Shared Regional Library Facility ILS
Six month exploration period
Report
Submitted to the Council of University Librarians
June 12th, 2017

Executive summary

This project report of the Shared RLF ILS team summarizes the efforts and recommendations of the team during a six month exploration period. The team was charged to study how shared systems would positively impact the RLFs and the University of California (UC) libraries overall and to study specifically how the RLFs would make use of a shared ILS. In total the team studied five potential system integration approaches, evaluating them on five benefits / outcomes that a shared system should have for campuses and the RLFs.

These expected benefits of a next generation shared ILS for the RLFs are:
1. A shared system should reduce the depositor and RLF staff time required to complete the entire depositing process
2. A shared system with fully merged and aligned metadata would positively impact discovery, access and resource sharing opportunities across the entire UC system
3. A shared system should enable new approaches to using RLF space and will be essential in supporting deposits and materials shifting
4. A shared system should enable unified reporting and shared print programs
5. A shared system provides a path for UC libraries to explore shared ILS systems

The five potential approaches explored were:
1. Voyager and Millennium integration
2. Inventory management software for high density facilities
3. Enhanced discovery and duplicate checking tools
4. Standardized holdings and item records content and display
5. Shared ILS

Overall the team found that the RLFs are tightly coupled to their host campuses (e.g. UCB and UCLA) and that merging the RLFs onto a next generation shared system without also moving the host campuses would have considerable negative impacts on the library workflow and user experience.

1. The RLFs should work towards the creation, adoption and possible implementation of consistent item and holdings standards. This work is of high impact but also of moderate to high cost and realizable over a long timeframe. It is likely that retrospective cleanup will require additional funding.
2. The RLFs, in partnership with CDL and UC Berkeley should upgrade discovery and duplicate detection tools to better support campus and RLF staff. This work is of high impact and realizable in a short timeframe if UCB and CDL invest the staff time.
3. Of all the technical solutions considered, a next generation shared ILS appears to be the most effective solution to meet our stated project benefits.

The RLF directors would like to move forward with recommendations one and two with the expectation that each recommendation can be acted on with in-kind staff contributions. In addition, the RLF directors would like to come back to CoUL once we understand the costs associated with retrospective cleanup of holdings data to discuss how and if this work should be funded.

Shared RLF ILS team roster, important links and full explanation of benefits can be found in Appendices A, B and C.

Introduction

In 2014, the University of California (UC) Libraries charged SAG3 (Strategic Action Group 3) with moving forward an exploration of a shared integrated library system (ILS), recommended by the Next Generation Technical Services group. Marshall Breeding was engaged to help assess the feasibility of implementing a shared ILS for the UC Libraries. Breeding's findings indicated that while a shared platform would present opportunities for interoperability within the UC Libraries, it would also present challenges with cost as well as with the intricacies of moving to a shared ILS. As a result of discussions around these findings, the Council of University Librarians (CoUL) formed the RLF Systems and Workflows Project Team with the charge to study the possibility of a shared ILS for the Regional Library Facilities (RLFs) in 2015.

The RLF Systems and Workflows group met for 9 months and issued their final report in April of 2016. A key recommendation of the RLF Systems and Workflows group was creation of a Shared RLF ILS team to manage a six month exploration period to determine the feasibility of moving selected data representing the NRLF holdings from the Millennium catalog managed by UCB into Voyager managed by UCLA. The Shared RLF ILS team was assembled and initially convened at a kick off meeting in December of 2016 at the SRLF with a mid-point meeting held in March of 2017 at the NRLF. Initially, there were three working groups (Technical Services, Public Services and Development & Systems) and in March 2017 two subgroups (Holdings and Item Records and Enhanced RLF tools) were added. Overall project coordination was provided by a group made up of the Working Group co-chairs, the Collections Project Coordinator and the two RLF Directors.

The primary goal of the six month exploration period was to determine if there was a technological solution to the issues exposed by the RLF Systems and Workflows group. These issues included difficulty of duplicate checking for both campuses and RLFs, differences in RLF practices that had evolved in serving campus needs and unrealized opportunities around collection analysis, discovery and access given the creation of separate systems and workflows.

The Shared RLF ILS team began its work by pinpointing tangible benefits of collaboration and identifying potential collaborative avenues including the specific one (i.e. merging RLFs into a single system) recommended by the RLF Systems and Workflows team. Throughout the process the benefits, included in Appendix C for reference, were used to evaluate options. Over the six month period the Shared RLF ILS project team identified and studied five options to address the team's charge. These five options are:

1. Voyager and Millennium integration (UCLA, UCB)
2. Inventory Management software
3. Enhanced Discovery Tools
4. Standardizing Holdings and Item Record Content and Content and Display
5. A next generation shared ILS

This report summarizes the findings from each explored option with detailed finding reports in the appendices. Throughout the exploration process the working group was influenced by other trends and projects occurring in the UC Libraries including the exploration of renewed resource sharing systems, the potential construction of a fourth module at the NRLF (NRLF4) to accommodate more resources and participation in large scale national shared print programs. Cutting across these efforts, the philosophy of "*one RLF, two locations*" emerged as a guiding principle. This principle can be seen in each of the recommendations in this document.

Detailed content/investigation

Voyager and Millennium integration discussions

The Shared RLF ILS team examined the possibility of using Voyager as the main system for the RLFs for Technical, Public, and Access Services processes. Challenges with cross-system functionality and interoperability (e.g. Voyager to Millennium and Millennium to Voyager connections) and user experience became apparent early on. As a result, the team considered the possibility of splitting operations between Voyager for Technical Services and Millennium for Access and Public Services. This second approach involved syncing data from Voyager back to Millennium to support Access and Public Services. Although this method left user experience intact, it also resulted in decreased Millennium functionality. Ultimately, each approach created more dependencies between systems without lowering operating costs or gaining efficiencies. For these reasons a merge of the two systems is not recommended.

