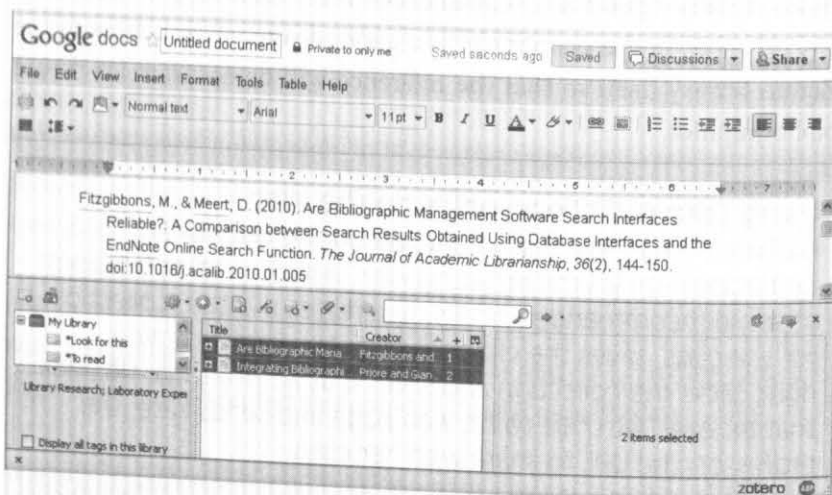


Figure 4.2. Drag and drop references from Zotero to Google Docs to create a bibliography in the default style.

Drag and Drop and Default Styles

Perhaps even simpler, you can literally drag references from the Zotero library into any text field in your web browser. This is particularly useful when writing in Google Docs (figure 4.2).

The citations will appear fully formatted in the default style. To set your default style, open Zotero's preferences window (from the gear menu), click the Export tab (the clipboard icon), and choose the style you use most from the drop-down menu. All drag-and-drop bibliographies will be formatted in this style. (Keyboard shortcut: control-alt-C copies selected references to the clipboard in the default style, for pasting anywhere.)

The default style can be customized on a per-site basis, so that drag-and-drop bibliographies appear in different styles on different sites.

On the same Export preferences window, click the + button below the Site-Specific Settings window, type in part of a URL and choose the style from the Output Format menu.

For example, if you usually use Chicago style but need to use APA on a PBworks site you're building, set your default style to Chicago, click the + under Site-Specific Settings, type pbworks.com as the domain and choose APA under Output Format for that site. Any references you drag into a pbworks.com page will be formatted in APA, and any you drag into other sites (like Google Docs) will be in Chicago style.

Zotero and Google Docs

The click-and-paste or drag-and-drop methods are the best ways (the only ways, really) to use Zotero with the online Google Docs word processor. There is no way to install a Zotero toolbar into Google Docs since it exists only on the web.

I do a great deal of my writing, at least first drafts, in Google Docs. It's convenient since all of my documents are accessible from any computer. Creating drag-and-drop bibliographies from Zotero is easy (both tools are in the browser window if I'm using Firefox) and works well. When using Zotero with Docs, remember to set the preferences to reflect your desired bibliographic style.

Using Google Docs with Zotero carries a few disadvantages. Zotero has no way to interact directly with Docs the way it can with Word or OpenOffice. This means that there is no way for Zotero to create in-text citations in a Docs document, nor can it create bibliographies that update automatically as you write.

RTF Scan

If you add citations within a document file in a special way, Zotero can scan the document, add citations and format the bibliography when you're done writing. This feature is called "RTF Scan." It's not as intuitive or easy as using the word processor toolbars (see the next section of this chapter), but it doesn't require installing any additional plugins besides Zotero itself.

Type in-text citations within curly braces as you write: for example, "{Puckett, 2010}." See the list at right for the citation formats

that will work.¹ Type “{Bibliography}” wherever you want the bibliography to appear, or leave it out to have the bibliography automatically placed at the end of the document.

When finished, use your word processor’s “Save As” function to save the document as an RTF file. RTF stands for Rich Text Format; it’s a universal format that any word processor can read and write.

Now open Zotero. Click the gear menu and choose “RTF Scan.” Next to “Input File,” click Choose File and browse to the RTF document you just saved. “Output File” will default to the name of your input document with “(Scanned)” appended to the end of the filename, but you can of course give it a different name or location by clicking Choose File and selecting a new destination. Click Next when ready to proceed.

Zotero now attempts to match (or “map”) your bracketed citations in the document to references in your library. The next screen lets you verify the citations before creating the finished document. Zotero displays three categories: unmapped citations, ambiguous citations, and mapped citations.

Unmapped citations are those for which Zotero was unable to find a match. Click the icon to the right of an unmapped citation to browse the library yourself and choose the correct reference.

Ambiguous citations match more than one reference in your library. Possible matches show below each ambiguous citation—click the icon with the green arrow to choose the correct reference, or click the icon to the right of the ambiguous citation to browse the library for the correct one.

Citations for which Zotero did find a match are shown as mapped citations at the bottom of the window. Click the icon to the right of a mapped citation to change the reference.

Formatting Citations for RTF Scan

The RTF Scan feature can read citations typed in any of these formats:

```
{Smith, 2009}
Smith {2009}
{Smith et al., 2009}
{John Smith, 2009}
{Smith, 2009, 10–14}
{Smith, “Title”, 2009}
{Jones, 2005; Smith, 2009}
```

When you have chosen references for all ambiguous and unmapped citations, click Next. Choose the desired bibliographic style on the next screen and then click Finish. Open the output file and don’t forget to check the finished product for accuracy.

Zotero and Word Processors

Installing the Toolbar

The methods above don’t require any software other than Zotero itself to create bibliographies. By installing the appropriate toolbar, though, a word processor can pull citations from the library, format the in-text citations or footnotes in the document, and automatically build a bibliography as the user writes. Zotero toolbars are available for Word for Windows, Word for MacOS, and OpenOffice (or NeoOffice) for Windows, MacOS or Linux. Standalone Zotero includes these toolbars; you’ll only need to install them separately if you are using Zotero for Firefox.

Quick Instructions: Installing the Word Processor Toolbars

1. Close your word processor.
 2. Go to zotero.org/support/word_processor_plugin_installation in Firefox. (If several versions of Zotero are listed, follow the instructions on the page and choose the version you’re using.)
 - a) Windows Word users, click **Install Word for Windows Plugin**
 - b) Mac Word users, click **Install PythonExt**, install as in step 3, then click Install Word for Mac Plugin.
 - c) OpenOffice users (any OS), click Install **OpenOffice Plugin**.
 3. Click Allow, then Install.
 4. Wait for the plugin to download, restart Firefox.
 5. Open your word processor.
-

If you didn’t install the word processor toolbar when you installed Zotero, you can add it at any time. Open Zotero.org in Firefox and click the “Download word processor plugins” link (zotero.org/support/word_processor_plugin_installation). Close your word processor before you start.

- Close the word processor.
- Open Zotero's preferences (gear menu/Preferences).
- Click the Cite tab, the Word Processors sub-tab and then the "Reinstall Word Add-in" (or "Reinstall OpenOffice Extension") button.
- Restart Firefox or your word processor if prompted.

This quick process fixes most toolbar problems. For help with other word processor toolbar problems, see the suggestions on the Zotero site.²

Using the Word/OpenOffice Toolbar

The Word (or OpenOffice) toolbar creates a connection between the word processor and the Zotero library. It allows the writer to "pull" references from her library, creates in-text citations or footnotes in the document, automatically formats them in the desired style, and builds the bibliography as the writer adds new citations. (The toolbar works the same for Microsoft Word and OpenOffice Writer, so for brevity's sake I will refer to it as the "Word toolbar" hereafter, with the understanding that all of these instructions apply to OpenOffice users as well.)

