

Zotero Project Interim Report
to the Andrew W. Mellon Foundation
28 September 2007

Executive Summary

We are delighted to report to the Andrew W. Mellon Foundation that the Zotero project at the Center for History and New Media at George Mason University has had an exceptionally productive and successful first year. Although we believed the project had significant potential when it was merely a pilot effort funded by an earlier grant, the Mellon funding has enabled us to bring the software out of the lab, greatly extend and enhance it, and put it into the hands of hundreds of thousands of scholars and students. Furthermore, we believe that Zotero is beginning to change the way that research is done—far beyond improving the management of citations and note-taking.

Use and Coverage

A year ago the software was only in a private, alpha release. Since its initial public beta release last October, Zotero has already reached the milestone of an active installed base of 250,000 users (as of September 19, 2007, measured by unique IP addresses). We anticipate continued strong growth during the second year of the grant, and will likely surpass the active user base of the commercial citation management tool RefWorks during the second year.

In the summer of 2007, the Mozilla Corporation—the makers of the Firefox web browser—recognized the importance of Zotero as a research tool by creating a special version of Firefox, Campus Edition, for the back-to-school season that included Zotero preinstalled. Although we cannot access download statistics from Mozilla, we believe that special edition has been downloaded tens of thousands of times by students and faculty. Mozilla will continue to market it for the next six months and we expect to gain many more users from this partnership.

During its first year, Zotero received numerous awards and positive reviews. In February, Educause noted Zotero as one of the "tech trends to watch" as part of its annual *Horizons* report on the state of academia and technology. *PC Magazine* declared Zotero one of the "Best Free Software" applications in the same month. This August, the American Political Science Association gave Zotero its "Best Software" award at its annual meeting.

Zotero has also been the subject of uniformly laudatory articles in the *Chronicle of Higher Education* and many other academic and general press outlets. *Inside Higher Ed* recently concluded in its extensive review of the software, "Zotero does for research what word-processing software did for writing. After a short while, you start to wonder how

anyone ever did without it." Zotero has also been the subject of 4000 blog posts (according to Google Blog Search), and well over a million web pages now mention it.

Users and developers have been vocal in their appreciation of Zotero and their commitment to the project. Usage of the Zotero community forums on our website is extremely active—to date there have been over 5500 posts and we regularly get over 50 new posts a day. Dozens of developers have contributed code to the project, ranging from the large (a plugin for OpenOffice, a sidebar written by the lead developer of StumbleUpon), to the medium (translators to make sites Zotero-compatible), to the small (bug fixes). Community users have also worked diligently to make Zotero accessible in other languages: over 15 user-translated language localizations of the interface ship with Zotero, and another 17 are in production; our user documentation and tutorials are now available in five languages thanks to our users.

Deliverables

We have made excellent progress on our list of deliverables:

1) *We will connect Firefox Scholar with other semantic web technologies and initiatives to increase the value of all of these projects, and to allow for more sophisticated data analysis and display.*

One of the first things we did following the Mellon grant award was to add native RDF export to Zotero (in addition to many other import/export formats; see below). This RDF specification has now been adopted by an international group of RDF/bibliographic researchers (the Bibliontology group) and is being developed as a major standard for the semantic web. Moreover, we folded the MIT SIMILE project's Timeline software into Zotero in August 2007, and are working to add their Exhibit software for the next release.

2) *We will create a variety of mechanisms for both sharing and backing up user data and metadata.*

Zotero now includes a number of methods for sharing and backing up user data and metadata, with more to come. For example, users can already use RDF export to send information to each other. We also implemented an API which allows for automated sharing with other software and web services, and we added a storage location preference to the client that allows users to store or backup their collections on an external drive or USB key, on a networked drive, and soon, on a university (or other) server running WebDAV or FTP protocols. The most significant aspect of the coming year is of course the planned launch of our data exchange server, which will further simplify this process.