Examining the technical feasibility of merging Millennium records into Voyager was the main work of the Shared RLF ILS team for the first three months of the 6-month exploration period. Complete project documentation was created and can be reviewed in Appendices E and F to provide a fuller explanation of the issues, particularly in discovery and delivery of RLF holdings, that the Shared RLF ILS team working groups investigated during this phase of the project.

Inventory Management software

The Shared RLF ILS team studied inventory management software as a potential mechanism to support intended outcomes of RLF system integration. The high density facility inventory management software (HDIMS) marketplace includes a small number of commercial and open source applications including projects by Generation Fifth Applications[1] (GFA), CAIA Software[2], and an open source platform developed by the University of Notre Dame called Annex IMS[3]. The Shared RLF ILS team explored each application at a high level in order to understand the functionality that a HDIMS would bring. More details of this exploration are included in Appendix G.

Overall, the Shared RLF ILS team found that HDIMS systems could save facility staff considerable time in the deposit process but only if RLF staff were to stop doing the level of bibliographic work that they are currently engaged in. Facilities that use HDIMS software can generally accession hundreds of items per hour per staff member. In contrast, because of the metadata work that the RLF staff complete (e.g. bibliographic record checking, holding updates, item record updates) the items per-hour per staff person average 15-17. The Shared RLF ILS team recommends that the RLF directors and staff continue exploring these systems so that they can appropriately advise the Shared Library Facilities Board (SLFB) if there is a point in the future when the implementation of this type of system is advantageous for UC libraries.

Enhanced Discovery Tools

Based on the technical and public services issues identified when discussing the incorporation of NRLF bibliographic, item and holdings data into Voyager, the team pivoted to explore technological options that build on discovery tools already in place. Three specific options were explored. The first was implementing an RLF

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[1] http://www.gfatech.com/

[2] https://www.caiasoft.com/

[3] https://github.com/ndlib/annex-ims

only instance of WorldCat Local (WCL); the second was an upgrade to the currently available RLF tool; the third was to utilize an OCLC API to retrieve RLF holdings information.

Each of the studied approaches would afford staff and depositors the opportunity to easily search holdings in both RLF locations in a variety of configurations, one with manual entry while another in batch mode, one with OCLC number searching only, while another one could search on a variety of access points. Unfortunately, the team recently learned that OCLC may not be able to provide UC with an RLF only instance of WCL that could retrieve LHRs. The team is still waiting to hear back on the feasibility of this option. Based on a positive OCLC response, more discussions will need to take place to determine which organization within the UC system might best host the product and who covers the annual cost.

Of the two remaining approaches discussed by the enhanced discovery tool group, it was proposed that the OCLC API be used to group LHRs from the RLFs in conjunction with the RLF tool. In effect, the two retrieval methods would be combined thereby augmenting functionalities of the current RLF tool for staff and depositors. Please see Appendix H for more details. The team recommended moving forward with this work, recognizing that for it to be most effective UC Berkeley will need to adjust some of its processes for updating LHRs.

Standardizing Holdings and Item Records Content and Display

Currently, the two RLFs use different standards for formatting holdings and item records. Most these differences are stylistic but do have implications for how holdings information is displayed. Having the RLFs move to a common practice would be advantageous to depositors, staff, and patrons and would positively impact the improved duplicate checking and discovery tools. The group identified four main differences where alignment of practice would have a positive impact:

- Whether all circulating holdings are compressed into one summary statement per RLF, or are separated by owning location
- Whether holdings records for multivolume monographs are displayed or suppressed from public view
- How supplements are disclosed in holdings summary statements
- Whether RLF item records are enumerated based on depositor-provided information (e.g. spine label), or the publisher information on the piece in hand

Moving to a common standard would also aid in future deduplication efforts across both RLFs. Please see Appendix I for more details. While some of the desired changes could be implemented programmatically, being able to utilize an outside team to engage in record cleanup would be a huge benefit. This is likely to involve considerable in kind and real costs. If this effort moves forward, the RLFs will study the approach to metadata cleanup and costs associated with that and come back to CoUL once there is a more solid understanding of the real costs.

The team believes that regardless of system changes in the future that the investment in holdings and items upgrades would be beneficial. While forward-looking standards implementation would be the most beneficial, retrospective cleanup would also be highly impactful.

Sustainability of collaborative efforts:

One intended side benefit of the collaborative efforts associated with the Shared RLF ILS 6-month exploration period has been the relationships and trust built between the staff of the RLFs. As the RLF Directors continue to think about unifying the workflows and operations of the facilities, the rapport that has been established

between the staff is a tremendous benefit. Chris Barone, the SRLF Collections Project Coordinator and operational lead for the 6-month exploration period, spent a week at the NRLF in February, gaining insight and understanding of NRLF operations and strategies. The trust and understanding created during this period will need to continue as the Holdings and Items group continues to discuss a joint items and holdings standard. RLF Directors Cathy Martyniak and Erik Mitchell have established a regular RLF working group and propose that the UC libraries leverage this group to achieve a fuller implementation of the "*one RLF, two locations*" philosophy.

To sustain this collaboration, the RLF teams will continue to explore workflows and procedures as well as potential future collaborations. The SRLF will continue to allocate 50% of the Collections Project Coordinator to support all collaborative efforts outlined in these recommendations. In addition, the RLFs may leverage the as yet unimplemented RLF CKG and other existing or new groups to address areas supporting the "*one RLF, two locations*" philosophy such as workflows.

Next generation shared ILS

Each of the recommendations of this report, including metadata standardization and cleanup and RLF tool enhancement, make solid strides towards solving the fundamental issues raised by the RLF Systems and Workflows team. At the same time, they are solving low level issues without addressing some of the fundamental challenges that come from having separate information systems in the first place. Staff at UC libraries, from technical services to resource sharing, from the RLFs to information technology, need the ability to quickly, easily and accurately discover what materials are held at the RLFs, request them for usage in a timely and efficient manner and track their usage via easily gathered and generated statistics and reports. An integrated library system used by the RLFs that offers both next generation technological capabilities and functionality across one or more UC libraries could help both depositors and RLF staff address many of the problematic issues identified by the RLF systems and workflows team.