Important note: Word has a built-in citation management feature called References. When using Zotero, remember that you're using it *instead* of the Word feature. Use the Zotero toolbar and ignore the References tab in the Word menu bar entirely.

The toolbar has seven buttons. In order, they are:

- **Insert Citation:** This button adds in-text citations or footnotes to the document. Citations appear at the cursor's location when you click Insert Citation.
- **Edit Citation:** This allows the writer to change an existing citation: add or edit page numbers, for example, or change the citation to an entirely different source.
- **Insert Bibliography:** This adds the automatically generated bibliography to the document at the cursor's location (usually at the end, but it can go anywhere in the document).
- **Edit Bibliography:** This button allows the writer to add references to customize the bibliography as needed, and to edit individual references.

- **Refresh:** Clicking this button "re-reads" all references in the document, updating them to show any changes made in the Zotero library.
- **Doc Prefs** (short for document preferences): This button is used to change bibliographic styles, but can also make changes in how the references are stored within the document.
- **Remove Codes:** This removes all special Zotero code from the document.

Quick Reference: Inserting a Citation

1. Click the Insert Citation button on the Zotero toolbar in Word.
 2. When you insert the first citation, choose a bibliographic style from the list and click OK.
 3. Browse or search to choose the reference you want to cite. Optionally enter a page number.
 4. Click OK.
-

Citing Sources

Start writing just as you normally would. When you reach a point in the document where you'd type an in-text citation or a footnote, click the first button on the Zotero toolbar, Insert Citation (Mac Word users: click "Add Citation" from the Zotero menu). Zotero must be running in order to cite sources from your library.

The first time you cite a source in a document, Zotero presents a list of all the bibliographic styles available. Scroll through the list, click the desired style, and click OK. This indicates to Zotero what style this document should use. You can bring back this dialog box and choose a new style at any time by clicking the Doc Prefs button.

(Two other options appear on this dialog box: First, some styles offer a choice between footnotes and endnotes. This choice will be grayed out if it doesn't apply to the selected style. Second, some styles offer a choice between "Fields" or "ReferenceMarks" and "Bookmarks." This affects how the word processor saves the citation information in terms of its internal data format. If a document is to be shared between Word

and OpenOffice, choose Bookmarks. Most users can leave this set to the default of Fields or ReferenceMarks and ignore it.)

Once the style is set, a window opens displaying the Zotero library. This gives full browsing access to the entire library, including all collections and group libraries, plus a small search box at the top. Browse or search for the reference you wish to cite and select it. If you need to cite a page number for this source, type it in the Page box at the bottom right. (The Page box can be used to cite other parts of a source; change the drop-down menu to change “page” to “figure” or “chapter,” for example.) The Prefix and Suffix boxes will add text to the beginning or end of a citation (such as “see also”). Click OK to insert the citation into the document.

Select the Suppress Author checkbox to leave the author name out of the citation. This is useful when you name the author in your text—for example, “Smith’s study shows ... (2008, p. 22)”—and don’t need to include it again in the in-text citation.

CITING MULTIPLE SOURCES

To cite more than one reference in a single citation, click the Insert Citation button as usual, and then click the Multiple Sources button. A new pane appears at the right of the Insert Citation window, with four arrow buttons (up, down, left and right) next to it. The new right-hand pane shows the references you will be citing. Use the arrow buttons to choose and order the references in your citation.

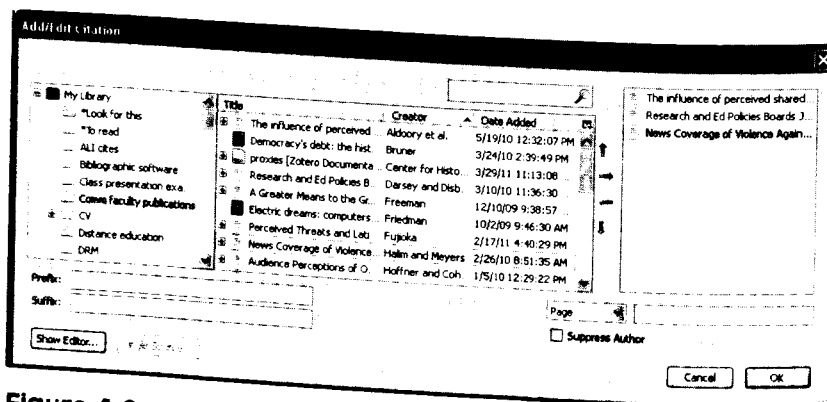


Figure 4.6. Cite multiple references at once

Browse your library in the left and middle columns, and choose the references to cite with the right arrow button (think of it as moving the citation from the library rightwards into the citation pane). To remove a reference from the citation, use the left button (pointing from the citation pane back into the library). Use the up and down arrow buttons to choose the order of citations by moving them up and down. Add page numbers to each reference the same way as usual, by selecting the reference and typing in the Page box. Click OK to add the citation to the document.

This sounds more complicated on paper than it really is. Try it once and you will probably find it quite intuitive: right arrow adds references, left removes them, and up and down change the order. Otherwise, citing multiple references works exactly the same as citing single ones.

EDITING CITATIONS

Editing a citation, such as adding or changing a page number, suppressing an author name, or even changing which source to cite, is easy. Click the citation in your document and click the second button on the Word toolbar, Edit Citation. (In Windows and Linux it looks just like the Insert Citation button with a yellow pencil in place of the red Z.)

Clicking Edit Citation opens the same dialog as inserting a citation, with all the same options. You can change any element of the citation, including citing an entirely different source. Click OK to update the citation in your document.

Adding Bibliographies

So far we’ve added citations to the text, but the document still lacks a bibliography.

Place the cursor at the end of the document (or wherever you want the bibliography to appear) and click the third button on the toolbar, Insert Bibliography. It looks like a series of horizontal red lines and is meant to resemble a tiny list of references. (Mac Word users: click “Add bibliography” from the Zotero menu.)

The bibliography appears wherever your cursor is located in the document, consisting of all the sources you have cited so far. As you cite

and OpenOffice, choose Bookmarks. Most users can leave this set to the default of Fields or ReferenceMarks and ignore it.)

Once the style is set, a window opens displaying the Zotero library. This gives full browsing access to the entire library, including all collections and group libraries, plus a small search box at the top. Browse or search for the reference you wish to cite and select it. If you need to cite a page number for this source, type it in the Page box at the bottom right. (The Page box can be used to cite other parts of a source; change the drop-down menu to change “page” to “figure” or “chapter,” for example.) The Prefix and Suffix boxes will add text to the beginning or end of a citation (such as “see also”). Click OK to insert the citation into the document.

Select the Suppress Author checkbox to leave the author name out of the citation. This is useful when you name the author in your text—for example, “Smith’s study shows ... (2008, p. 22)”—and don’t need to include it again in the in-text citation.

CITING MULTIPLE SOURCES

To cite more than one reference in a single citation, click the Insert Citation button as usual, and then click the Multiple Sources button. A new pane appears at the right of the Insert Citation window, with four arrow buttons (up, down, left and right) next to it. The new right-hand pane shows the references you will be citing. Use the arrow buttons to choose and order the references in your citation.

