

Final Report for IMLS Grant, LG-24-07-0005-07

Omeka, A Free, Open Source, Standards-based, Easy-to-Use, Web Publishing Platform

Center for History and New Media, George Mason University

Summary of Grant Activities

When the Center for History and New Media (CHNM) first applied for funding to support the development of Omeka, few options existed for museums, libraries, and archives wishing to publish collections and narrative exhibits to the web as easily as one could launch a blog. Most museums had websites, but even still, institutions of all sizes lacked in-depth content. Even award-winning narrative-intensive museums exhibitions came packaged in multi-media wrappers making the content non-508 compliant, and impossible to share, bookmark, or Google. We believed that publishing accessible standards-based collections and exhibitions, containing standards-based metadata, could be accomplished by building a free, open-source platform that, like blogging software, offered an easy-to-use administrative interface, provided syndication for sharing content, extended the core functions of publishing collections and archive with a flexible plugin architecture and rich design theme API.

Since its public launch in 2008, *Omeka* has made significant progress towards its goal of making sophisticated, standards-based web publishing available to even the smallest cultural heritage institutions. *Omeka* has been downloaded over 10,000 times and is used by hundreds of museums, libraries, and archives to display collections and build online exhibits. Among these are large and venerable institutions like the

Omeka Dashboard 2007-2010

Beta launch: February 2008

Omeka downloads: 10, 643 (and growing)

Releases: 18

Plugins: 31

Plugins, built by Omeka community: 5

Themes: 15

Website visits: 608,784

Sites launched: 100 +

Presentations about Omeka: 50

Tutorial Workshops: 14

Screencasts tutorials: 30

Forum Participants: 1965

Omeka.Net Dashboard 2010

Limited alpha launch: March 2010

Public beta launch: October 2010

Alpha Testers: 250

Current Users: 840

Websites Created: 637

Website Visits: 14,508

Find Omeka

Web: Omeka.org and Omeka.net

Blog: Omeka.org/blog and blog.omeka.net

Twitter: [@omeka](https://twitter.com/omeka)

Flickr: [flickr.com/photos/omeka](https://www.flickr.com/photos/omeka)

Vimeo: vimeo.com/omeka

Facebook: [Omeka group](https://www.facebook.com/omeka)

Smithsonian Institution and the Newberry Library as well as smaller, less renowned organizations like the Merchant's House Museum and the Upper Ringwood (New Jersey) Public Library. These smaller institutions have used *Omeka* to build their own award-winning projects, such as *Digital Amherst*, a project of the Jones Public Library in Amherst, Massachusetts that recently won an award for best use of cutting-edge technology from the ALA's Program on America's Libraries for the 21st Century. *Omeka* itself was recognized by a blue-ribbon panel of leading technologists and Internet pioneers who awarded *Omeka* a Mellon Award for Technology Collaboration in December 2008. Available as a server installable download, as of October 2010 *Omeka* is also available as a low- or no-cost subscription web service at Omeka.net.

In our 2007 proposal, we identified three primary needs of museums and cultural heritage sites that CHNM addressed in the building and launching of the *Omeka* project:

- *Museums, libraries, and archives, need low-cost and easy-to-use systems for publishing web content.*
 - Outcome: *Omeka* is a free and open source (written for Linux, Apache, MySQL, and PHP and released under the GPL) platform designed with the non-IT specialist in mind allowing users to focus on content and interpretation rather than programming. *Omeka's* interface design appeals to users working at institutions of all sizes, which has led to an increased online presence of a diverse group of institutions from small historical societies and local libraries to a consortium of Smithsonian museums. The software will always remain free for downloading. We recently launched a free and fee-based hosted service at Omeka.net that requires no File Transfer Protocol (FTP) access or knowledge of server technology.
- *Museums need standards-based, interoperable systems that allow them to share and use digital content in multiple contexts.*
 - Outcome: *Omeka* provides unqualified Dublin Core Metadata standards for items and public design theme templates adhere to web design standards allowing *Omeka* users to design a fully accessible online exhibition efficiently. *Omeka* sites use this DC metadata schema to communicate with other systems. Each site can serve collections data in several output formats, including Atom, DCmes-XML, Json, Omeka-Json, Omeka-XML, RSS2, and OAI-PMH, which promote and encourage re-use and sharing of content. By conforming to internationally-recognized metadata standards and offering a variety of output formats, *Omeka* gives its users freedom to use that data in different ways without being locked into specific platforms or vendor-specific schema. Once collection materials are loaded into or shared through *Omeka*, the items may be reused in multiple contexts without requiring redundant data entry.
- *Museums need systems that allow them to engage their publics and build communities around objects.*
 - Outcome: *Omeka* offers museums, libraries, and archives easy ways to push content to their online visitors through feeds and rotating featured items and exhibits on the

