CDL Electronic Resource Management Needs Statement DRAFT 1/16/04

The CDL needs a flexible, extensible electronic resource management infrastructure that creates greater efficiencies in:

- 1. Collection development decision-making for collaborative purchase/license and cancellation of digital content (i.e. holdings, status, evaluation, and cost data drawn from and aggregated across UC campuses);
- 2. Ongoing management and tracking of subscribed resources (i.e. contract management, accounting, contacts, and usage statistics);
- 3. End user discovery of and access to resources (i.e. generating data for CDL's Directory of CDL-Licensed Content and the Shared Cataloging Program);
- 4. Outreach and communication about digital information resources and the processes supporting them (i.e. mining, summarizing and sharing cost and benefit data to share as necessary for reporting or political needs).

To date CDL analysis and requirements specification have focused on shared digital content – primarily ejournals and A&I databases – acquired and managed by the CDL on behalf of the UC libraries. Supporting acquisitions and management processes for shared print collections is a prospective need that is expected to generate a similar set of requirements and thus has the potential to be served by the same infrastructure.

An infrastructure that supports acquisition and management of Tier 1 resources (and those tier 2 resources to which CDL provides support) requires aggregating campus data into a systemwide view. To aggregate data an infrastructure is envisaged that includes interoperability with campus systems that contain holdings and acquisitions data (at the least). "Interoperability" ranges from (and likely starts with) export and import functions between a central system and campus systems and at the far, ideal end to real-time dynamic querying of disparate data stores and systems.

Detailed requirements within each of the above categories is attached in the appendix, with some placeholders for campus-based (Tier 2 and 3 resources) requirements.

An initial set of key challenges that have been identified include:

- 1. Lack of consistent/available match points/key fields between data sets; evolution and varying practice re: standards and conventions for identifiers.
- 2. Lack of existing commercial products that support consortial functionality (accommodation of campus-by-campus information on holdings, fund-accounting, statistics, etc.)
- 3. Lack of existing commercial products that provide robust standalone functionality.
- 4. Lack of existing commercial products that provide workflow functionality.
- 5. Uncertain data availability: Is campus-based data already captured electronically, (easily) available for export, and mergeable (cf: #1 above)?
- 6. Will commercial vendors provide enough extensibility, including the ability to define, add, and populate custom fields?

Appendix: Detailed Requirements for CDL/Tier 1 ERM

1 Collection Development Decision Making: Supporting Selection and Evaluation

- 1.1 Shared electronic (CDL-licensed resources)
 - 1.1.1 Identify/analyze which vendors provide access to a title
 - 1.1.2 Identify/analyze overlapping campus holdings for a title
 - 1.1.3 Identify gaps/redundancies in subject coverage
 - 1.1.4 Batch import (or link/synch) acquisitions information from external providers [Which fields: price? current status?]
 - 1.1.5 Record prices for different scenarios and generate reports that facilitate evaluation of different pricing scenarios
 - 1.1.6 Record decisions to acquire a new title; record intentions, comments, and decisions
 - 1.1.7 Record decisions to cancel an existing title: record intentions, comments, and decisions
 - 1.1.8 Generate reports/notifications of decisions; trigger other workflows (cataloging, acquisitions, etc.)
 - 1.1.9 Manage/track workflow for selection and evaluation of shared electronic resources
 - 1.1.10 Manage/track workflow for enabling trial access

1.2 Shared print

- 1.2.1 Identify/analyze overlapping campus holdings for a title (e.g., to identify last copy)
- 1.2.2 Record decisions—including the possibility of voting via an interface provided by the system—to migrate the last copies of a title to a shared print repository; record intentions, comments and decisions
- 1.2.3 Provide information on requirements for maintaining print copies
- 1.2.4 Generate report/notification of decisions
- 1.2.5 Manage/track workflow for selection and evaluation of shared print resources
- 1.2.6 Manage/track workflow for moving resources to the shared print repository
- 1.3 Campus-licensed electronic [TBD by campuses]
- 1.4 Campus-licensed print [TBD by campuses]

2 Ongoing Management and Tracking, including Workflow

2.1 Provide a hub for interoperability and exchange, especially metadata integrity in parallel systems

- 2.1.1 Provide a means of exchange for bibliographic information (including holdings) across separate systems.
- 2.1.2 Batch import (or link/synch) of bibliographic information from complementary systems, including external providers (MARC CONSER records via a third party, SFX Knowledge Base, campus ILS systems)
- 2.1.3 Batch export to complementary systems, such as campus cataloging modules