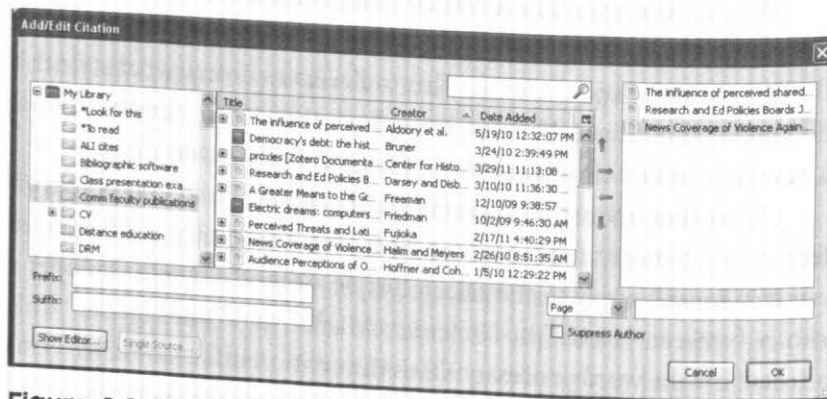


Figure 4.6. Cite multiple references at once

Browse your library in the left and middle columns, and choose the references to cite with the right arrow button (think of it as moving the citation from the library rightwards into the citation pane). To remove a reference from the citation, use the left button (pointing from the citation pane back into the library). Use the up and down arrow buttons to choose the order of citations by moving them up and down. Add page numbers to each reference the same way as usual, by selecting the reference and typing in the Page box. Click OK to add the citation to the document.

This sounds more complicated on paper than it really is. Try it once and you will probably find it quite intuitive: right arrow adds references, left removes them, and up and down change the order. Otherwise, citing multiple references works exactly the same as citing single ones.

EDITING CITATIONS

Editing a citation, such as adding or changing a page number, suppressing an author name, or even changing which source to cite, is easy. Click the citation in your document and click the second button on the Word toolbar, Edit Citation. (In Windows and Linux it looks just like the Insert Citation button with a yellow pencil in place of the red Z.)

Clicking Edit Citation opens the same dialog as inserting a citation, with all the same options. You can change any element of the citation, including citing an entirely different source. Click OK to update the citation in your document.

Adding Bibliographies

So far we’ve added citations to the text, but the document still lacks a bibliography.

Place the cursor at the end of the document (or wherever you want the bibliography to appear) and click the third button on the toolbar, Insert Bibliography. It looks like a series of horizontal red lines and is meant to resemble a tiny list of references. (Mac Word users: click “Add bibliography” from the Zotero menu.)

The bibliography appears wherever your cursor is located in the document, consisting of all the sources you have cited so far. As you cite

more sources, they appear in the bibliography in the correct order: either alphabetical or in the order cited, depending on which bibliographic style you chose when you cited your first source.

EDITING BIBLIOGRAPHIES

Click the Edit Bibliography button, the fourth button on the toolbar. (In keeping with the theme of the other buttons, this one looks like the Insert Bibliography button with a yellow pencil added.)

The Edit Bibliography window allows you to add or remove references to or from the bibliography. Use the left and right arrows to add or remove references. They work in the same way as citing multiple sources: right arrow adds a reference to the bibliography, left arrow removes it.

If you have cited a source in the text but for some reason want to omit it from the bibliography, select it in the right pane and click the left arrow. To include a source in the bibliography that you have not cited in the document, browse the library in the left and middle panes, select the desired reference and move it into the bibliography by clicking the right arrow.

The Edit Bibliography window also provides a way to make changes to the final citation. Select any reference in the right column (below “References in Bibliography”). Its citation appears in the bottom of the Edit Bibliography window. This citation can be edited manually by adding or deleting text, or by reformatting using the bold, italic, underline and super- and subscript buttons.

Use this feature cautiously: the citation will retain any changes you make here, but will no longer update based on changes you make to your Zotero library or to the document style. In other words, if you correct an error in your Zotero library or change bibliographic styles the manually edited citation will not update.

You can remove your manual changes with the Revert button at the bottom left of the window. Revert All resets all references in the bibliography to the version automatically created by Zotero.

Multiple Bibliographies

Longer documents like book and thesis manuscripts may require mul-

iple bibliographies, perhaps one for each chapter. There’s no way for Zotero to maintain multiple bibliographies in one document if you use the Word toolbar, so you have two options: create multiple documents, or copy and paste multiple bibliographies instead of using the toolbar.

First, you can create a document for each chapter, and use the Word toolbar to create your citations and automatically update your bibliography in each chapter. It’s usually convenient to create a collection for each chapter as well. The inconvenience is that you’ll have to keep your project in several documents, not just one.

Second, you can keep the project all in one document file and use the copy and paste method to create bibliographies at the end of each chapter. You’ll lose the convenience of having Zotero create your citations for you, but only have one document file as your finished product.

Refreshing the Bibliography

The Refresh button (two gray arrows in a circle) causes the word processor to “re-read” all the citation information from the Zotero library and rewrite the bibliography and in-text citations. This is useful, for example, if you have edited a reference in the library and need to update the document to reflect your changes.

Zotero performs this “refresh” process whenever you insert a new citation into the document. The toolbar button just allows you to force a refresh without inserting a citation.

If you have edited any citations or any part of the bibliography in the document itself—that is, by typing citation changes into Word, not by making changes within the Zotero library—refreshing the document will undo all of those changes and re-write all citations and the bibliography based on the contents of the library. In other words, to correct a mistake in a citation, go to the library and fix it there, because Zotero periodically updates the document based on the references in your library. Changes made to the bibliography “by hand” in the document won’t stick.

Document Preferences

The Doc Prefs (document preferences) button allows you to change the

bibliographic style of a document, or change between Bookmarks/ReferenceMarks and Fields. See “Citing sources” above for more information.

Remove Codes

The last button on the toolbar, Remove Codes, strips the document of all the special code that allows Zotero to edit and update citations and bibliographies. This might be useful if you are having difficulty opening a document containing Zotero citations in an older word processor, for example.

Removing the Zotero code from a document breaks the “link” between the document and Zotero and converts the bibliography and citations to ordinary Word/OpenOffice text that Zotero can no longer edit. Use this feature only if you are finished using Zotero with a document, and consider making a backup copy first.

Annotated Bibliographies

One limitation of Zotero is that in most cases there is no easy way to embed annotations to a citation (as a note, for example) and have them appear automatically in an annotated bibliography.

The simplest solution is to create a bibliography using the copy-and-paste or drag-and-drop method, then simply add annotations by typing them beneath each entry. Annotations could be initially created in the library by adding them as notes, then copied and pasted into the final document one by one. This would preserve them for future projects and make them searchable.

At present there’s only one citation style available that creates annotated bibliography: a custom version of Chicago. Historians are in luck: a Zotero user has created a Chicago annotated style available for download from zotero.org/styles (look for the style called “Chicago Manual of Style (Annotated Bibliography)”). Add annotations to the Extra field in the library and they will appear in the bibliography.

Bibliographic Styles

Zotero includes fifteen bibliographic styles when installed: APA, MLA, a few variants of Chicago style, and a handful of others. Hundreds more

are available to download (for free, of course) from the Zotero Style Repository at zotero.org/styles.

Installing a new style (or updating an existing one) is easy: open the Style Repository page in Firefox, browse or search the list, and click the Install link next to the desired style. Click the Install button on the confirmation dialog window that opens and the new style will be installed instantly.

One of the drawbacks to Zotero is that it lacks a built-in style editor like EndNote’s. Zotero styles are written in a format called Citation Style Language (CSL). There are a number of CSL editors in the works at this writing, but none have reached a state of user-friendly completeness yet.³ (The Zotero Style Repository is presently the largest library of CSL styles on the web.⁴)

If you need a style that isn’t included in Zotero, you have a few options.

1. Check the Zotero Style Repository (zotero.org/styles) as noted above. Search the page for the name of the style you need and click Install.
2. Zotero can import a few EndNote styles, which are available to download even if you don’t own EndNote. Search the list at endnote.com/support/enstyles.asp and save the .ENS (EndNote Style) file from the Download link. Open Zotero’s Preferences from the gear menu. Click the Cite tab, then the Styles tab. Click the plus (+) button below the list of installed styles. Set the file type to “EndNote Styles” and browse to where you saved the .ENS file. CHNM has stated that they’re no longer supporting this feature, so don’t count on this to work consistently: some EndNote styles import with no problem. Some simply don’t seem to work with Zotero.
3. Check the Zotero forums to see if someone else has already requested the style you need. (The Citation Styles forum is at zotero.org/forum/11.) If not, post a request. Make sure you include all the information at zotero.org/support/requesting_styles in your request. The Zotero community includes many volunteers who create custom styles; someone may be able to help!

