Next-Generation Technical Services: Changing How We Provide Technical Services for the University of California Libraries

Scope Statement April 10, 2009

The UC Libraries' technical services units acquire, describe, organize, facilitate discovery of and access to, and preserve information resources for research, education, and clinical care. UC Libraries have always made it a priority to continually adapt internal operations to meet the needs of rapidly changing information discovery and access behaviors, as well as to support new modes of collection development and acquisition of scholarly content.

However, radically new approaches to these operations are now called for in order to ensure that they are not only maximally efficient, but also transformatively effective.

The Next-Generation Technical Services initiative evolves out of work conducted in several other key UC efforts. The UC Libraries have long been active participants and leaders in cooperative national cataloging programs, such as CONSER, BIBCO and NACO. The work of the Bibliographic Services Task Force (2005)¹ and the current Next-Generation Melvyl pilot serve as foundations for the work of this group. Additionally, both the Shared Cataloging Program (SCP) and the Cataloging and Metadata Interest Group (CAMCIG) have already issued vision statements for evolving from shared cataloging to integrated cataloging: a vision in which the system adopts a single set of standards and policies, eliminates duplication of effort and local variation in practice, and leverages access to language and subject expertise in order to create a single copy of a bibliographic record for use by the entire system.

The Next-Generation Technical Services Steering Team will explore these and other options, and in particular, it will seek to articulate similarly broad visions that will engage and challenge the expertise of all of our libraries' staffs in acquisitions, cataloging, metadata, digitization, and preservation. Our goal is to ensure broad access over the long term to all of the extraordinary collections of the University of California. The values upon which transformative models to achieve that goal will be evaluated include:

- Speed processing throughout all technical services functions
- Eliminate redundant work
- Free up resources in order to focus cataloging and other metadata description on unique resources
- Start with existing basic metadata from all available sources
- Allow for continuous improvements to basic metadata including from the world beyond the UC Libraries: our users, expert communities, vendors, and other libraries
- View technical services as a single system-wide enterprise
- Make the UC Collections easy to find and use
- Define success in terms of the user's ability to easily find relevant content

¹ Rethinking how we provide Bibliographic Services for the University of California; Bibliographic Task Force Final Report, Dec. 2005 (http://libraries.universityofcalifornia.edu/sopag/BSTF/Final.pdf)

Guiding Principles

The Next-Generation of UC Libraries' technical services will be guided by the following principles:

1. Technical services support and provide infrastructure for the development and management of the UC library collections.

- Services will expose all of UC scholarship and all the collections managed by each UC Library, including unique, 'hidden', and complex resources.
- Infrastructure will support new modes of scholarly communication, lifecycles of knowledge creation, and innovative paths to discovery.
- Approaches, tools, and services will support access to metadata for purposes of analysis and assessment of the collections, their use and discoverability, acknowledging that the questions asked of our collections will change rapidly over time.

2. Technical services provide broad access to and facilitate discovery of collections in support of the mission of the University.

- Integrated approaches to technical services are preferred when they enhance the user experience and provide faster disclosure of materials to the broadest audience of users.
- Systems must allow for experimentation and innovation in approach to the widest variety of discovery pathways both inside and outside the "catalog" environment.
- Interoperability of metadata across content, formats, and systems is essential to support discovery and emerging models of scholarly communication and knowledge creation.

3. UC Libraries will build a culture of continuous improvement of services applied to scholarly content.

- UC Libraries value approaches that shorten the time span between information acquisition and discovery.
- The UC Libraries will approach all areas of technical services (cataloging, metadata design and development, acquisitions, preservation, etc.) as phases in the life cycle management of the collections. It will be a priority to speed the discovery process and to build in follow-up efforts, as needed to enhance and improve access and discoverability.
- UC Libraries metadata work will be flexibly designed with the expectation that it will be exposed in multiple ways and open to enhancement by user tagging and expert communities.

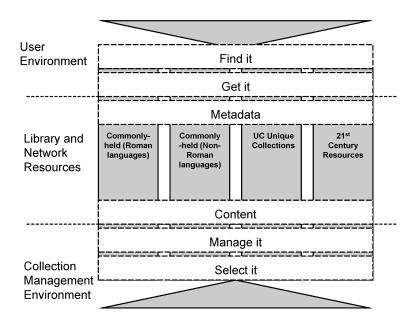
4. UC Libraries seek to organize technical services and develop standards of practice to achieve efficiencies and attend to a broader scope of content.