homepage, while also giving visitors opportunities to contribute content to a museum's digital collections, comment on items, or share museum object data with a visitor's personal social networks.

Development and Use

Building on experiences acquired from other digital projects, especially online museum exhibitions, museum education, and collecting and archiving websites, CHNM began development on *Omeka* immediately after we received the grant. We pledged to test and release early and often, so that we could respond to suggestions and fix bugs as they arose over time. As a result of this development cycle, we tagged and released 18 versions of *Omeka* in three years, in addition to producing two versions of the Omeka.net hosted platform.

Omeka's success exceeded our expectations, and we are pleased with how well the cultural heritage and academic community accepted *Omeka* from the earliest stages of development. Since we launched *Omeka* in its alpha form, it has been downloaded over 10,000 times, and institutions and individuals launched more than 100 new websites with many more in development. Some sites have been recognized for excellence, including the *Bracero History Archive* (a virtual collaborative archive that brings together materials from the Smithsonian National Museum of American History, Brown University, and The Institute of Oral History at the University of Texas at El Paso) that received the Excellence in Public History Award by the National Council on Public History in 2010.

To demonstrate to those unfamiliar with *Omeka* what types of sites have been created with *Omeka*, we launched a Showcase <<http://omeka.org/showcase>> and created a wiki page for "Sites Powered by *Omeka*" <http://omeka.org/codex/View_Sites_Powered_by_Omeka>. Currently documenting 100 websites, the showcase demonstrates the diversity of institutions, content, designs, and implementation possible with *Omeka*. Below are a few examples to highlight the range of museums and libraries using *Omeka*:

- *Art Nouveau*, Europeana, <http://exhibitions.europeana.eu/exhibits/show/art-nouveau/introduction>;
- *Catawba River Docs*, Light Factory and Cultural Heritage Museums, <http://www.catawbariverdocs.com/>;
- *Creating Holyoke: Voices of Holyoke Community's Past, Present, and Future*, Holyoke Public Library History Room and Archive and the Wistariashurst Museum: <http://www.creatingholyoke.org>;
- Digital Amherst, Jones Library, <http://www.digitalamherst.org/>;
- *Elvis at 21*, Smithsonian Institution's National Portrait Gallery: <http://160.111.252.141/elvis/>;

- *Lincoln at 200*, Abraham Lincoln Bicentennial Commission, the Chicago History Museum, and the Newberry Library: <http://lincolnat200.org>;
- *Minnesota Maps*, Minnesota Historical Association: <http://content.mnhs.org/maps>;
- *Upper Ringwood Special Collections*, Ringwood Public Library <http://www.upperringwood.org>;
- *Voices for the Lake*, ECHO Lake Aquarium and Science Center/Leahy Center for Lake Champlain, <http://www.voicesforthelake.org>;
- Yaddo, New York Public Library, <http://exhibitions.nypl.org/exhibits/yaddo>.

Additionally, we are seeing more undergraduate and graduate level classes incorporating *Omeka* as a platform for building digital public history, museum, and archive sites. To encourage using *Omeka* for building capstone projects, we created a separate page in the documentation where professors and teachers can link to their sites and talk about how they teach with *Omeka* <http://omeka.org/codex/Teach_with_Omeka>.