Journal Abbreviations

Many citation styles in the sciences require abbreviated journal titles. Zotero cannot automatically abbreviate full journal titles, nor can it import lists of titles and abbreviations. It is highly dependent on being able to import accurate information from the research database. Science researchers should check their bibliographies carefully for journal titles' consistency.

Some databases (e.g., Web of Science) only provide Zotero with a full unabbreviated journal title. Some (e.g., PubMed) provide both the full title and abbreviation. If the database provides both, Zotero saves the abbreviated title to the "Journal Abbr" field in the reference.

If the bibliographic style calls for an abbreviated journal title in the citation, Zotero will use the abbreviation. If the Journal Abbreviation field is empty, Zotero uses the full title. Depending on what database you saved the citation from, you may need to add journal abbreviations to the library yourself.

Reports

In addition to standard bibliographies, Zotero can create reports—HTML documents listing all the items in a collection or a group of selected items. A report is simply a list displaying all your references in the browser window, in a format easy to print or save. Reports list all fields in your references: Author, title, dates, pages, everything—and include notes and the titles of any attachments.

To create a report, right-click a collection (or any selected references) and choose "Generate Report." The report displays in your browser window, ready to save, print or copy. No customization is available: reports simply list everything you've selected and do not display in any citation style. (But see jasonpriem.com/projects/report_cleaner.php for a web application that can fine-tune the output of a Zotero report.)

Reports also include information about citations such as the date the reference was added and modified. This can be a useful way for teachers to track students' research progress.⁵

Timelines

The timeline feature gives you a chronological visualization of your

library or a collection. A timeline is an interactive scrolling display of your references that allows you to view them chronologically.

To create a timeline, select either your library or a collection in the left column. Click the gear menu button and choose "Create Timeline." A timeline based on your selection appears in the browser window (figure 4.7).

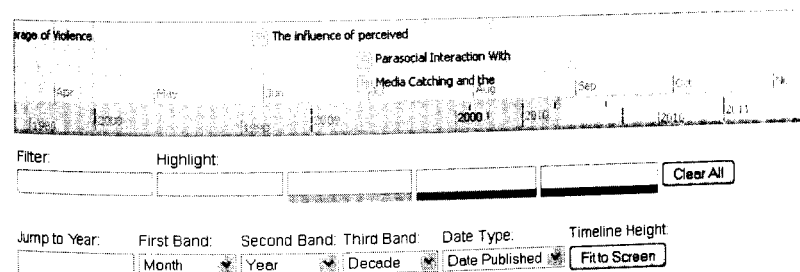


Figure 4.7. Timelines show a visual representation of the dates represented in your library

The timeline is divided into bands. The top light gray band, divided into months, contains your references with appropriate icons indicating books, articles and so on. References appear in chronological order. The medium gray band below that represents years, and the darker gray band at the bottom, decades. Clicking any reference opens it in your Zotero library. Drag the timeline left or right to see newer or older references or use the Jump to Year button to navigate directly to a year.

The default chronology is publication date. Change this to sort by the date the reference was added or modified using the Date Type drop-down menu at the bottom of the timeline. Use the other menus to adjust the date ranges shown in the bands: think of this as "zooming" in and out by choosing shorter or longer time periods. Enter text in the Filter box to display only references matching what you type. Type text into the four highlight boxes to mark matching references by color. The Fit to Screen button redraws the timeline to the current height of your browser window.

Notes

1. Center for History and New Media, "RTF scan..

Journal Abbreviations

Many citation styles in the sciences require abbreviated journal titles. Zotero cannot automatically abbreviate full journal titles, nor can it import lists of titles and abbreviations. It is highly dependent on being able to import accurate information from the research database. Science researchers should check their bibliographies carefully for journal titles' consistency.

Some databases (e.g., Web of Science) only provide Zotero with a full unabbreviated journal title. Some (e.g., PubMed) provide both the full title and abbreviation. If the database provides both, Zotero saves the abbreviated title to the "Journal Abbr" field in the reference.

If the bibliographic style calls for an abbreviated journal title in the citation, Zotero will use the abbreviation. If the Journal Abbreviation field is empty, Zotero uses the full title. Depending on what database you saved the citation from, you may need to add journal abbreviations to the library yourself.

Reports

In addition to standard bibliographies, Zotero can create reports—HTML documents listing all the items in a collection or a group of selected items. A report is simply a list displaying all your references in the browser window, in a format easy to print or save. Reports list all fields in your references: Author, title, dates, pages, everything—and include notes and the titles of any attachments.

To create a report, right-click a collection (or any selected references) and choose "Generate Report." The report displays in your browser window, ready to save, print or copy. No customization is available: reports simply list everything you've selected and do not display in any citation style. (But see jasonpriem.com/projects/report_cleaner.php for a web application that can fine-tune the output of a Zotero report.)

Reports also include information about citations such as the date the reference was added and modified. This can be a useful way for teachers to track students' research progress.⁵

Timelines

The timeline feature gives you a chronological visualization of your

library or a collection. A timeline is an interactive scrolling display of your references that allows you to view them chronologically.

To create a timeline, select either your library or a collection in the left column. Click the gear menu button and choose "Create Timeline." A timeline based on your selection appears in the browser window (figure 4.7).

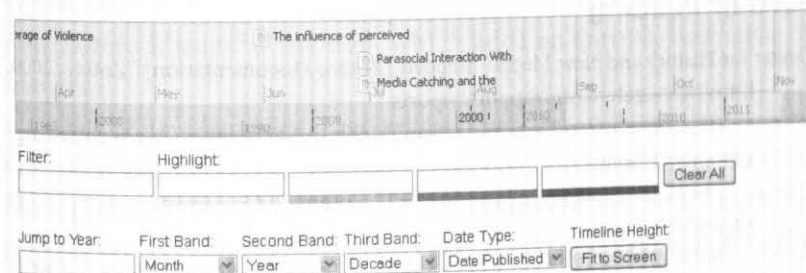


Figure 4.7. Timelines show a visual representation of the dates represented in your library

The timeline is divided into bands. The top light gray band, divided into months, contains your references with appropriate icons indicating books, articles and so on. References appear in chronological order. The medium gray band below that represents years, and the darker gray band at the bottom, decades. Clicking any reference opens it in your Zotero library. Drag the timeline left or right to see newer or older references or use the Jump to Year button to navigate directly to a year.

The default chronology is publication date. Change this to sort by the date the reference was added or modified using the Date Type drop-down menu at the bottom of the timeline. Use the other menus to adjust the date ranges shown in the bands: think of this as "zooming" in and out by choosing shorter or longer time periods. Enter text in the Filter box to display only references matching what you type. Type text into the four highlight boxes to mark matching references by color. The Fit to Screen button redraws the timeline to the current height of your browser window.

Notes

1. Center for History and New Media, "RTF scan.."

2. Center for History and New Media, “Word processor plugin troubleshooting [Zotero Documentation].” Zotero, 2010. http://www.zotero.org/support/word_processor_plugin_troubleshooting.
3. For an introduction to editing Zotero styles, see http://www.zotero.org/support/csl_simple_edits.
4. “Styles.”
5. Center for History and New Media, “Reports [Zotero Documentation].”

