

**Digital Content Creation  
Annual Report for FY14  
Submitted by Angela Waarala, Digital Collections Project Manager**

**I. Unit Narrative**

**A. Overview of major activities and accomplishments in FY14**

Digital Content Creation's (DCC) major activities and accomplishments in FY14 focused on the digitization of special collections, primarily in the Rare Book & Manuscript Library (RBML), the University Archives, and the Map Library, which are detailed in various sections below, as well as continued digitization with the Internet Archive including content from RBML, Classics, ACES and the Google Reject Project. DCC integrated new equipment into its workflow and ramped up its in house book digitization projects. We digitized a substantial amount of University of Illinois related publications for deposit into IDEALS including the Master Theses on microfiche, U of I Historical Theses and Dissertations, Agricultural Engineering Department Newsletters and various others detailed below. DCC in-house projects resulted in the creation of over 271,976 digital files; Internet Archive scanning resulted in the digitization of 9893 volumes from the Library's collections (approximately 2,681,079 million pages). We worked closely with Content Access Management metadata personnel on access issues related to our digitized content. DCC also worked with Kyle Rimkus and programming staff on preparations for ingest of digitized content into Medusa and HathiTrust. We provided cost recovery digitization services for several campus units, and handled patron requests for digital images for several units in the library. In addition to the digital projects outlined in the chart below, other major activities of the year included:

1. In August 2013 Digital Content creation hired additional academic hourly staff. DCC hired two new staff to digitize the pre-1923 master theses and dissertations on microfiche funded by the Collections Digitization Initiative grant in conjunction with the Scholarly Commons. Upon hiring Nicole Stevens and Jack Maples, DCC recognized the value in their work and a need for additional staff to support the increase volume of digitization in house. DCC hired them for additional hours to work in the imaging studio. Nicole Stevens, John Paul Goguen and Jack Maples comprise the team of specialized imaging staff who work with DCC's Phase One capture systems digitizing special collections for the Library. This year their efforts supporting the integration of a new capture system were integral in DCC adapting to the significant increased volume of book content assumed this year.
2. Oversight of and training for the Library's participation in the IMLS grant funded Copyright Review Management System – World project, a collaborative project with the University of Michigan and 14 other institutions to make reliable copyright status determinations for foreign published titles, which constitute a significant portion of the scholarly works being digitized by projects such as HathiTrust. Illinois contributed 33,756 reviews to the CRMS system in FY14, performed by Joshua Shelley and new staff member Elizabeth Lippoldt who DCC hired for an additional 20 hours a week in August 2013.