We identified small museums and historical societies as a key main user group for *Omeka* in the grant, and we found that libraries and archives were drawn to *Omeka* more often than museums because of its strong metadata structure and its interoperability with existing content management systems. In a recent survey (March 2010) of *Omeka* users, we found that the highest percentage of sites were collections catalogues, with narrative exhibits following closely behind. One of the biggest barriers to adoption and use for museums of all sizes is due to limited access to a LAMP server environment and lacking staff comfortable designing in open-source software.

To remove this barrier to adoption, the team worked very hard to provide alternatives for those interested in using *Omeka* but who could not provide their own LAMP servers and administrators. First, we offered some assistance in helping users find third-party hosting services that could best manage a program like *Omeka* on their servers. Next, we reached out to third-party hosts and requested one-click installations and received them from JumpBox <<http://www.jumpbox.com/app/omeka>> and Dreamhost <<http://dreamhost.com>>. The final piece, building a CHNM-hosted version, was the most difficult and the most-recently-completed deliverable.

In October 2010, CHNM launched the public beta version of Omeka.net. This service offers any institution or individual the means to launch an Omeka site by removing the technological challenges of installation and maintenance, which is similar to cloud-based content management services offered by WordPress.com, Blogger, and PBWorks, but geared to the needs of cultural heritage. No server or programming experience is required to launch an Omeka.net website, only a username and password. With Omeka.net, any user with an Internet connection can build digital exhibits, map photographs, collect memories from web audiences, or publish new scholarship in a few easy steps.

Building Omeka.net from scratch required two years of planning and development, together with six months of alpha testing from the development and outreach teams. This work has proven well worth the effort, because we have already seen tremendous enthusiasm for using Omeka.net with over 600 websites and over 800 users since the alpha launch in March 2010.

Throughout the *Omeka* software development process, we tested often and engaged our major partners, and the growing community of *Omeka* users and developers in various ways throughout these three years. Early in the development process, we relied heavily on our major partner, the Minnesota Historical Center and their Great Rivers Network of small historic sites and historical societies, to field test the software. We learned from their knowledge of museum collections management systems and their experiences in launching online projects at small cultural heritage sites. We incorporated their feedback into the administrative user interface and plugin development, and we continue to seek their insight and advice.

To help our users navigate *Omeka*'s functionality, we launched a documentation wiki <<http://omeka.org/codex>>, or the "How To" section, together with the software, and the wiki continues to grow. The section offers step-by-step instructions on topics including installation, working with the archive, building exhibits, modifying themes, editing PHP in plugins and themes, and more advanced topics on the theme API helper functions and building plugins. Initially, the documentation was only written and edited by the *Omeka* team, but now other community members contribute. To improve the documentation, we convened a documentation working group to discuss better ways to help users, of different technical backgrounds, to find information they might need. We implemented many of those suggestions.

To familiarize new users with *Omeka*, we recorded and released screencast tutorials on "Screencast Fridays" during the summer of 2008, and continued recording and updating screencasts to keep up with new releases and plugins. Currently 30 screencasts are available on the wiki: <<http://omeka.org/codex/Screencasts>> and on our Vimeo video channel <<http://vimeo.com/omeka>>. We applied this knowledge when creating a detailed Help section for end users of Omeka.net <<http://help.omeka.net>>.

Prior to Omeka.net, potential users had no place to test *Omeka* before committing to installation, so we created a "sandbox" <<http://omeka.org/sandbox/demo>> for public testing. We preloaded the sandbox with items, plugins, and themes, and allow anyone to login to the administrative side to add, edit, delete items; switch themes; create exhibits; and see the overall functionality of an *Omeka* system.

From the earliest release, we set up a forum where any user could ask a question to the crowd and of the *Omeka* team. Much like with the wiki, initially only the *Omeka* team responded to help. To our delight, many community members regularly respond to forum posts and share their own experiences, and the forum has nearly 2000 registered users. Questions that surface through the

forums have helped the development team identify software bugs and have influenced user interface design decisions.