At the RLFs, a next generation shared ILS would address multiple specific issues that impede staff ability to process materials into the facility in an effective and efficient manner. For example, checking for duplicates is a multi-step process whereby staff need to check both OskiCat and the UCLA Library catalog. Having the holdings of both RLFs listed on a single screen would save hundreds of clicks for SRLF staff every day. In another example, when 100 new volumes are deposited into the SRLF, processing staff need to 'relink' [move from original holding location to RLF holding location] the 100 volumes one by one. Batch capabilities in Voyager are extremely limited and significant staff time is wasted every day performing tasks one by one. Finally, certain functions in Voyager happen in small sized windows. Staff must scroll back and forth in the window to see the data they need where new ILS platforms offer resizable windows. Finally, tracking deposits and generating annual statistics for an RLF can be an hours or days long task and one that NRLF and SRLF perform separately. With a next-generation shared ILS the RLFs could more easily accept deposits from across the UC system and could report out on data in automated and more real-time ways. Additionally, campuses who were on the same ILS could more easily mark items for deposit - allowing the UC libraries to fully track items as they are selected, prepared, shipped to and deposited by the RLFs. Additional benefits of a system-wide ILS are referenced in the recommendations section.

As the RLF Directors look towards the next 10 to 20 years of facility operations, keeping in mind no new construction possibilities at the SRLF and the hoped-for construction of NRLF4, the real possibility exists that selected circulating southern materials will be shelved and made accessible from the north and vice-versa. In this service model, a shared ILS with all RLF materials listed in the catalog would allow for collection load

balancing between the RLFs to be accomplished in a fluid and efficient manner. For this and other reasons, the team believes that a truly shared RLF ILS is one of the fullest expressions of the "***one RLF, two locations***" philosophy and would allow the RLFs to more easily continue to collaborate in building shared collections and services.

The Shared RLF ILS team believes that the single best way to accomplish these outcomes (e.g. reduced cost for deposit, improved discovery and access, improved reporting and collections analysis) is a truly shared ILS, with elements including but not limited to rich searching and reporting capabilities, full merger of loan rules to support resource sharing, consistent method of stating holdings for RLF materials, and co-located holdings statements for both RLFs. We also believe, based on our exploration of other options, that a shared ILS has the potential to serve all five of the benefits that the team explored (e.g. reduced deposit time, improved discovery and access, enhanced collection analysis). Thinking more broadly the team also believes that the benefits of a shared system would broadly impact the UC system in collections management and access areas that extend beyond those listed here.

Recommendations

1. The RLFs should work towards the creation, adoption and implementation of consistent item and holdings standards. This work is of high impact but also of moderate to high cost and realizable over a long timeframe. It is likely that retrospective cleanup will require additional funding but the extent of that cost is not yet known. The RLF Directors would like to come back to CoUL once we understand the costs associated with retrospective cleanup of holdings data to discuss how and if this work should be funded.
   a. **Next steps:**
      i. Extend the life of the Holdings and Item subgroup (See Appendix A for roster of this group) allowing them to continue their discussions with a focus on establishing a standard to be used for creation of RLF holdings statements and enumeration and chronology in item records. This group could report to the RLF Joint Committee, a standing group facilitated by the RLF Directors who would keep the Shared Library Facilities Board (SLFB) and CoUL informed on the group's progress.
      ii. Determine feasibility of single master holdings statement at UCB/NRLF
      iii. Draft potential timeline for implementation of consistent standard for all metadata
      iv. Support near future use of metadata enhancements using agreed upon standards
   b. **Anticipated outcomes:**
      i. Metadata improvements would make NRLF and SRLF metadata consistent, improving campus ability to check complex holdings statements for deposited materials. Normalized holdings statements would improve patron discovery and access.
2. The RLFs, in partnership with CDL and UC Berkeley should upgrade discovery and duplicate detection tools to better support campus and RLF staff. This work is of high impact and realizable in a short timeframe if UCB and CDL invest the staff time.
   a. **Next steps:**
      i. Extend the life of the Enhanced RLF tool subgroup (See Appendix A for roster of this group) allowing them to continue their discussions with a focus on upgrading the existing RLF tool. This group could report to the RLF Joint Committee, a standing group facilitated by the RLF Directors who would keep SLFB and CoUL informed on the group's progress.
      ii. Support a Worldcat local RLF only instance for UC staff (not public), if technically feasible per OCLC

      iii.   Improve the current RLF tool - Enhance duplicate checking and believe that an improved tool, combined with an updated policy on duplicate checking (based on the tool functions) will help campuses

   b. Anticipated outcomes:

      i.   Upgraded tool(s) would enhance duplicate checking and lower effort required by campuses to find duplicates as well as support RLF staff during the deposit process. A potential future recommendation based on the outcome of this work could be to adjust RLF practice around duplicate checking.