3. A dedicated staff member, Julio Flores, who digitized most of our sheet-fed and document projects for the last four years along with patron request for the Library, left DCC in summer 2014 for another position. DCC's current staff members including Amy Lovell and Elizabeth Lippoldt, added additional hours to their schedules and absorbed his responsibilities. This coincided with our ramping up the scanning of foldout material being digitized via the Internet Archive for the Google Reject Project. DCC staff adapted to the distribution of work and projects only because of the decrease in material RBML supplies for digitization as a result of limited resources in their unit.
4. DCC purchased and integrated the BC100 Book Capture system into its digital workflows in September 2013. This book capture system is designed for mass digitization of books and utilizes two P65 megapixel Phase One digital backs, two Schneider 90mm lenses and a pneumatic cradle. This technology provides the ability to efficiently capture books on a v-shaped, air-cushioned cradle allowing for safer digitization and handling of rare books while also providing superb image quality for digital surrogate creation and access. The BC100 enabled DCC to ramp up its digitization of books from the Rare Book & Manuscript Library and Archives. Historically DCC digitized only one to three books a month for RBML and even fewer for any bound material from Archives. The progress photographing and processing the unique collections RBML and Archives prioritizes for digitization in DCC was very slow. Since the acquisition and integration of the BC100, DCC digitized 416 bound volumes of content from University Archives and RBML as well as 802 short pieces of sheet music for the Sousa Archives and Center for American Music. Recently RBML digitization efforts slowed due to their staffing deficits, which prevent the preparation of materials for DCC. Currently RBML can only supply DCC with one day of material to digitize which includes only one to two books.
5. The University of Illinois Library contributed 570 volumes of locally digitized content to the HathiTrust in FY14. Digital Content Creation is working with the HathiTrust User Group in the Library to develop and codify procedures for ingest of locally digitized content.
6. DCC and Kyle Rimkus from Preservation worked with the Rare Book & Manuscript Library to arrange for ingest of the Unica Collection, the Digital Manuscript and Digital Rare Book collections exclusively into HathiTrust insuring increased and expedient access to their content. This eliminates locally hosting digital collections via Illinois Harvest which, due to lack of technical support, historically created long backlogs.
7. DCC staff adapted to the absence of Unit Head Betsy Kruger from May 2013 into the new fiscal year in August. Angela Waarala, the Digital Collection Project Manager, with the support of Jennifer Hain-Teper and Kyle Rimkus managed the unit, assumed administrative responsibilities, communicated with selectors and oversaw portions of the Internet Archive Google Reject Project and the various other projects DCC worked on in this time period.
8. DCC acquired and established its own imaging studio in room 423 which houses the digital Phase One capture systems. Having an exclusive studio space offers the convenience of better light and color control along with increased safety of the special collections DCC digitizes.
9. DCC met monthly with Library IT to discuss improvements in workflows. Angela Waarala worked with Eric Mosher from IT to articulate DCC's increased data processing needs with the introduction of the BC100. This included mapping DCC's intricate processing workflows, rate of data being captured and processed, eliminating duplication and testing various workstations to identify

machines with the most efficient processors. In doing this, DCC reverted back to its use of Windows computers for processing data and acquired seven HP USDT 8300 3.1 i5 workstations through IT. The conversion resulted in DCC increasing its throughput of data eliminating cumbersome bottlenecks and over taxing the servers where content is stored.

10. DCC partnered with IT to migrate all content DCC produces onto [\\storage.library.illinois.edu](http://storage.library.illinois.edu), eliminating the need to copy content across servers for ingest into access and preservation repositories and facilitating safer transfer of data from one process to the next.
11. DCC worked with Cher Schneider, Senior Special Collections Conservator and Henry Herbert, Rare Book Conservator to train new and current staff on handling materials from The Rare Book & Manuscript Library. DCC and Conservation developed techniques for digitizing rare books with the new equipment while staff learned about the anatomy of rare books and how to prevent damage when handling fragile materials. Concerns were addressed and workflows adjusted successfully.

**B. Significant changes to unit operations, personnel, and service profile or service programs—**Betsy Kruger, DCC's unit head was on family medical from May into the new fiscal year. Angela Waarala, the Digital Collections Project Manager oversaw the unit in her absence. Responsibilities were divided and delegated to maintain progress on DCC's current projects however the unit did slow down its preparation for new projects to prepare for Betsy Kruger's retirement in fall 2014.

**C. Articulate (with appropriate examples) the ways in which the unit and/or its members contributed to Library-wide programs, including information services, instructional services, scholarly communications, assessment, collection management, digital content creation, staff training and development, diversity efforts, and public engagement.**

1. Information services— Received, billed and processed the imaging and output of 24 individual patron requests. Also completed various other internal library requests including digitizing, processing, printing and sharing content with department libraries and staff.
2. Instructional services—
  - (1) Betsy Kruger and Angela Waarala developed and taught four sessions of the Digital Historian Workshop series through the Scholarly Commons. This workshop provided campus researchers, scholars and students with information about digitizing materials in archives for their own research. The workshop includes teaching attendees about best practices for digital imaging, storage and file formats, tips and methods for taking photographs of materials in unpredictable conditions, technical terms and use of camera, as well as demonstration of tools.
  - (2) Betsy Kruger and Angela Waarala hosted Professor Mara Wade's GER 199 *Digital Humanities* and GER/CWL 199 *Books Matter* classes.
  - (3) Angela Waarala taught a class in digital project management on campus at the Summer Educational Institute for Visual Resources and Image Management (SEI).