As the number of *Omeka* developers grew, we created channels for more technical problem solving discussions where individuals contribute ideas, bug fixes, and seek helping testing new themes and plugins. The most active is a developers' Google group <<http://groups.google.com/group/omeka-dev/>>. We also host regular IRC channel <irc.freenode.net/#omeka> chats on Friday afternoons when the *Omeka* team is available for live support. To keep the code open for development, we have a working copy of the *Omeka* “trunk” available through Subversion (svn), for serious developers. By providing users, developers, and designers of all technical levels spaces for discussions, we created, and continue to foster, an active and strong open-source community around online collections and exhibition-based software. The result is that *Omeka* will continue to grow beyond CHNM.

Features and Plugins

We released *Omeka* with all of the basic features that we promised in the grant with additional functionality provided with a variety of plugins. First, *Omeka* may be easily downloaded omeka.org/download and installed on a LAMP (Linux, Apache, MySQL, PHP) server, (available at some institutions or through a third-party host, such as dreamhost.com for a small monthly fee). Each installation is equipped with an unqualified Dublin Core-based archive; 4 basic design theme templates that may be configured with different styles sheets to produce up to 9 different looks; an exhibit builder offering 12 basic page layouts and 4 different themes; tagging for items and exhibits; an RSS feed for new items; and COinS plug-in making all *Omeka* content readable by another CHNM-produced and IMLS-funded project, Zotero, zotero.org; and an easy way to write and publish simple web pages.

During the three year grant, *Omeka*'s functionality expanded greatly as we developed and released 31 plugins, and 5 were developed outside of CHNM. Plugins fall into broad categories including the following:

- Batch importing and data sharing (Atom Output; COinS, Dropbox, CSV Import, OAI-PMH Harvester, OAI-PMH Repository, Fedora Connector, EAD Importer; Zotero Import);
- Metadata input and support (Library of Congress Subject Heading autocomplete; Dublin Core Extended, Simple Vocab, Tag Bandit; Site Notes);
- Copyright (Creative CommonsChooser);
- Web 2.0 and online visitor interaction (Social Bookmarking, Contribution, Intense Debates Comment, MyOmeka; Google Translate; Simple Contact form, Terms of Service;)
- Representing data in different contexts (Exhibit Builder, Geolocation, Timeline; Simple Pages; QR codes and Reports);
- Annotating and displaying item files (iPaper, Docs Viewer, MediaRSS, Image Annotation);
- Security and site performance: (HTML Purifier, Page Caching).

Omeka's plugin architecture has led other developers to build and contribute plugins now available for all users to download. A key partner in building the developer community that is at the core of *Omeka's* strength has been the Scholar's Lab at the University of Virginia Library, whose developers have contributed innovative plugins including a timeline builder, EAD importer, and Fedora Connector. This work has been done out of a desire to make *Omeka* a more attractive and viable option to larger libraries and cultural heritage institutions (who might, for instance, host a Fedora-based repository of content), and also in connection with their *Neatline* project <<http://neatline.org/>>, a set of *Omeka* plugins for the creation of interlinked timelines and maps as interpretive expressions of the literary or historical content of archival collections. This relationship will help the *Omeka* community stay strong and active as this grant period closes, and as CHNM and Scholars' Lab begin work on a Library of Congress grant together for the coming two years.

Dissemination and Recognition

The outreach team worked consistently throughout the grant period to introduce and to teach *Omeka* to museum, library, archive, and university audiences at individual institutions and at professional conferences on 50 separate occasions. Additionally, we provided 14 tutorial workshops and offered advice, separately, in countless meetings, emails, and conference calls with cultural heritage professionals across the globe. To ensure everyone we encountered during these meetings, conferences, presentations, and workshops we designed and distributed *Omeka* SWAG including fliers, bookmarks, laptop stickers, t-shirts, and miniature Sharpies.

To regularly update stakeholders, we write to the project blog and the development Trac Wiki. We communicate with other users using the social networking sites, including Twitter and Facebook, and we have a presence on Vimeo and Flickr. Twitter has been particularly useful in reaching user-testers, for collecting feedback, and for announcing updates and newly-released plugins. The team also responds to questions and comments posted to the Forum and on the Google development group.