Further Reading

- Center for History and New Media. “Reports [Zotero Documentation].” Zotero, 2009. <http://www.zotero.org/support/reports>.
- . “rtf_scan [Zotero Documentation].” Zotero, 2009. http://www.zotero.org/support/rtf_scan.
- . “Timelines [Zotero Documentation].” Zotero, 2009. <http://www.zotero.org/support/timelines>.
- . “Word processor plugin troubleshooting [Zotero Documentation].” Zotero, 2010. http://www.zotero.org/support/word_processor_plugin_troubleshooting.
- “Styles.” CitationStyles.org, 2010. <http://citationstyles.org/styles>.

CHAPTER 5 Zotero Online

So far, we’ve only used the Zotero “client”—the program installed on a single computer. As you’ve seen, the client software on its own is extremely useful, but in this chapter we’ll look at ways to connect your Zotero library to the web, which adds an entirely new layer of features.

CHNM hit a significant milestone when they released Zotero version 2.0 in May 2009. This version represented a dramatic upgrade with two significant new features: synchronization and shared libraries. By creating an account on the Zotero website and connecting it with the local client software, references saved on the researcher’s computer can be backed up and shared in new ways.

Synchronization (or “syncing”) allows the researcher to automatically upload a copy of her library to the Zotero server online, kept current as references are added or deleted. This not only serves as a remote backup, but allows all of a user’s computers to be tied to the same Zotero account so that the library is accessible from the home computer, office computer, and/or laptops.

Group libraries allow Zotero users to share work with each other: they are shared workspaces, public or private, separate from the single personal library. Group libraries can be coordinated by one person and shared with many, created and edited by many researchers simultaneously, or used as a private mutual workspace.

Any library, personal or group, that is synchronized with the Zotero servers can be easily published to the web as a means of sharing research.

Creating your Zotero Account

To get started, create an account on the Zotero website. This account serves a few functions. On the Zotero website, it allows you to create a profile including a photo and CV, view and share your library online, connect with other Zotero users, participate in the forums, and create and join group libraries.

Quick Steps: Set up Zotero Online

1. Go to zotero.org/user/register and register.
2. Open Zotero preferences, click the Sync tab.
3. Enter your username and password. Check Sync Automatically, click OK.
4. Click Sync button (circular green arrow).

In the Zotero client software on your computer, logging in with your account allows you to synchronize your library with the Zotero server and among all of your computers, save references to and from group libraries, and upload files to the Zotero Commons to share with researchers worldwide.

Go to [Zotero .org](http://Zotero.org) and click “Register” (zotero.org/user/register). Follow the instructions: choose a username, enter your email and choose a password. Click the link in your email to confirm the new account.

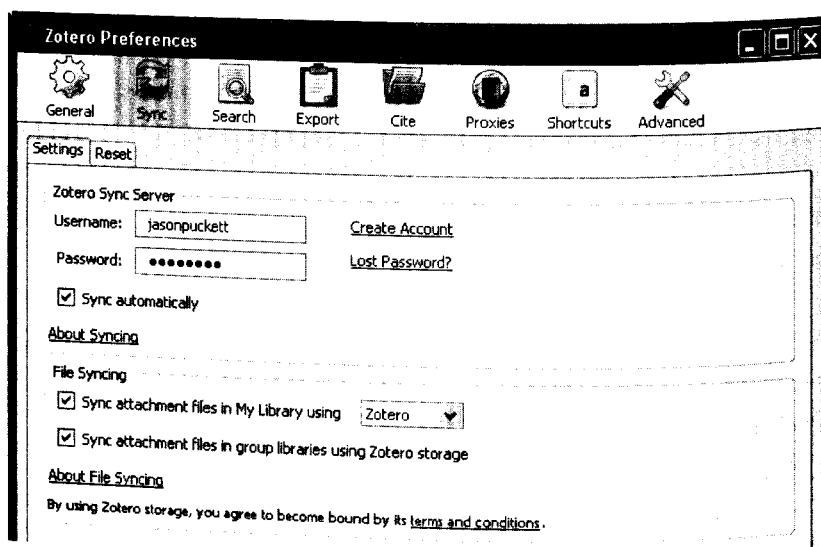


Figure 5.1: Enter your Zotero username and password on the Sync tab of the Preferences screen to synchronize your Zotero library across all your computers.

Once your account is set up, open Zotero, click the gear button and open the preferences screen. Click the Sync tab. Enter your username and password and make sure the Sync Automatically box is checked. Click OK.

Note that there are two places you’ll enter your account information: on the website, and in the Zotero software itself. Logins do not carry over between the two: logging into the software does not log you into the website or vice versa.

Synchronizing your Library

Once you have your account set up and your username and password entered into the Zotero client, you can synchronize your library with the Zotero server. This feature allows you to take advantage of Zotero’s free cloud storage to synchronize your library. (You can sync an unlimited number of references, notes and collections. PDFs and other attachments take up storage space, which is limited to 100MB for free. See “Attachment Storage” below.)

Synchronizing (“syncing”) your library keeps it current by uploading any changes you make on your computer. If you use Zotero on multiple computers, it downloads any changes you have made from other computers as well.

Syncing has several advantages. As mentioned above, having access to the library from multiple computers is very handy. Even if you only work on a single computer, syncing also serves as an online backup of the entire library: the library is stored on your hard drive, but backed up on a remote server and easily restorable if the computer crashes.

Syncing in Action

Kate works on her desktop computer in her office on campus several times a week, but often does research and other work on her laptop from home or in the library.

Next time she’s in the office, she enters her login information in Zotero on that computer and synchronizes it. She does the same to her laptop when she gets home.

They’re now synchronized from now on: whatever changes she makes to her library on one computer automatically download to the other one the next time she opens Zotero.

Quick Steps: Set up Zotero Online

1. Go to zotero.org/user/register and register.
2. Open Zotero preferences, click the Sync tab.
3. Enter your username and password. Check Sync Automatically, click OK.
4. Click Sync button (circular green arrow).

In the Zotero client software on your computer, logging in with your account allows you to synchronize your library with the Zotero server and among all of your computers, save references to and from group libraries, and upload files to the Zotero Commons to share with researchers worldwide.

Go to Zotero .org and click “Register” (zotero.org/user/register). Follow the instructions: choose a username, enter your email and choose a password. Click the link in your email to confirm the new account.

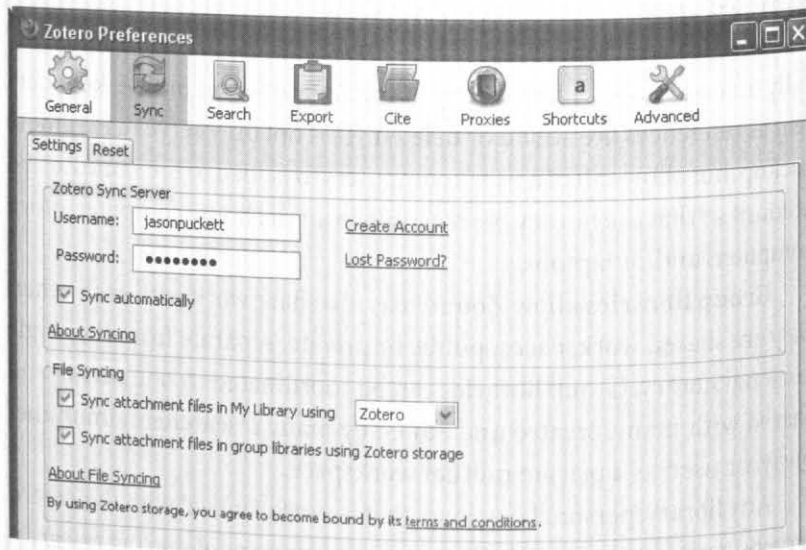


Figure 5.1: Enter your Zotero username and password on the Sync tab of the Preferences screen to synchronize your Zotero library across all your computers.