- (4) Angela Waarala presented at the National Archives Conference for Fraternities and Sororities 2014 on campus to talk about the digitization of the Palm, Alpha Tau Omega's Journal, with the newly acquired BC100 book capture system.
3. Scholarly communications—a significant amount of DCC's digitization activities support IDEALS. (See 13, 14, 17, 18, 19, and 24 in chart below).
  4. Digital content creation—DCC undertook 25 small to large digital projects in FY14, most of which were digitized by DCC staff; one by an outside vendor; 9 by the Internet Archive scanning center at OSLF; and 2 were done jointly by DCC and the Internet Archive. DCC in-house projects resulted in the creation of over 271,976 digital files; Internet Archive scanning resulted in the digitization of 9893 volumes from the Library's collections.
  5. The Library started digitizing the rejected volumes from CIC Google Project via the Internet Archive and DCC in FY14. The Library's Google digitized content is deposited into the HathiTrust via Google. Mary Laskowski will be reporting more on the Google project in her annual report.

S	PROJECT	STATUS/SCOPE	DIGITIZED BY	FUNDING SOURCE
1	<b>Sanborn Insurance Maps II</b>	DCC is digitizing the entire collection of Sanborn Insurance Maps from our Map Library. DCC already digitized 7000 maps including Champaign-Urbana, Chicago and East St. Louis. DCC is currently digitizing the rest of the collection with an estimated 11,000 maps to be digitized, 5500 of which have already been completed and staged for ingest into ContentDM.	DCC	State
2	<b>Digital Emblematica</b>	Project completed Spring 2014 for Mara Wade and RBML. DCC digitized 56 volumes for the project in FY14 which will also be ingested into HathiTrust.	DCC	State
3	<b>Digital Manuscript Collection</b>	Digitized 16 manuscripts selected by RBML for this collection some of which will be ingested into HathiTrust	DCC	State
4	<b>Unica Project</b>	Photographed and processed 8 new books for the Unica Project; there are now 281 digitized texts for this collection. Hosting of this collection is being migrated from Illinois Harvest to HathiTrust.	DCC	State
5	<b>Digital Rare Book Collection</b>	58 new titles digitized volumes. Hosting of this collection is being migrated from Illinois Harvest to HathiTrust.	DCC	State
6	<b>Joseph Hand Correspondence</b>	The Papers of U of I Professor Joseph Hand, held in Archives including 146 pieces of personal correspondence for Archon.	DCC	State