Since the beta launch in 2008, museum professionals, librarians, archivists, educators, and tech bloggers have written about using *Omeka* in a variety of contexts including: *Electronic Museum*, *Museum 2.0*, and the *Association of Science - Technology Centers News*. *Omeka* also received attention and when two museum professionals active in the fields of museum technology demonstrated that a museum website could be built in a day, and they chose *Omeka* as a platform in their *Museum in a Day* project (unfortunately, the web domain has not been renewed). After working with *Omeka*, the project team commented, "The *Omeka* approach is great – we can't stress enough how impressed we were with the site, the documentation, the system itself." D-*Lib* magazine featured a review, "Using *Omeka* to Build Digital Collections: The METRO Case Study

<<http://www.dlib.org/dlib/march10/kucsma/03kucsma.html>> in its March/April 2010 issue.

Another case study, "Digitizing Civil Rights: An *Omeka*-based Pilot Digital Presence for the Queens

College Civil Rights Archive” was published in the Metropolitan New York Library Council’s 2010 book, *Digitization in the Real World: Lessons Learned from Small to Medium-Sized Digitization Projects*.

The *Omeka* team and its growing community earned recognition by winning the Mellon Award for Technology Collaboration (MATC) in December 2008. MATC awards recognize not-for-profit organizations that are making substantial contributions of their own resources toward the development of open source software and the fostering of collaborative communities to sustain open source development. Members of the prize committee included Vinton Cerf, often called the “father of the internet” and chief internet evangelist at Google and Sir Tim Berners-Lee, creator of the World Wide Web. Committee members singled out *Omeka* for “involving an international collaborative community from the very beginning of the project.”

We are very pleased with the reception *Omeka* continues to receive from cultural heritage organizations, including other IMLS National Leadership Grant recipients such as Bringing Oral Histories to Life - Unlocking the Power of the Spoken Word (National World War II Museum) and the Virtual Terrapin Station (University of California, Santa Cruz), who are using *Omeka* as their project content management system.

Future

As this grant ends, *Omeka* has exceeded our expectations in its growth and adoption across the cultural heritage sector. We have fostered a strong open source community that continues to thrive as this grant ends. CHNM is committed to supporting this community and its software, which we ourselves use for many of our in-house digital cultural heritage projects. Omeka.net is a key part of this sustainability strategy and its “freemium” fee structure will allow CHNM to cover the increased server space and maintenance costs required to run a hosted application. Prices for paid plans range from \$50/year to \$1000/year for institutional users. Financial and legal services and basic operations for Omeka.net are handled by the not-for-profit Corporation for Digital Scholarship <<http://digitalscholar.org>>, which will return revenues (minus expenses) from paid Omeka.net plans to CHNM for continued *Omeka* development.

With this view to the long term, development of *Omeka* proceeds towards a version 2.0. We are especially pleased to report that the Library of Congress has recently awarded CHNM and its partners at University of Virginia’s Scholars’ Lab nearly \$700,000 over two years to fund regular point releases, improved documentation, development community support, user studies, key enhancements to the plugin API, and a set of geo-temporal visualization tools. *Omeka* will also continue to grow with our newly-awarded IMLS National Leadership Grant to fund a pilot of the *Omeka Commons*. The *Commons* will offer a select group of *Omeka* institutional users an easy, one-click option for adding their collections to a central preservation grade repository to provide institutions with both a low-overhead preservation pathway for their materials, and greater community exposure

and engagement. Second, *Omeka Commons* will provide researchers with immeasurably greater and centralized discovery and open access to the small collections contained in *Omeka* sites across the web. Meeting these aims will require significant work will also require enhancements to the core *Omeka* software, a new *Omeka Commons* server, and design and production of the *Omeka Commons* discovery portal. We look forward to getting started with that work in the coming two years, so that we can offer the *Commons* option to all *Omeka* users.

The Omeka team thanks the IMLS for funding the *Omeka* project between 2007 and 2010 and for funding our move into the development of the *Omeka Commons* pilot.

Please feel free to contact either of us at any time, should you wish to visit the Center or to learn more about *Omeka*, *Omeka.net*, or our forthcoming work on *Omeka Commons*.

Sincerely,

Tom Scheinfeldt
Managing Director
jscheinf@gmu.edu
703-993-4213

Sharon M. Leon
Director of Public Projects
sleon@gmu.edu
703-993-3831