3. Of all the technical solutions considered, a next generation shared ILS appears to be the most effective solution to meet our stated project benefits

   a. Next steps:

      i.   The project team believes that a shared system is the preferable method of integrating the RLF catalogs, particularly considering the technical and resource sharing concerns expressed during the entire 6-month exploration period.

   b. Anticipated outcomes for RLF staff and depositors:

      i.   Improved and automated duplicate detection; with improved metadata (i.e. oclc number reclamation, merged holding records, consistent holdings statement)

      ii.   Automated accessioning from campuses in a shared ILS

      iii.   Streamlined statistics and reporting with associated streamlined policies

      iv.   Saved IT resources (e.g. license and IT fees, support) through shared licensing and implementation

      v.   Streamlined discovery, request and request fulfilment. Campuses on the same ILS as the RLFs would experience improved access and lower metadata management costs

      vi.   Potential shared acquisitions programs

      vii.   Potential for large-scale collections analysis within an ILS platform

Appendices

Appendix A:
Membership rosters

Appendix B:
Links to documentation

Appendix C:
RLF project benefits

Appendix D:
First update - January 25, 2017

Appendix E
Options 1 and 2 report - March 2017

Appendix F:
Second update - April 10th, 2017

Appendix G:
High Density Inventory Management Software

Appendix H:
Full subgroup report for RLF tools - May 28, 2017

Appendix I:
Full subgroup report for Items & Holdings - May 31, 2017

Appendix A: Membership Roster

Public Services Working Group

Jon Edmondson, SRLF	Jutta Wiemhoff, NRLF	Patrick Shannon, UCB	Joe Ferrie, CDL
Judea D'Arnaud, UCSD	Robin Gustafson, UCD	Alison Ray, CDL	Mark Marrow, UCB
Erik Mitchell, Director, NRLF	Cathy Martyniak, Director, SRLF	Christine Barone, SRLF	

Technical Services Working Group

Tin Tran, SRLF	Tim Converse, NRLF	Lisa Rowlison de Ortiz, UCB	Kathryn Stine, CDL
Xiaoli Li, UCD	John Riemer, UCLA	Kourtney Murray, UCSD	Kathryn Tam, SRLF
Erik Mitchell, Director, NRLF	Cathy Martyniak, Director, SRLF	Christine Barone, SRLF	

Development and Systems Working Group

Gary Thompson, UCLA	Lynne Grigsby, UCB	Andy Kohler, UCLA	Eileen Pinto, UCB
Dave Scholl, SRLF	Matt Smith, SRLF	Erik Mitchell, Director, NRLF	Cathy Martyniak, Director, SRLF
Christine Barone, SRLF			

Holdings and Item Records (HAIR) Subgroup

Lisa Rowlison de Ortiz, UCB	Tim Converse, NRLF	Judea D'Arnaud, UCSD	Sarah Koller, UCD
Mark Marrow, UCB	Kourtney Murray, UCSD	Kathryn Ombao, SRLF	Elleen Pinto, UCB
Peter Soriano, UCB	Tin Tran, SRLF	Christine Barone, SRLF	Erik Mitchell, Director, NRLF
Cathy Martyniak, Director, SRLF			

RLF Tool Expansion and WorldCat Local Subgroup

Lynne Grigsby, UCB	Xiaoli Li, UCD	Tim Converse, NRLF	Joe Ferrie, CDL
Robin Gustafson, UCD	Kourtney Murray, UCSD	Kathryn Ombao, SRLF	Alison Ray, CDL
Patrick Shannon, UCB	Tin Tran, SRLF	Jutta Wiemhoff, NRLF	Christine Barone, SRLF
Cathy Martyniak, Director, SRLF	Erik Mitchell, Director, NRLF		

Co- Chairs

Cathy Martyniak, Director, SRLF	Erik Mitchell, Director, NRLF	Tim Converse, NRLF	Jon Edmondson, SRLF
Lynne Grigsby, UCB	Xiaoli Li, UCD	Lisa Rowlison de Ortiz, UCB	Gary Thompson, UCLA
Tin Tran, SRLF	Jutta Wiemhoff, NRLF	Christine Barone, SRLF	

Appendix B: Relevant documentation

1. Shared ILS/RMS Task Force to Investigate a Shared ILS/Resource Management System for UC Libraries (SAG3, 2014)
   a. http://libraries.universityofcalifornia.edu/sag3/shared-ilsrms-task-force Membership, Consultant and background reading
   b. http://libraries.universityofcalifornia.edu/groups/files/sag3/docs/SAG%203%20Shared%20ILS%20RMS%20Feasibility%20TF%20Report%20Exec%20Summary%20Oct%202014rev.pdf Executive Summary
2. RLF Systems and Workflows (2016)
   a. http://libraries.universityofcalifornia.edu/slfb/projects/rlf_systems_and_workflows Scope, Background and Phases
   b. http://libraries.universityofcalifornia.edu/groups/files/rlfswpt/docs/RLFSystemsWorkflowsFinalReport20160524.pdf Final report
   c. Original charge for RLF systems and workflows team
3. Shared RLF ILS project
   a. Original charge for Shared RLF ILS 6 month exploration period https://drive.google.com/open?id=0B3MZ4I0OlkIXZHc0QTFpWi14R1U

Appendix C: Benefits of increased collaboration between the RLFs

#1 A shared system may reduce the depositor and RLF staff time required to complete the entire depositing process: Simplified duplicate checking, especially for serials-level information, will be a direct benefit of a shared system for both depositors and RLF staff. In merging the systems, the RLFs will need to grapple with aligning metadata practices, deposit policies and other current areas of inconsistency all of which will make it easier for campuses to identify and send collections for deposit. The envisioned system will allow campuses to check one place for duplicates. The RLF Systems and Workflow survey of campuses (April 2016) surfaced different workflows and varying levels of staff-time dedicated to deposit selection. While it would take time to bring systems together, immediate benefits could result upon implementation of an integrated system. The Project Coordinator is working to determine costs for deduplication activities at two depositing campuses.

#2 A shared system with fully merged and aligned metadata could positively impact discovery, access and resource sharing opportunities across the entire UC system. While it would take a tremendous effort on the part of RLF staff to come to agreement on aligned workflows for creation of summary holdings statements, and then implementing the new practices, the long term benefits to ILL and resource sharing staff across the UC system cannot be overstated.

#3 A shared system enables new approaches to using RLF space and will be essential in supporting deposits as we move forward with NRLF4: A unified information system, supported by carefully vetted policy and workflow alignments between the RLFs, enables and expands future collaborative opportunities across RLFs such as shared campus deposits between the facilities based on best collection fit (e.g. in an expanded RLF it may be preferable to have NRLF and SRLF store collections based on maximized collection density rather than depositing campus). This benefit to the RLFs would be accrued as NRLF 4 planning moves forward and may more directly benefit RLF staffers. This benefit could be quite significant in the three to five-year term.