- UC Libraries will organize to eliminate duplication of effort across the UC system and local variation in practice.
- In support of the UC Libraries' emerging vision for UC collections, Next-Generation Technical Services will adopt new models and practices in order to support the full spectrum of 21st century scholarly content and knowledge production lifecycles.
- Next-Generation Technical Services will develop sustainable strategies to support collection
 development and management within existing resource constraints, rebalancing budgetary
 expenditures as necessary to embrace the format and service requirements for the full range of
 all the UC collections.
- Next-Generation Technical Services will leverage national and international standards and strategically position themselves to be an earlier adopter of emerging standards (e.g., ONIX metadata).
- Approaches and organizational structures that alleviate effort in some areas in order to provide

- opportunities in other areas are preferred when they achieve system-wide cost-savings and provide opportunities to focus staff skills and expertise, and allow for experimentation with new techniques or ideas.
- In support of the UC Libraries' emerging vision for UC collections, Next-Generation Technical Services will adopt new models and practices, possibly including some that are non-traditional, in order to support the full spectrum of 21st century scholarly content and knowledge production lifecycles.

Content and Discovery Layers

The landscape of content and discovery of the collections is envisioned in layers, each layer ultimately interacting with one virtual metadata resource. Users access metadata resources through multiple discovery paths and metadata resources are built from multiple sources.



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For the purposes of thinking holistically about technical services operations and the skills they require, collections content can be categorized in four broad groups: commonly-held content in Roman languages, commonly-held content in non-Roman languages, UC unique collections, and 21st century emerging resources.

Generally, each group has similar lifecycle-management characteristics for selection, acquisition, bibliographic services, and preservation for which our Next-Generation Technical Services will be designed. The services ultimately provide metadata to a discovery layer.

The discovery layer consists of one virtual metadata resource; multiple sources provide metadata to that virtual resource (Next-Generation Melvyl, institutional repositories, harvesting and curation services,

² Graphic based on Lorcan Dempsey's "Some Context" presentation at RLG Partners Meeting, Philadelphia, June 2, 2008, http://www.oclc.org/programs/events/2008-06-02a.pdf

digital collections, vendors, etc.) and users access that layer through multiple discovery paths (search engines, scholarly sites, Next-Generation Melvyl, institutional repositories, etc.).

Next-Generation Technical Services will focus on these goals:

- streamlining the lifecycle management for the four broad categories of information types and developing infrastructure to quickly provide metadata to this virtual metadata resource as content is acquired
- 2. exposing that virtual metadata resource to the broadest number of discovery pathways so that users can find and use them easily
- 3. enabling continuous enhancement of the virtual metadata resource by librarians, scholars, and third parties

It is assumed that the work of Next-Generation Technical Services will build on the UC Libraries' strategic development of the Next-Generation Melvyl. It is also assumed that discovery pathways may be developed by scholars, librarians, and third parties in myriad ways and using a wide variety of tools. It is assumed the collections of the UC will become increasingly diverse and digital. Next-Generation Technical Services will build and expose the metadata and curate the content of all these diverse collections of the UC Libraries to enable and inspire scholarly activity.

Information Resource Types

In keeping with the UC Libraries' emerging vision for the UC collections, Next-Generation Technical Services will rethink the infrastructure for a wide variety of information resource types. Resource types in these broadly defined groups can be characterized as having common lifecycles encompassing selection, acquisition, description, access, and preservation or long-term retention. Format is a secondary characteristic and certainly there are formats in the categories that overlap. UC Libraries' Next-Generation Technical Services has scoped out these four groups to design appropriate lifecycle models for each and in doing so, to redefine Technical Services operations.

- 1. Commonly-held Content in Roman Script
 - a. Print publications
 - b. Licensed resources
 - c. Reformatted content (digitized, mass digitized, microfilmed)
 - d. Audio materials
 - e. Images
 - f. Born-digital publications
- 2. Commonly-held Content in non-Roman Script
 - a. Print publications
 - b. Licensed resources
 - c. Reformatted content (digitized, mass digitized, microfilmed)
 - d. Audio materials
 - e. Images
 - f. Born-digital publications
- 3. UC Unique Collections
 - a. Special Collections
 - b. University Archives, including digital papers and email correspondence

- Theses and dissertations
- d. UC scholarship
- 4. 21st Century Emerging Resources
 - a. Harvested Web sites and resources (e.g., "Web at Risk")
 - b. Other selected Web sites
 - c. Blogs and other integrating resources
 - d. Digital maps
 - e. GIS
 - f. Datasets

Next Steps

The Steering Team envisions an iterative and inclusive approach to the design of Next-Generation Technical Services.