Once your account is set up, open Zotero, click the gear button and open the preferences screen. Click the Sync tab. Enter your username and password and make sure the Sync Automatically box is checked. Click OK.

Note that there are two places you’ll enter your account information: on the website, and in the Zotero software itself. Logins do not carry over between the two: logging into the software does not log you into the website or vice versa.

Synchronizing your Library

Once you have your account set up and your username and password entered into the Zotero client, you can synchronize your library with the Zotero server. This feature allows you to take advantage of Zotero’s free cloud storage to synchronize your library. (You can sync an unlimited number of references, notes and collections. PDFs and other attachments take up storage space, which is limited to 100MB for free. See “Attachment Storage” below.)

Synchronizing (“syncing”) your library keeps it current by uploading any changes you make on your computer. If you use Zotero on multiple computers, it downloads any changes you have made from other computers as well.

Syncing has several advantages. As mentioned above, having access to the library from multiple computers is very handy. Even if you only work on a single computer, syncing also serves as an online backup of the entire library: the library is stored on your hard drive, but backed up on a remote server and easily restorable if the computer crashes.

Syncing in Action

Kate works on her desktop computer in her office on campus several times a week, but often does research and other work on her laptop from home or in the library.

Next time she’s in the office, she enters her login information in Zotero on that computer and synchronizes it. She does the same to her laptop when she gets home.

They’re now synchronized from now on: whatever changes she makes to her library on one computer automatically download to the other one the next time she opens Zotero.

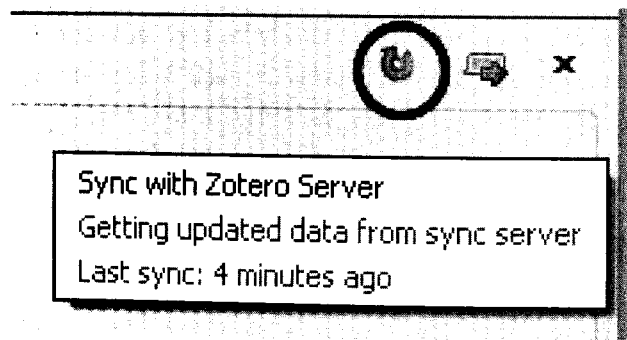


Figure 5.2. Click the Sync button in the upper right corner to start synchronizing your library. The arrow spins while a sync is in progress; this happens automatically as you use Zotero. Mouse over the button to check the status of your sync.

If you disconnect from the internet, you still have a full copy of your library on your local computer. When you reconnect and open Zotero again, any changes you made while offline will synchronize.

Setting up synchronization also allows access to group libraries, about which much more shortly. Finally, any library set up for synchronization is easy to share online as desired. See “Publishing your library” later in this chapter for some ways to do this.

Enter your account info on the Sync tab of the Preferences screen as described above. In the upper right corner of the Zotero pane, click the circular green arrow button to start the synchronize process. This involves uploading your library to the Zotero servers, and downloading any references that you have previously synchronized from another computer. You’ll only have to enter your login information once; Zotero “remembers” it from then on.

Note: Zotero and/or Firefox may freeze for a minute or two the first time you synchronize, especially if you have a large library with many attachments. This is normal: just get a cup of coffee and let it finish. Once you have syncing set up, it happens automatically in the background whenever you are connected to the internet and does not cause any noticeable lag. Zotero checks for any changes that need syncing the first time you open it, and synchronizes your library periodically as you make changes.

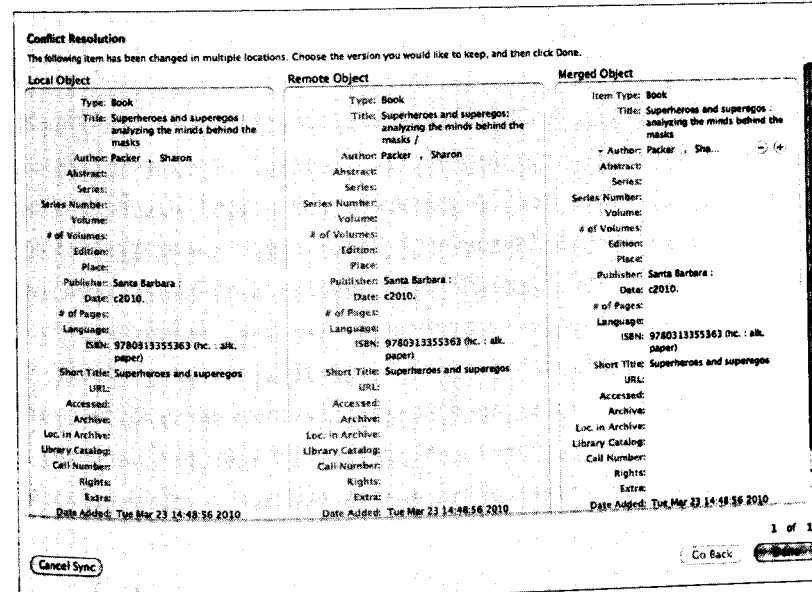


Figure 5.3. Resolve sync conflicts by choosing which version of the conflicted items you want to keep in your library.

The green arrow button will spin briefly from time to time as synchronization takes place (figure 5.2). Mouse over the button any time to see the sync status: whether a sync is currently taking place, and the last time the library was synchronized. If an error occurs during a sync, a red exclamation point appears to the left of the sync button. Click the exclamation point to see details of the error.

Resolving Sync Conflicts

Occasionally when syncing Zotero notifies you that one of your references has been changed on multiple computers.

If you edit a reference on two different computers before Zotero syncs them, a dialog will appear (figure 5.3) presenting the two versions of the reference and asking you to choose which version is the correct one, the local version (on your hard drive) or the remote one (on the server). Zotero also offers a “merged” choice that combines the changes made on both computers. Just choose the correct version by clicking it, and click Done.

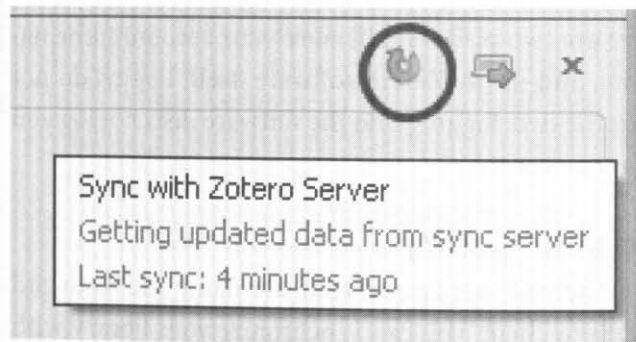


Figure 5.2. Click the Sync button in the upper right corner to start synchronizing your library. The arrow spins while a sync is in progress; this happens automatically as you use Zotero. Mouse over the button to check the status of your sync.

If you disconnect from the internet, you still have a full copy of your library on your local computer. When you reconnect and open Zotero again, any changes you made while offline will synchronize.

Setting up synchronization also allows access to group libraries, about which much more shortly. Finally, any library set up for synchronization is easy to share online as desired. See “Publishing your library” later in this chapter for some ways to do this.

Enter your account info on the Sync tab of the Preferences screen as described above. In the upper right corner of the Zotero pane, click the circular green arrow button to start the synchronize process. This involves uploading your library to the Zotero servers, and downloading any references that you have previously synchronized from another computer. You’ll only have to enter your login information once; Zotero “remembers” it from then on.

Note: Zotero and/or Firefox may freeze for a minute or two the first time you synchronize, especially if you have a large library with many attachments. This is normal: just get a cup of coffee and let it finish. Once you have syncing set up, it happens automatically in the background whenever you are connected to the internet and does not cause any noticeable lag. Zotero checks for any changes that need syncing the first time you open it, and synchronizes your library periodically as you make changes.