#4 A shared system will enable unified reporting and shared print programs: By merging RLF information systems and aligning deposit and use tracking practices, the RLFs will be able to extract a wide variety of statistics in a more streamlined way directly benefiting RLF staff. This will allow for faster production of statistics and will make it easier to provide reports to depositing libraries. Unified reporting will also enable RLFs to more easily participate in shared print programs where RLF collections need to be analyzed prior to commitment statements.

#5 A shared system provides a path for UC Libraries to explore shared ILS systems, policies and workflows: While this may not be the right time to invest in a UC-wide shared ILS, the RLF workflows study surfaced a continuing need for ILS work at the RLFs and tangible benefits from a shared system. By focusing on shared systems, as well as consistent policies and workflows across the RLFs, this project will deliver value to the UC system as a whole while not requiring campuses to buy into shared policies, systems and workflows without a direct benefit.

Appendix D: First update (January 25, 2017)

Update on the Shared RLF ILS 6-month exploration period

The Shared RLF ILS 6-month exploration period kicked off with an in-person meeting at UCLA on December 1st. 25 people from across the UC system participated including staff from UCB, NRLF, UCLA, SRLF, UCD, UCSD and CDL. Topics for the 1.5 day meeting included an overview of Voyager, a discussion of the background and goals of the project, an environmental scan, multiple brainstorming sessions and breakout sessions.

Goals of the exploration period include:
- Audit RLF systems, policies and workflows and consider approaches for alignment / differentiation of systems, policies and workflows
- Experiment, pilot and complete proof-of-concept applications as needed to explore approaches to shared systems, policies and workflows
- Create a recommendation for moving forward towards more unified systems, policies and workflows
- Based on the recommendation, create technical plans for implementation
- Based on the recommendation, develop a proposed implementation timeline and possible budget options
- Engage in outreach and advocacy
- Prepare final report for COUL in summer 2017

Current project focus

An April 2016 report discussing the RLF systems and workflows group final report, a precursor to this project, can be found at
http://libraries.universityofcalifornia.edu/groups/files/rlfswpt/docs/RLFSystemsWorkflowsFinalReport20160524.pdf
Project leads, Cathy Martyniak (SRLF Director) and Erik Mitchell (NRLF Director), facilitated the kick off meeting. Half time project coordinator, Chris Barone of the SRLF, was introduced to the entire team. Three working groups (WG) were established. Each WG meets separately via ZOOM at least twice a month. To facilitate cross WG communication, a group consisting of all 6 co-chairs, the 2 project leads and the project coordinator meet twice a month. The entire team may meet again in person in mid-March. A complete project roster is included in Table 1.

Table 1: Working group membership

Name	Organization	Role	Working group
Gary Thompson	UCLA	Co-chair	Development and Systems

Lynne Grigsby	UCB	Co-chair	Development and Systems
Andy Kohler	UCLA	Member	Development and Systems
Eileen Pinto	UCB	Member	Development and Systems
Dave Scholl	SRLF	Member	Development and Systems
Matt Smith	SRLF	Member	Development and Systems
Jutta Wiemhoff	NRLF	Co-chair	Public Services
Jon Edmondson	SRLF	Co-chair	Public Services
Patrick Shannon	UCB	Member	Public Services
Joe Ferrie	CDL	Member	Public Services
Judea D'Arnaud	UCSD	Member	Public Services
Robin Gustafson	UCD	Member	Public Services
Tim Converse	NRLF	Co-chair	Technical Services
Tin Tran	SRLF	Co-chair	Technical Services
Lisa Rowlison de Ortiz	UCB	Member	Technical Services
Kathryn Stine	CDL	Member	Technical Services
Xiaoli Li	UCD	Member	Technical Services
John Riemer	UCLA	Member	Technical Services
Kourtney Murray	UCSD	Member	Technical Services

Working group updates

The three working groups and chairs teams have met several times and have identified several potential approaches and challenges. Current activities across the working groups include exploring:

1. Public service implications of a shared ILS across NRLF and SRLF in the context of the broader UC collaborative infrastructure
2. Implications for catalog records, authorities and other catalog structures in a shared ILS as well as across multiple ILS systems (i.e. how to manage split records, serials and authorities to ensure an accurate and patron-friendly experience)
3. Technical opportunities and limitations associated with various information systems including the UCB and UCLA ILS systems, VDX and OCLC systems. The team is also exploring the impact that connective applications such as NCIP could have.

The working groups are experimenting with the Voyager platform and record loading from Millennium to Voyager to better understand workflow, logistics and potential issues.
1. UCB and NRLF staff are receiving installations of and introductions to the Voyager client.
2. UCLA IT staff is allowing authorized UCB and NRLF staff to access the Voyager TEST server.
3. Team are exploring a technical test with 500 bibliographic records that do not match Voyager to serve as a proof of concept and to provide teams a sandbox to explore workflow options. Work includes:
    1. Configuration of NRLF, UCB, and UCD locations in Voyager Test
    2. Comparison of fields in the bibliographic, holdings and items records between Millennium and Voyager
    3. Mapping location and item type (as well as other important) information from the Millennium format to the UCLA Voyager model
    4. Comparing discovery, request and fulfillment workflows at the RLFs
    5. Exploration and documentation of the differences and similarities between patron expectations at the RLFs

Please contact Cathy Martyniak (cmartyniak@library.ucla.edu) or Erik Mitchell (emitchell@berkeley.edu) with any questions, comments or concerns that you have regarding this project.