7	<b>ALA Posters</b>	The ALA Archives Posters including 599 printed posters, rotogravures and architectural drawings of ALA divisions committees, projects and events digitized as a ContentDM collection.	DCC	State
8	<b>Palm (Alpha Tau Omega)</b>	60 volumes from the Alpha Tau Omega journal digitized in house on the BC100, 105 journals digitize via the Internet Archives all of which are available now in HathiTrust.	DCC and Internet Archive	Cost Recovery
9	<b>College of Engineering Annual Reports, Scrapbooks, Status Reports,</b>	Digitized and processed 62 separate scrapbooks and reports for the College of Engineering and Archives for Archon.	DCC	Cost Recovery
10	<b>Albert Lybyer Papers</b>	The Papers of U of I History Professor Albert Lybyer held in Archives including 254 items; correspondence, diaries, notes, manuscripts and financial records for Archon.	DCC	State
11	<b>Nalbandov Journal</b>	A journal including 288 images from the Papers of Andrew V. Nalbandov, Professor of Animal Physiology held in Archives for Archon.	DCC	State
12	<b>Sousa Archives Music Instrument Digital Images and 3d Model Collection</b>	Project complete. Created 233 digital compound objects and 3-dimensional models for ContentDM.	DCC	State
13	<b>UI Theses and Dissertations</b>	Planned workflow and began digitization for 1200 pre-1923 handwritten theses and dissertations belonging to University Archives for ingest into IDEALS.	DCC	State
14	<b>Illinois State Budget on Microfiche</b>	Digitization from microfiche of the Illinois State Budget up to 2001 for ingest into HathiTrust.	DCC	State
15	<b>Merserve Lincoln Photographs</b>	Photographs digitized as a ContentDM Collection from a photo album held in the Illinois History and Lincoln Collection collected by Frederick Merserve and Carl Sandburg.	DCC	State
16	<b>Google Rejects</b>	Books digitized by Internet Archives, which were first rejected by Google during U of I Library's previous leg of the project; rejects also include foldout material requiring in-house DCC imaging. All content will be ingested into HathiTrust.	DCC and Internet Archive	Google Budget
17	<b>Pre-1923 Theses and Dissertations</b>	Digitized 2341 pre-1923 theses and dissertations for IDEALS.	Internet Archive	State
18	<b>Prairie Research Institute Reports</b>	Digitized 648 various reports from Prairie Research Institute for IDEALS.	Internet Archive	State
19	<b>College Catalogues</b>	Digitized 2136 college catalogues from the University of Illinois for IDEALS.	Internet Archive	State
20	<b>U.S. Government Documents</b>	Digitized 586 United States government documents.	Internet Archive	State
21	<b>Unique material selected</b>	This material includes 602 volumes selected	Internet	State

	<b>by ACES, Classics, International Studies and Architecture Libraries</b>	by departmental librarians for digitization via the Internet Archive including Slavic and Asian material from International & Area Studies, Literature and Language, Art and Architecture, ACES and Classics Libraries.	Archive	
<b>23</b>	<b>Antonio Cavagna Collection (RBML)</b>	Digitized over 545 volumes of the Antonio Cavagna Collection for HathiTrust. To date, more than 4,000 volumes in this collection have been digitized for RBML.	Internet Archive	State
<b>24</b>	<b>Railroad Research Reports</b>	Engineering Library; Faculty request for IDEALS.	Internet Archive	State
<b>25</b>	<b>2013 Honor's Tablet</b>	Outsourced the photography for the 2013 University of Illinois Honor's Tablet	Vendor	State

6. Staff training and development--Angela Waarala attended a forum for Digital Transitions Cultural Heritage Division. This forum was hosted at the Morgan Library and Museum in New York. Several prominent libraries and museum participated in the forum including the Getty, NYU, Penn State, Harvard and Yale Libraries. Topics surrounding the digitization of special collections, color, lighting and image quality were discussed in an effort to build a cultural heritage digitization community.
7. Public engagement
  - (1) Continued to publish PIXELS, a multi-disciplinary blog from the University of Illinois Library and the College of Fine and Applied Arts with announcements and technical tips on finding, creating, and using digital images in teaching, learning, and research.  
(<http://illinoispixels.wordpress.com/>)

**D. Unit activities, current and projected, which advance the Library's strategic initiatives**

1. All of DCC's digitization activities as detailed in this annual report support and advance the following Library strategic initiatives:
  - (1) 3.1 Establish a robust and sustainable program supporting access, dissemination, preservation, and curation of digital content created, managed, or acquired by the Library.
  - (2) 4.3 Acquire, process, and make accessible materials scarcely-held among research libraries that align with campus research and teaching emphases and/or with the historic strengths of the Urbana campus collections.

- E. Graduate assistant information**—DCC was approved to hire and share a GA with Preservation for the FY15 school year. Molly Wayne was hired in summer 2014 and begins her appointment in DCC where she will help facilitate ingest of DCC content into HathiTrust as well as contribute to the digitization of materials and workflow in the imaging studio.