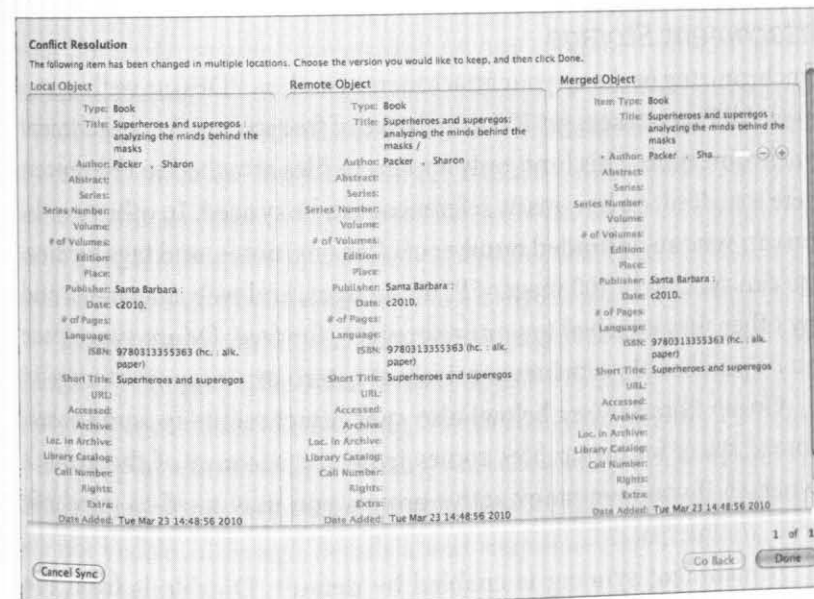


Figure 5.3. Resolve sync conflicts by choosing which version of the conflicted items you want to keep in your library.

The green arrow button will spin briefly from time to time as synchronization takes place (figure 5.2). Mouse over the button any time to see the sync status: whether a sync is currently taking place, and the last time the library was synchronized. If an error occurs during a sync, a red exclamation point appears to the left of the sync button. Click the exclamation point to see details of the error.

Resolving Sync Conflicts

Occasionally when syncing Zotero notifies you that one of your references has been changed on multiple computers.

If you edit a reference on two different computers before Zotero syncs them, a dialog will appear (figure 5.3) presenting the two versions of the reference and asking you to choose which version is the correct one, the local version (on your hard drive) or the remote one (on the server). Zotero also offers a “merged” choice that combines the changes made on both computers. Just choose the correct version by clicking it, and click Done.

Attachment Storage

Synchronizing backs up your attachments (such as PDFs) as well as citations. All Zotero users get 100 megabytes of free storage for attachment synchronization. This limit only applies to files attached to references: there is no limit on how many references can be synced. In other words, you can sync an unlimited number of citations, notes, and tags for free. You can sync up to 100 megs of PDFs, images, and web snapshots, and any other files attached to your references, for free. (More sync space can be purchased quite inexpensively at zotero.org/support/storage.)

Group libraries (see below) also sync attachments in some cases. Storage space for group files comes from the account of the group's owner, so if you own many active groups you may need to purchase more storage space.

Attachment syncing is enabled by default. Disable it from the Preferences/Sync tab if you prefer not to sync your attachments, either because of insufficient space or a slow network connection. Group file syncing can be disabled independently of your personal library.

Syncing attachments makes them accessible via your profile on the Zotero website. Log into the Zotero site, view your library at zotero.org/yourname/items, and click on any item with an attachment. At the bottom of a page you'll see a link to download the attached file. You must be logged into the Zotero site in order to download your attachments, or attachments in groups of which you are a member.

Your Library on the Web

Any library synchronized with the Zotero server is accessible from zotero.org. By default, your library remains private: no one can see it on the web except you. You can share your library publicly if you choose to: log into zotero.org, click Settings and then Privacy, and check the "Publish entire library" box. (You can also choose to publish your notes along with your library. Leave this second box unchecked if you want your notes to remain private.) Click Update.

Your library is visible from the My Library tab at the top left of the Zotero website (or zotero.org/username/items). Again, it is visible only to you unless you choose to publish it. From this page you can view

your library from any browser, and on any computer without having to install Zotero.

The library is listed with the most recent additions first. Unlike in the Zotero client, no search feature is available. All of your collections are available as links to browse on the left side. Every collection also has a unique URL, so a librarian or instructor can easily create a list of references to share by saving them to a collection and sending a link.

Every item in the library has its own page; view details about any item by clicking its title. Attachments appear as links at the bottom of each reference under the heading "Notes and Attachments." Attached notes display the first line of text, and clicking this link shows the entire contents of the note. Some attachment types, such as snapshots, are not visible, although details about snapshots (URL and dates) do show up on the site.

You can download PDF attachments from your library. You must be logged in to access your attached PDFs even if your library is public. References with attached PDFs show two at the bottom of the page un-

Title	Creator	Date Added
Health reform implications for employers	Georgia State University and Doe	2011-03-30 12:43
A Case for Zotero	Arellano	2011-03-30 10:55
Citation Advantage of Open Access Legal Scholarship	Dorovan and Watson	2011-03-29 16:51
proves (Zotero Documentation)	Center for History and New Media	2011-03-29 11:13
dev server.ap (Zotero Documentation)	Center for History and New Media	2011-03-26 09:19
The Cathedral and the Bazaar: Release Early, Release Often	Raymond	2011-03-17 16:47
News coverage of violence against women: engineering blame	Meyers	2011-03-16 09:46
Adventures in Library Instruction (podcast case study)	Eorhardt et al	2011-03-10 14:17
Epubs: The future of print	Puckert	2011-03-10 14:08
Link listing for professional development	Borchardt et al	2011-03-10 14:04

Figure 5.4. My personal library viewed on the Zotero website (zotero.org/username/items).

Attachment Storage

Synchronizing backs up your attachments (such as PDFs) as well as citations. All Zotero users get 100 megabytes of free storage for attachment synchronization. This limit only applies to files attached to references: there is no limit on how many references can be synced. In other words, you can sync an unlimited number of citations, notes, and tags for free. You can sync up to 100 megs of PDFs, images, and web snapshots, and any other files attached to your references, for free. (More sync space can be purchased quite inexpensively at zotero.org/support/storage.)

Group libraries (see below) also sync attachments in some cases. Storage space for group files comes from the account of the group's owner, so if you own many active groups you may need to purchase more storage space.

Attachment syncing is enabled by default. Disable it from the Preferences/Sync tab if you prefer not to sync your attachments, either because of insufficient space or a slow network connection. Group file syncing can be disabled independently of your personal library.

Syncing attachments makes them accessible via your profile on the Zotero website. Log into the Zotero site, view your library at zotero.org/yourname/items, and click on any item with an attachment. At the bottom of a page you'll see a link to download the attached file. You must be logged into the Zotero site in order to download your attachments, or attachments in groups of which you are a member.

Your Library on the Web

Any library synchronized with the Zotero server is accessible from zotero.org. By default, your library remains private: no one can see it on the web except you. You can share your library publicly if you choose to: log into zotero.org, click Settings and then Privacy, and check the "Publish entire library" box. (You can also choose to publish your notes along with your library. Leave this second box unchecked if you want your notes to remain private.) Click Update.

Your library is visible from the My Library tab at the top left of the Zotero website (or zotero.org/username/items). Again, it is visible only to you unless you choose to publish it. From this page you can view

your library from any browser, and on any computer without having to install Zotero.

The library is listed with the most recent additions first. Unlike in the Zotero client, no search feature is available. All of your collections are available as links to browse on the left side. Every collection also has a unique URL, so a librarian or instructor can easily create a list of references to share by saving them to a collection and sending a link.