Appendix E: Findings on Options 1 and 2

Prepared for the March 21st, 2017 Shared RLF ILS mid-point meeting

Executive Summary:

Working Group members reviewed option 1 (Full merger of all Millennium data into Voyager with all circulation happening inside Voyager) and found that opportunities exist in several areas. Some of these opportunities include improved discovery for both patrons and depositors, a streamlined request path for NRLF/SRLF resource sharing, streamlined workflows (particularly in de-duplication) for depositors and RLF staff, and achieving consistency in statistical reporting. However, there are five main challenges with this solution. 1) Current systems are not sophisticated enough to meet the functional requirements (e.g. NCIP, data interchange), thus requiring considerable changes to the UCB discovery environment. 2) This would lead to increases in ILL workflows and reduced service levels to UCB patrons. 3) Technical Services would lose key functionalities (bulk processing, the ability to link items to multiple bib records, retaining searchable local call numbers, etc.), thus impacting how statistics are gathered as well as providing a reduced service level for depositing libraries. 4) There would be a need to work out of two separate ILSes. 5) The interdependency that UCLA and UCB would have following the merger.

In reviewing option 2, Working Groups found that the opportunities present are the same as those for option 1 with the main advantage being that this solution would not require any changes to UCB patron experience. There are three main challenges to this approach. 1) Technical Services would lose key functionalities (bulk processing, the ability to link items to multiple bib records, retaining searchable local call numbers, etc.) thus impacting how statistics are gathered as well as providing a reduced service level for depositing libraries, 2) needing to work out of 2 separate ILSes, and 3) the interdependency that UCLA and UCB would have following the merger.

Full detailed findings:
Findings for Option 1 from all 3 working groups:
Option 1 = NRLF/SRLF merger into Voyager (Syncing only patron requests/records)

This approach is the original idea where NRLF data regarding bibliographic, holdings and item records are migrated to Voyager. All Circulation and Public Service functions would need to be conducted via NCIP or some form of middleware. A key necessity would be for both campuses to engage in a reclamation project prior to migration with plans for continued record maintenance to retrieve the most recent OCLC number as new records are added to avoid duplication. More detailed information on record matching below.

Opportunities:
- Potential for both RLFs to adopt similar workflows for processing new deposits as RLFs would be working in the same technological environment

- Potential for depositors to only have to check one place for RLF holdings making duplication checking more streamlined and efficient
- Potential for consistency in reporting statistics across both RLFs
- Voyager supports SQL queries, which for trained staff, makes QC, bulk record edits, and data gathering easier and more robust
- Potential for an NRLF article request link in Voyager/OPAC?
- Potential for UCLA to have better discovery and a streamlined request path to NRLF items via Voyager

Challenges:

1. NRLF would lose the ability to act as another branch of the UCB libraries
2. Staff would need to work out of two ILS systems - and possibly not just at NRLF
   a. Potential for this to impact Public Service through record problems, delay and confusion
   b. Possible delay in how fast newly processed NRLF items would appear in Oskicat
   c. Foresee record problems and data issues with OCLC numbers not matching
3. UCB requests would be routed to NRLF via VDX and handled as ILL requests, presenting a significant increase in workflow, possibly indicating a need for more staffing
4. Millennium supports only some components of NCIP. This functionality would only allow ILL to create and delete circ on the fly (COTF) records and track fines. It would not solve service issues.
5. Currently, no policy or procedural alignment between ILL and NRLF - ILL loan periods available to ILL patrons do not align with the loan periods that Berkeley patrons have for NRLF materials
6. Unclear how fines and tracking overdue and lost items would be managed.
7. An ILL survey showed that users wanted all circ info in myOskiCat. If items are no longer in Millennium, not clear how this would work.
8. Unless current practices are standardized, merged holdings will cause some confusion to users and inconsistencies in practices will be showcased.
9. Possible confusion for UCLA folks since NRLF items would appear in their catalog and yet could not be requested through catalog - unless something like Aeon could work for requesting
10. UCB barcodes would become unsearchable in Voyager
11. Voyager holdings records do not support multiple call numbers. NRLF would no longer retain depositors' local call numbers negatively impacting user and depositor access to data.
12. Difficulties migrating items linked to multiple bibs and subsequent impact to user access to data.
13. NRLF statistical information is stored in Millennium at the item level in a MARC-delimited field. Voyager item records do not have MARC fields. NRLF may lose valuable statistical information.
14. Voyager does not inherently support macros; SRLF uses third-party software to fill this workflow gap, but reports regular errors. NRLF does not currently have this issue, but would likely experience the same difficulties as SRLF when using Voyager.
15. Unlike Millennium, item records cannot be moved in bulk between bib/holdings records. This significantly increases time spent at NRLF on processes involving record edit/cleanup requests from depositors, and Shared Print consolidation responsibilities (sometimes involving moving hundreds of items at a time).
16. Moving NRLF data to Voyager fails to consider NRLF Phase 4. It's not logical to tie NRLF to UCLA's DB when SRLF will fill before NRLF.
17. OCLC reclamation by both RLFs would work to the point of migration, but not into the future for campuses trying to determine duplication

Findings for Option 2 from all 3 working groups:

NRLF/SRLF merger into Voyager (Syncing all records, using separate systems for request/circ)

This approach is a variation on option 1 wherein all NRLF bibliographic, holdings and item records would be migrated to Voyager and synced back to Millennium. Technical Services would use the Voyager system while Public Services would operate out of Millennium. A key necessity would be for both campuses to engage in a reclamation project prior to migration with plans for continued record maintenance to retrieve the most recent OCLC number as new records are added to avoid duplication. More detailed information on record matching below.