**F. Review of progress made on Unit Annual Goals for FY13**

<b>FY14 Goal</b>	<b>Progress</b>
<p>Submit proposal to Library Budget Committee to stabilize DCC's funding for a least a three-year renewable cycle. This would enable the unit to plan more strategically and assure our partners that digitization projects will be completed if they carry across fiscal years.</p>	<p>DCC requested its FY15 budget as part of the Technical Services Division budget request. Securing permanent funding for the unit remains a priority.</p>
<p>Installation of BC100 equipment from Digital Transitions and subsequent training of staff and workflow modifications.</p>	<p>DCC successfully installed and integrated the BC100 into its workflow. New procedures for books digitization from RBML and Archives were established and more efficient computers were installed to increase throughput for projects.</p>
<p>Continue our Internet Archive book-scanning program. Targeted collections include: the college catalog collection; approximately 500 volumes from the area studies libraries; and many of the pre-1923 UIUC theses and dissertations currently held in the RBML.</p>	<p>Internet Archive scanning resulted in the digitization of 9893 volumes from the Library's collections targeted last fiscal year (approximately 2,681,079 million pages). Work continued on The Antonio Cavagna Collection and University High School collections were completed.</p>
<p>Continue and/or complete the in-house digital collections still ongoing from FY13: Unica Project; Sousa Band Instruments; ALA Executive Committee Proceedings; Illinois EPA Groundwater Quality Protection Program Well Survey Reports; College of Engineering materials; and the Joseph Royer Collection.</p>	<p>DCC continued work with RBML and ongoing projects including Unica, Digitla Manuscript and Digitla Rare Book Collections. The Sousa Band Instruments Digital collection was completed in spring 2014. The EPA Groundwater Quality Survey Reports were complete in February 2014. We continue work on the College of Engineering materials. All materials were completed except for the Scrapbooks, which posed significant challenges due to their complex format and condition. DCC completed the scanning of the Joseph Royer Collection.</p>
<p>Begin the following in house DCC digitization projects: Sanborn Insurance Maps II; archives of the Coordinated Science Laboratory; UI theses and dissertations; several new RBML projects; digitization of more emblem books as part of the NEH Digital Emblematica Grant, Phase II; Letters of Diego Jose Carrillo de Albornoz (if NEH grant is successful); Meserve "Faces of Lincoln" Project.</p>	<p>DCC began the digitization of the Sanborn Insurance Maps II in February 2014 with projected completion in the spring 2015. The Coordinated Science Lab Reports project is currently halted due to change in staff in the Engineering Library. Digitization began in January of 2014. The Digital Emblematica Project, Phase II started in fall 2013 and completed in spring of 2014. The Merserv "Faces of Lincoln" was completed September in 2013.</p>

Hold open house in fall to showcase DCC projects.	DCC has not held an open house however this is again on our list of goals of this fiscal year to coordinate with Preservation on a larger open house.
Continue participation in IMLS CRMS-World grant with University of Michigan and other grant partners.	University of Illinois' involvement in the IMLS-CRMS-World grant project continues and was extended for three years. U of I contributed 33,756 reviews for the fiscal year, the highest of all of the participating institutions.
Migrate to new server.	The server migration occurred in early fall 2013. All of DCC's unprocessed content along with staging areas for ingest into our access and preservation repositories were merged onto one share.

**G. Unit goals for FY15**

**II.**

1. Adopt interim plan being drafted and submitted for approval by Unit Head of Preservation, Jennifer Hain-Teper. DCC's current Unit Head, Betsy Kruger will leave the Library in November 2014. In the interim, DCC projects will continue to be managed by Angela Waarala, the Digital Collections Project Manager. An interim Unit Head has not been appointed at this time however Angela Waarala is currently absorbing some of Betsy Kruger's responsibility in preparation for her absence.
2. Adapt to the changing environment and organization of the library with possible plan to join Preservation. Relationships between DCC and Preservation are already established especially with ingest of DCC's preservation content into Medusa and development of HathiTrust ingest procedures.
3. Develop models and implement formal project management strategies in planning future digitization efforts according to the material and equipment used. Use statistics from this year's projects to predict more accurate timelines for completion and tracking of resources.
4. Train new staff to replace Nicole Stevens who is leaving in November to perform quality assurance and staging content for ingest into our access systems. This position will continue to evolve once Betsy Kruger leaves in November.
5. Continue work with Preservation, IT and repository groups to improve DCC's workflows and ingest processes into preservation and access repositories. This includes further discussion with Preservation about adapting their database into a new and separate system for IA and DCC's priorities.