3) *We will ensure that Firefox Scholar natively recognizes the fullest possible range of scholarly resources nation- and world-wide; our goal by the end of the project would be to cover 90 percent of the collections used most commonly by scholars.*

Zotero's site "translators" now cover every major library software system (to make over 90 percent of online library catalogs compatible), as well as scores of "gated" research databases (including ProQuest, LexisNexis, EBSCOhost, and ABC-CLIO) and dozens of newspaper sites and other websites. We have particularly strong representation in the humanities (e.g., JSTOR, History Cooperative, MLA Bibliography), but many other fields as well. Zotero currently includes 120 translators that provide compatibility for thousands of sites. To guide translator development, we rely on our web forum's very active thread suggesting new sites, which are then put into a queue for translator creation.

4) We will create import/export and advanced synchronization tools.

Users of Zotero can now format citations in a number of styles: Chicago Manual of Style, APA, MLA, American Sociological Association, IEEE, Nature, Modern Humanities Research Association, and National Library of Medicine. We expect many more styles soon since most other styles are slight variations on these core formats. Moreover, we finalized with the bibliographic team of OpenOffice an open, XML-based standard called CSL (Citation Style Language) so that our styles can be reused by any project requiring bibliographic formatting.

We also have a "context-aware drag and drop" feature where bibliographic items can simply be moved via the GUI to any location on the screen (a web form, an email program, an IM window) and be inserted and formatted upon release of the mouse button. We have highly sophisticated plugins for Microsoft Word and OpenOffice (and its variants, like NeoOffice) that can generate and customize inline citations, footnotes, endnotes, and bibliographies. We also have exports to HTML that are marked up semantically so that they are Zotero-aware, an ideal way for professors to post semantically rich bibliographies and syllabi on the web or on Sakai or other course management systems.

We have import capability from EndNote, RefWorks, Scribe, BibTeX, BibIX, RIS, Refer, MODS, Dublin Core XML, and a variety of other programs that conform to these formats.

We are presently working on the synchronization logic and communication tools as part of the upcoming addition of the server.

5) We will use Firefox's embedded system for skinning to ensure that Firefox Scholar meets the highest level of accessibility.

We have made great strides on accessibility in the last year. We added the ability to resize the font throughout the Zotero window, and added keystroke equivalents to much of the functionality that formerly required a mouse movement or click. We believe we have now satisfied all of the provisions of Section 508 § 1194.21 ("software" accessibility) with the exception of a few other keystroke equivalents that will plan to implement in the near future.

6) *We will start to work with scholarly associations, institutions of higher learning, libraries and archives, and database providers to test and disseminate Firefox Scholar on a national, rather than local (Virginia) basis and begin to build a critical mass of user communities around Firefox Scholar to insure its wide use and long-term sustainability.*

The sheer number of users attests to the success of our strategy for this deliverable. In addition, dozens of university library websites (including MIT, Boston University, Emory, and the University of Michigan) now have extensive documentation informing members of their communities how to begin using Zotero. We have a dedicated listserv just for librarians and staff in higher ed to disseminate and support the software. The American Council of Learned Societies will be sending information about Zotero to all of its scholarly associations, and project PI Dan Cohen gave a talk at the annual ACLS meeting in Montreal in May 2007 about Zotero. We have given over thirty presentations and demonstrations at a variety of research institutions and organizations, academic programs, conferences, and technology groups—including CNI, Educause, the Library of Congress, the National Archives and Records Administration, Harvard, Brown, the University of Chicago, Northwestern, and Georgetown—and published reports about it in major scholarly newsletters such as the American Historical Association's *Perspectives* and the Organization of American Historians' *Newsletter*.

The Future

The power and flexibility of Zotero has already enabled us—and many others—to begin envisioning extensions to the software as well as new uses and features that will further assist scholarly research and collaboration. We hope to be able to support an ecosystem of development and scholarship in the future, with Zotero as the foundation of a research platform. We are incredibly grateful to the Mellon Foundation's continuing support of the project.

Financial Report

Attached is a summary of the budget for the grant. The budget does not fully reflect all expenses used to date since we have several large expenditures that have not yet been paid. Even so, we have stayed within budget and feel comfortable with our spending rate and staffing.