Opportunities:
- No change to discover or request features for UCB patrons
- Potential for both RLFs to adopt similar workflows for processing new deposits as RLFs would be working in the same technological environment
- Potential for better record matching and merging of holdings
- Potential for depositors to only have to check one place for RLF holdings making duplication checking more streamlined and efficient
- Voyager supports SQL queries, which for trained staff, makes QC, bulk record edits, and data gathering easier and more robust
- OCLC holdings updated for both RLFs by Voyager

Challenges:
1. (could be good or bad) We'd need to map a reverse-migration (Voyager to Millennium) path for data points. It may not be necessary or desirable to send all data back to Millennium (such as NRLF statistical information). For returning data for UCB items, UCB may wish to protect some elements from overwriting. This may be an improvement over Option 1 because we could potentially add the storage barcode to the Millennium record, which may be helpful at various stages of access. More details forthcoming on this once we actively test migration.
2. Staff need to work out of 2 systems
    a. Potential for this to impact Public Service through record problems, delay and confusion
    b. Possible delay in how fast newly processed NRLF items would appear in Oskicat
    c. Foresee record problems and data issues with OCLC numbers not matching
3. Possible confusion for UCLA folks since NRLF items would appear in their catalog and yet could not be requested through catalog - unless something like Aeon could work for requesting
4. Keeping all new deposits and withdrawals in sync would create ongoing work for both UCLA and UCB, including syncing Shared Print across both Voyager and Millennium
5. Same as 8-17 above.

RECORD MATCHING

A core motivation for this pilot project is to simplify the deposit process by providing a single catalog to determine if another copy of a specific item has already been deposited. The DSWG has done some work to determine the success rate for matching on OCLC number. The results indicate that successful record matching between the two systems will be challenging -- for the initial load/match process, and for ongoing work well into the future.

The best match point is OCLC number, but two records that represent by the same item can have different OCLC numbers, depending on when a campus last updated OCLC numbers in the local system. In addition, as OCLC is constantly merging records, a one-time reclamation won't be a long term solution, though it may work well for the initial merge.

In addition we have found that OCLC will cluster records with different OCLC number so they appear to be the same record when using WorldCat, but the OCLC numbers remain different. Which leads us to believe that there would be a benefit to expand matching beyond just the OCLC number.

Appendix F: Second update (April 10, 2017)

Shared RLF ILS Project update:

The RLF Shared ILS 6-month exploration group kicked off in Dec 1, 2016. (Please refer to the final report for RLF Systems Workflows for background on this group) Three working groups were established: Technical Services, Public Services and Development and Systems with members from both RLFs, UCB, UCLA, UCD, UCSD and CDL. Working groups have been meeting almost weekly. A first update was drafted and distributed in late January. It is available here.

In February and March 2017 the working groups studied two options for connecting the NRLF and SRLF information systems. These options are presented in Appendix A. In late March the team met at NRLF to review working group findings and define group activities for the second phase of this exploration period. A report on this meeting is included in Appendix B.

Overall the working groups found that the first two options explored for system integration introduced complexities that would prove to be difficult to sustain over time. As such the team is pivoting to explore other approaches to realizing project outcomes in Appendix C.

The project team anticipates concluding its work in June 2017 with a report to DOC/CoUL by the end of the month on findings and potential next steps.

Appendix A: Outcomes of exploration of system integration options

Option 1: Migrating NRLF records to UCLA's Voyager system:

Using the technical approach originally envisioned from the RLF systems and workflows report the RLF team explored the implications of using Voyager as the main system for RLFs for all deposit and access/request management. Voyager and other discovery systems would be used for local discovery. The group explored how Voyager could be the ILS for both Regional Library Facilities with NRLF using NCIP, or some form of middleware, to perform Circulation and Public Service functions.

Main benefits:

- Streamlined options for duplicate checking by depositors
- Alignment of RLF workflows for processing new deposits
- Consistency in statistical reporting across both RLFs

Major challenges:

- Current implementations are not able to communicate with each other through established protocols such as NCIP. This would require the development of several connective systems to enable interoperability. Unless interoperability can be established between Voyager and Millennium, Berkeley patrons would experience a substantial reduction in service levels
- Merged holdings would cause some confusion to users as inconsistencies in practices would stand out
- Initial exploration by the Development Systems Working Group indicated that successful record matching would be challenging and would need to be considered for all UCLA and UCB records to ensure that metadata errors were not introduced as the RLFs merged metadata. In addition, even if both campuses did a reclamation before migrating NRLF records to Voyager, with OCLC's continual merging of records, this solution would not be long term
- In some scenarios of option 1 NRLF staff would need to work out of two ILS systems to do their work

As a result of the difficulties inherent in this first option, a team of staff from NRLF and UCB met separately and identified a possible second option discussed below.

Option 2: Syncing data back to Millennium:

In this approach, NRLF bibliographic, holdings, and item records would be migrated to Voyager, but synced back to Millennium to support Circulation. Operations would be split between Voyager for Technical Services, and Millennium for Circulation and Public Services.

Main benefits:

- Approach would establish a method that would localize services appropriately (e.g. consolidated metadata work but distributed circulation/patron work)
- UCB user experience not negatively impacted, issues of sustainability avoided through localization of request and access functions
- Streamlined options for duplicate checking by depositors
- Alignment of RLF workflows for processing new deposits

Major challenges:

- The constant need to overlay and sync records would be problematic and likely not possible to complete without compromises in metadata quality
- Merged holdings will cause some confusion to users as inconsistencies in practices will stand out
- Record matching would be even more challenging with this option. After the initial reclamation project by both campuses, each ILS system will be subject to different timelines for updates due to local policies and practices
- NRLF would need to work out of two ILS systems to do their work

As a result of this exploration it was determined that like option 1, option 2 was not feasible without considerable middleware development. In addition, such an approach would create functional dependencies between UCLA and UCB's systems, making future migrations more difficult.

Option 3: Migrate to a high-density inventory management system
While at ALA Midwinter Erik Mitchell and Cathy Martyniak explored inventory management software solutions. One potential product called CAIA has the ability to create a union holdings environment, a service that could help the RLFs realize some of the metadata management, discovery and duplicate checking goals in the RLF project benefit goals. The team explored the idea that CAIA might be a possible middleware solution between Millennium and Voyager as Option 3. CAIA provided the team with four introductory videos and followed up with a webinar and product demonstration on 2/21. Out of that meeting, feedback and further questions were collected and sent to CAIA. The RLF directors are currently considering how to explore inventory management system as potential solutions further.