The Steering Team is actively working on and tracking near-term projects that we believe will fit into the new models: a HOTS survey of campus library use of Shelf-ready services from vendors, building collaborative projects based on HOTS' Cataloging Expertise document, the CalDocs project, CDC's Prospective Shared Print Task Force (joint approval plans). The intent will be to guide these near-term projects into the fabric of longer-range new models.

Following acceptance of the definition of the four broad groups of information resource types by the Executive Team, the Steering Team will appoint a cross-functional task force for each information resource group (Commonly-held Content in Roman Scripts, Commonly-held Content in non-Roman Scripts, UC Unique Collections, 21st Century Emerging Resources). Each task force will be encouraged to consult with other experts as needed.

Each task force will be charged to develop 1-3 models for technical services for each information resource group. Each model must:

- Address processes for selection, acquisition, cataloging, and preservation or reformatting (as needed), including possibilities for outsourcing some or all to third parties
- Incorporate the guiding principles and values enumerated above
- Address options for systemwide organization of Technical Services

Each task force will be encouraged to suggest a name for each proposed model (e.g., a Centers of Excellence Model for Technical Services, an RLF Model for Technical Services, a Localized-Standards Model for Technical Services)

For each model:

- 1. Research existing best practices and current initiatives within UC and beyond
 - a. Interview stakeholders and experts
 - b. Identify organizational structures
 - c. Collect evidence for proposed solutions, including throughput and discovery statistics
 - d. Describe when collaborative approaches to technical services ought to be considered/not considered
 - e. Describe when/if a collaborative technical services approach depends upon a shared UC collections approach

f. Consider vendor or other contracting solutions when appropriate

2. Outline proposed models

- a. Include, as appropriate, selection, acquisition, cataloging, [electronic] resource management, harvesting, access services, digitization, preservation, or other relevant functions
- b. Propose future workflows
- c. Propose policies and best practices needed
- d. Propose new tools, services
- e. Propose organizational structures
- f. Propose funding models
- g. Identify resource needs (including space requirements if any)
- h. Propose governance models
- i. Identify the collection development model best suited to the technical service model

3. Analyze proposed models

- a. Conduct a Strength, Weakness, Opportunity, Threats (including barriers to adoption) analysis (SWOT)
- b. Propose an assessment approach that monitors throughput and human resource effort over time and provides evidence of improvement in users' ability to easily find and use materials

The Steering Team will work with each task force to chart out these tasks over a reasonable time frame, identifying appropriate reporting and review stages for each.

Task Force Composition

The Steering Team has identified the types of representatives that should be on each task force. Beyond that, task force members will share a capacity for the broad, visionary thinking needed to engage and challenge the expertise of all UC libraries' staff.

- 1. Commonly-held Content in Roman Scripts
 - a. Collection Development rep (someone who actively works with all formats)
 - b. CDL Acquisitions rep
 - c. Campus Acquisitions rep
 - d. SCP rep
 - e. Campus cataloger
 - f. Mass dig rep
 - g. Preservation librarian
 - h. Steering Team liaison

Consult with visual resources, preservation, roman script area studies collection development librarians

Read SCP scope statement, CAL Docs, SPSTF deliverables

2. Commonly-held Content in non-Roman Scripts

- a. CJK rep (someone who does Selection, Acquisitions, Cataloging)
- b. Middle Eastern rep (someone who does Selection, Acquisitions, Cataloging)
- c. South Asian rep (someone who does Selection, Acquisitions, Cataloging)
- d. Cyrillic rep (someone who does Selection, Acquisitions, Cataloging)

- e. Preservation librarian
- f. Steering Team liaison

3. UC Unique Collections

- a. Special collections rep (someone who does collection development and acquisitions)
- b. Archivist
- c. Special collections cataloger
- d. Digital Special Collections rep from CDL
- e. Digital Special Collections rep from campus
- f. Preservation librarian
- g. Steering Team liaison

Consult with SOPAG's digital library initiative group, eScholarship, and DPR.

- 4. 21st Century Emerging Resources
 - a. "Web at Risk" rep
 - b. GIS librarian
 - c. San Diego Supercomputer library liaison
 - d. DPR rep
 - e. Data librarian
 - f. Preservation librarian
 - g. Steering Team liaison

We envision the task force work being broken into 3 – 6 month timeframes in order to make the work manageable and to get the reports widely shared, discussed, and owned by all interested groups (ACGs, CIGs, LAUC, etc.). The role of the Steering Team liaison on each task force will be to actively monitor this process in order to assure appropriate consultation and minimize duplicative work. From these discussions should emerge decisions as to which model(s) are most appropriate for each information resource group. Once these decisions are made, work can then move to implementation.