2.2 Support acquisitions management, tracking, and workflow for CDL-licensed resources

- 2.2.1 Batch import (or link/synch) acquisitions information from complementary systems, including external providers [Which fields: anything other than price and current status?] [See 1.1.4]
- 2.2.2 Batch export to complementary systems, such as campus acquisitions modules
- 2.2.3 Facilitate renewals process (generate reports/notifications prior to renewal notification date, etc.)
 - 2.2.3.1 Record list prices and price cap information.
 - 2.2.3.2 Automatically update capped prices annually.
 - 2.2.3.3 Automatically calculate credits due to price caps (list price minus capped price)
- 2.2.4 Facilitate acquisitions of new resources
 - 2.2.4.1 Record description of the pricing model
 - 2.2.4.2 For a package, identify which print resources a campus subscribes
 - 2.2.4.3 Record restrictions on cancellation of print subscriptions [See 1.2.3]
- 2.2.5 Facilitate termination actions and decisions [See 1.1.7]
 - 2.2.5.1 Record termination terms and conditions
 - 2.2.5.2 Store termination date and reason for termination
- 2.2.6 Support acquisitions workflow (see DLF ERMI: Appendix B: p.3-4)

2.3 Support licensing management, tracking and workflow

- 2.3.1 Manage/track licensing/contract information (ILL, reserves, distance ed, course web sites, coursepacks).(commencement date, duration of agreement, confidentiality provisions) (permanent rights?)
 - 2.3.1.1 Store license rights and terms for reference, reporting and control of services
 - 2.3.1.2 Provide access to online version of license agreement
 - 2.3.1.3 Store and manage perpetual access rights information
- 2.3.2 Support workflow for licensing activities (see DLF ERMI: Appendix B p. 3-4)
- 2.3.3 Support workflow for breach investigation and cure activities

2.4 Support cataloging

- 2.4.1 Record availability and quality of MARC records
- 2.4.2 Assign multiple subject headings according to multiple subject schemes

2.5 Access management, including activating a new resource

- 2.5.1 Store and maintain access URIs for multiple campuses.
- 2.5.2 Support integration with external systems for the creation, storage and updating of persistent URIs
- 2.5.3 Record information necessary to configure external authentication and access systems (including proxy services)
- 2.5.4 Generate reports/notifications of related to access URIs.
- 2.5.5 Support creation and maintenance of IP lists. Provide vendors with notification of IP updates.
- 2.5.6 For a given resource/provider, indicate whether IP address are registered online (and give URI)
- 2.5.7 Store administrative URIs, IDs, and passwords
- Record configuration options (hooks to holdings, z39.50, OpenURL source, live reference, branding)
- 2.5.9 Record the number of licensed concurrent users.
- 2.5.10 Track feature requests, enhancements, and other tasks Resource Liaisons perform.
- 2.5.11 Manage/track workflow for activating a new resource (p. B-5 of DLF ERMI)
- 2.5.12 Manage/track workflow for access management (IP management, linking, proxy notification)

2.6 Support management of and access to usage statistics

- 2.6.1 Record information about usage statistics (frequency, delivery method, available formats)
- 2.6.2 Record URIs, IDs, and passwords for access to online statistics

2.7 Support troubleshooting of access problems

- 2.7.1 Record amount/percentage of allowable downtime specified in license agreement
- 2.7.2 Store information about vendor's normal maintenance window
- 2.7.3 Store URI of server status provided by vendor
- 2.7.4 Flag resources as temporarily unavailable
- 2.7.5 Support integration with systems that support troubleshooting of access and performance-related problems

2.8 Contact management

- 2.8.1 Provide an exchange hub for contact information
- 2.8.2 Record multiple vendor contacts, including ability to assign multiple roles.

- 2.8.3 Generate reports/notifications of IP addresses and changes to vendors
- 2.8.4 Record official contract notice address and delivery requirements

2.9 Support instruction and outreach activities (optional)

- 2.9.1 Record URIs/information about documentation
- 2.9.2 Record information about (or provide links to) training classes
- 2.9.3 Ability to export information to create pathfinders

3 End-User Discovery and Access

- 3.1 Easily generate multiple systems for end-user navigation and access (lists, searchable directories, pathfinders, etc.)
- 3.2 Within a single system for end-user navigation and access...
 - 3.2.1 Provide item-level metadata (and export to other access systems), including the ability to search, browse and retrieve records by authors, titles, alternate titles, cross-references, subjects and keywords. Includes an A-Z list.
 - 3.2.2 Provide subject access
 - 3.2.3 Display relevant terms and conditions
 - 3.2.4 Display access instructions
 - 3.2.5 Display time-sensitive info (current outages, planned outages, planned upgrades)

4 Outreach and Communication

- 4.1 Provide information for faculty/key stakeholders
 - 4.1.1 Publish reports related to the additions or cancellations process (e.g., list of titles proposed for cancellation for faculty and/or librarians to review)
 - 4.1.2 Provide communications messages to patrons at the point of use, such as information about barriers to licensing from a particular vendor
 - 4.1.3 Publish reports for Resource Liaisons
- 4.2 Publish reports for UC librarians
- 4.3 Facilitate communications related to collection development and resource management