6. Continue Internet Archive book-scanning program. Targeted collections include: The rejected volumes from the Google project and the continued digitization of the Antonio Cavagna Collection through its completion.
7. Continue and/or complete the in-house digital collections still ongoing from FY14 including: Sanborn Insurance Map II; Unica; Digital Manuscript and Rare Book Collections; Illinois Theses and Dissertations; additional College of Engineering material and College of Veterinary Medicine newsletters for IDEALS.
8. Follow up with selectors about proposed projects: World War I Maps, National Highway Association Maps as a part of the Good Roads movement, 1913 to 1916; and a 50 volume collection of Newspaper Clipping Scrapbooks maintained by President Edmund J. James office for Archives as well as the ALA Scrapbooks and Letter Books.
9. Hold open house in fall 2014 to showcase DCC projects possibly coordinating with Preservation's open house.
10. Continue participation in IMLS CRMS-World grant with University of Michigan and other grant partners.

## II. Statistical Profile

A. Facilities – DCC has no user seating.

B. Personnel

1. Betsy Kruger (Faculty) (100%) (July 2012-June 2014)
2. Angela Waarala (Academic Professional) (100%) (July 2012-June 2014)
3. FTE academic hourly – 4.61 FTE - Julio Flores (left DCC in July 2014), John Paul Goguen, Amy Lovell Elizabeth Lippoldt, Nicole Stevens, Jack Maples, Joshua Shelley.

C. User Services

1. Gate count – N/A
2. Circulation – N/A
3. Reference and information services – Fulfilled 24 patron requests for digital images.
4. Number of hours open to public per week – N/A
5. Number of presentations to groups – 8
6. Number of participants in group presentations - 68

## III. Preservation Statistics

A. Personnel - 4.61 FTE

B. Expenditures

In the following fields, unit heads should only report the expenditures from budgets managed and supervised by their units. Monies spent through the Friends Preservation Competition, the NEH Competition, and the Preservation and Conservation Departments will be reported by the fund managers responsible for these activities. On the first line, write the dollars spent; on the second,

include the project or a description of what the monies funded.

Contract Conservation:	\$	0	_____
Contract Commercial Binding	\$	0	_____
Contract Pres. Photocopying	\$	0	_____
Contract Pres. Microfilming	\$	0	_____
Other Contract Expenditures	\$	0	_____

1. Total Contract Expenditures \$ 0 \_\_\_\_\_

Preservation Supplies	\$	0	_____
Preservation Equipment	\$	0	_____

2. In-house Conservation/Book Repair Treatments

This section refers to conservation treatments completed in-house, i.e., by staff at the University of Illinois at Urbana-Champaign from your unit. Materials sent to Preservation/Conservation or outsourced for treatment will be counted in other sections.

Number of volumes given a level 1 conservation treatment:	0	_____
Number of volumes given a level 2 conservation treatment:	0	_____
Number of unbound sheets given conservation treatment:	0	_____
Number of photos and non-paper items given conservation treatment:	0	_____
Number of custom-fitted protective enclosures constructed:	0	_____

3. Out-Sourced Conservation/Book Repair Treatments

Number of volumes treated:	0	_____
Number of unbound sheets given conservation treatment:	0	_____
Number of photos and non-paper items given conservation treatment:	0	_____
Number of custom-fitted protective enclosures constructed:	0	_____

4. Reformatting

Outsourced reformatting:

- a) Number of books reformatted to digital via Internet Archive: 9893 (approximately 2,681,079 million pages)
- b) Number of images reformatted by vendors: 1

In-house reformatting:

- a) Images and text pages - 271,976