Every item in the library has its own page; view details about any item by clicking its title. Attachments appear as links at the bottom of each reference under the heading "Notes and Attachments." Attached notes display the first line of text, and clicking this link shows the entire contents of the note. Some attachment types, such as snapshots, are not visible, although details about snapshots (URL and dates) do show up on the site.

You can download PDF attachments from your library. You must be logged in to access your attached PDFs even if your library is public. References with attached PDFs show two at the bottom of the page un-

The screenshot shows the Zotero website interface for a user named Jason Puckett. The page title is "zotero" with the tagline "Citation management is only the beginning." The user is logged in, and the page shows a navigation menu with "My Library" selected. The main content area is titled "Library" and displays a list of items. The items are organized into collections, with "My Library" being the primary collection. The list of items includes titles, creators, and dates added. The items are as follows:

Title	Creator	Date Added
Health reform implications for employers	Georgia State University and Doe	2011-08-30 12:43
A Case for Zotero	Arellano	2011-08-30 10:35
Citation Advantage of Open Access Legal Scholarship	Donovan and Watson	2011-08-29 16:51
proxies [Zotero Documentation]	Center for History and New Media	2011-08-29 11:13
dev server_api [Zotero Documentation]	Center for History and New Media	2011-08-26 09:19
The Cathedral and the Bazaar: Release Early, Release Often	Raymond	2011-08-17 16:47
News coverage of violence against women: erigen dering blame	Meyers	2011-08-16 09:46
Adventures in Library Instruction (podcast case study)	Borchardt et al	2011-08-10 14:17
Keynote: The future is open	Puckett	2011-08-10 14:08
Podcasting for professional development	Borchardt et al	2011-08-10 14:04

Figure 5.4. My personal library viewed on the Zotero website (zotero.org/username/items).

der Notes and Attachments: the filename (this link just displays details about the attachment) and a link that reads “pdf” followed by the size of the file. This second link goes to the actual PDF itself.

A library on the Zotero website is read-only: it’s viewable, but not editable. Making changes to a library—adding citations, editing or deleting items, creating collections—requires accessing it from the client software. (This will change in future versions of Zotero, which will allow making edits via the website without needing to install the Zotero software.)

Group Libraries

Up to this point, you’ve saved all references into a single Zotero library: your personal library. Once you have connected Zotero to the internet, it becomes possible to create additional libraries shared with other researchers.

Each Zotero group has a shared library that may or may not be visible to non-members. Every group also has an information page on the Zotero website. Groups may be public or private. Private groups’ information is only visible to group members who are logged into their Zotero accounts. Membership in public groups may also be either open, allowing anyone to join, or closed, requiring an invitation.¹



Figure 5.5. The New Group button is next to the New Collection button at the top left of the Zotero window.

Creating a Group Library

To create a group, either browse to zotero.org/groups and click the “Create a new group” button, or open the Zotero pane and click the

New Group button, at the top left next to the New Collection button. Both open the “Create a new group” page on the Zotero site (you will be prompted to log in if you haven’t logged into the site).

Choose a name for your new group. Public groups will be automatically be assigned a URL of zotero.org/groups/groupname. The “group URL” text below the name you enter will turn red if the name is unavailable or green if it is available. (Private groups can have any name.)

Next, choose the type of group: public (open or closed) or private. “Public” and “private” refer to the group’s visibility by non-members, and “open” and “closed” indicate whether anyone can join the group or whether new members must be invited. A group can be changed between public and private, and public groups can be changed between open and closed, any time. (Private groups are always closed.)

What about Copyright?

Don’t group libraries potentially provide a means to copy and share copyrighted files?

Yes. So does email. So does Facebook. So does the USB drive in your pocket. So does the postal service, for that matter.

Zotero makes no attempt to control what you choose to share in group libraries, any more than your email software polices your attachments for copyright violations. It’s a neutral tool. You are still responsible for your own use of copyrighted information.

Public groups with open membership appear in Google search results and searches on the Zotero site. Any Zotero user can join a public group with open membership. Administrators can choose whether non-members can view the group library or specific collections. This kind of group is useful for sharing research in the broadest possible way: allowing anyone to join, view and copy references from the library. Group administrators can choose to allow members to add, edit and delete library items, or make the library read-only. Public open groups are the only type that cannot use group file storage.

Example: Nathan is a co-author on a shared blog about academic librarianship. He sets up a public Zotero group for blog authors and readers. Anyone can join the group, add and edit citations, and create collections. The blog's community uses it to share citations to works mentioned in posts and comment threads. The blog site includes a link to the group library's page so that anyone, not just group members, can view and save references from the library.

Public groups with closed membership appear in search results. Group members must be invited or approved for membership by the group's administrators. Administrators can choose whether non-members can view the group library or specific collections. This type of group is useful for work in which collaborators wish to show their research online, but control membership of the group.

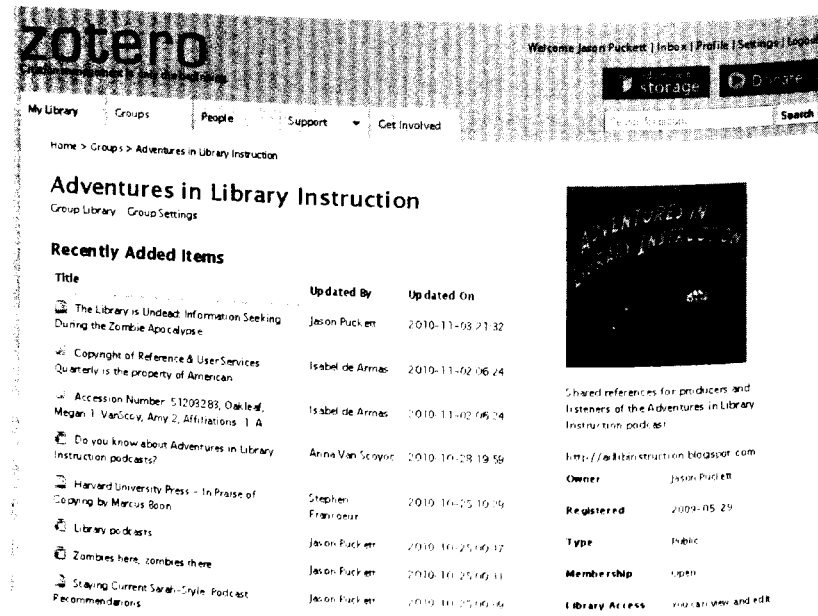


Figure 5.6. Web page for a public group library.

Example: Kate has assigned Ian's class a small-group bibliography assignment in which each member of the group must find four sources on their topic and produce a bibliography. Ian creates a public (closed membership) Zotero group and invites his two partners to join. All three group members can add references and see each others' references, and have Zotero format the bibliography when it's done. Kate can check in on the group's progress without having to be invited as a member.

Private groups are only visible to members, do not appear in search results, and members must be invited to join. Administrators can control whether members can add, edit and delete library items. Private groups are useful for collaborators who do not want to share their work outside of the group.

Example: Kate is collaborating on an article with a colleague in another state, and Anita is assisting with her research. She sets up a private group to create a workspace only the three of them can use. Kate saves citations to the group and tags them "needs pdf." Anita then sets up a saved search for this tag in her own Zotero client so she can see the article citations for which Kate wants copies. Once she's done that, she adds the PDFs as attachments to the references in the shared library.

Note: private group libraries and public groups with closed membership can be set to allow (or disallow) storage of file attachments. If attachments are allowed, the group uses storage space from the account of the group's owner, not the individual members. In other words, any PDFs saved to a group library by any member use up the group owner's free 100 megs of file space. Public groups with open membership cannot store attachment files, as a preventative measure to keep the owner's storage allowance from being used up.