Option 4a: Creating a staff view of summary holdings statements in WorldCat local (WCL):
Tin Tran (SRLF Deposits Manager) envisioned this option as a quick, low tech, staff only solution for creating a staff view in WCL that would provide summary holdings statements for campuses to review when preparing material for deposit.

Option 4b: Enhancing the existing application known as the RLF Tool:
Lynne Grigsby (Manager of Library Applications & Publishing at UCB) offered this option which would enhance the ability for campuses to discover serial records using the RLF Tool. Benefits of this enhancement would be the ability for depositors to batch check for duplicates. Working groups would like to explore these options further.

Appendix B: March 21st mid-point meeting
On March 21st, 2017, members of the working groups, CDL and other stakeholders met at the NRLF to review the 4 options, discuss findings, review policies and work flows and chart activities for the 2nd half of the exploration period.

Meeting findings:

During the meeting the group discussed options 1, 2, 3, 4a and 4b as well as a potential option (4c)
- Although Options 1 and 2 present benefits, they also present major challenges. These options are not off the table, but they are being set aside for the moment.
- With regard to Options 3 and 4, the group feels it needs to explore these approaches more fully and learn more about them.
- Option 4c was presented by Joe Ferrie of CDL during the meeting. This option would group local holdings records (LHRs) from both RLFs together using an OCLC API to gather the information. The working groups would like to explore this more.
- The option of recommending a UC-wide shared ILS was also explored
- Policies and workflows were also discussed
  - The team considered different possibilities on how to approach deduplication of collections, which was one of the most difficult issues identified during RLF systems and workflows
    - One solution may be to place the burden of deduplication on the RLFs, allowing campuses to offload duplicate checking
    - Another solution is to examine whether a system such as Zephir or a derivative system that leverages Zephir metadata analysis would help automate duplicate analysis
  - Teams also discussed local holdings/enumeration practices and whether local practices complicate the potential for a summary holdings statement of all RLF holdings. Each of the RLFs configures their holdings statements according to either UCLA or UCB policies. Both UCLA and UCB structure their holdings statements slightly differently from each other. Also, the NRLF does not create a holdings statement for multivolume monographs; for serials the NRLF creates a holdings statement for each depositing campus. The SRLF creates one summary holdings statement for both multivolume monographs and serials.

Possible working group goals for the second half of the exploration period

In the afternoon of the mid-point meeting, working groups and leaders discussed the focus of the working groups during the second half of the exploration period

1. Evaluate the similarity between the RLF and NISO holding standards with the intention of understanding the difference and determining the possibility of implementing joint RLF standard that results in machine readable statements.
2. Determine the impact of NRLF moving to a single holdings record and experiment with automated holding consolidation
3. Speak with the Zephir team at CDL to explore the potential of using Zephir system/algorithms for duplicate checking
4. With regard to Option 4(a,b,c), investigate real-world impact, costs and technical support needed
5. Explore whether an inventory management system is a good option - how would this compare to an ILS-based solution for the RLFs?

Please contact Cathy Martyniak (cmartyniak@library.ucla.edu), Erik Mitchell (erik@berkeley.edu) or Christine Barone (cbar@library.ucla.edu) with any questions, comments or concerns that you have regarding this project.

Appendix G: High Density Inventory Management Systems exploration

The project team studied inventory management software as a potential mechanism to support intended outcomes of RLF system integration. The High Density facility inventory management software (HDIMS) marketplace includes a small number of commercial and open source applications including projects by Generation Fifth Applications[4] (GFA), CAIA Software[5], and an open source platform developed by the University of Notre Dame called Annex IMS[6].

The project team explored each application at a high level to understand the functionality that a HDIMS would bring. Table 1 shows a summary of findings from this exploration.

Table 1: Summary of HDIMS exploration and findings

Outcome / benefit	Exploration findings
Save depositor time	Some HDIMS products employed a union catalog feature that could save depositor time. Other systems had little bibliographic data, the impact of which would be that the RLFs would be less involved in bibliographic, holding and item metadata work or would continue to use existing systems
Enhance discovery and access	A successful HDIMS would need to be connected to multiple ILS systems around UC. This appears to be feasible in most cases. In addition, CAIASOFT offers a union catalog which could be used as a source of unified discovery records that libraries could load into their systems to support local discovery
Promote new ways of managing RLF space	All the systems evaluated would allow new material shifting and potential cross-RLF sharing of content due to the decoupling of the barcode from the location (in both RLFs the barcodes are used as accession numbers and are shelved in a sequential manner).
Unified reporting / records analysis	All systems evaluated would support some level of unified reporting. For some systems, this would be at the inventory level (i.e. number of items per format/size category deposited from campuses). For other systems, the inclusion of bibliographic information would allow some level of unified bibliographic and holdings reporting
Develop capacity for UC-wide shared systems (ILS)	If RLFs were to embrace an HDIMS system as their only information system they would be less involved in bibliographic, authority, holding and item metadata work. While this would save considerable work time at the RLFs, whether this is in the best interest of UC libraries overall is an unresolved question.

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[4] http://www.gfatech.com/

[5] https://www.caiasoft.com/

[6] https://github.com/ndlib/annex-ims

Overall, the RLFs found that HDIMS systems could save the RLFs considerable time but only if RLFs were to stop doing the level of bibliographic work that they are currently engaged in. Facilities that use HDIMS software can generally accession hundreds of items per hour per staff member. In contrast, because of the metadata work that the RLF staff complete (e.g. bibliographic record checking, duplicate detection (SRLF), holding updates, item record updates) the items per-hour per staff person average 15-17.

The project team recommends that the RLF Directors and staff continue exploring these systems so that they can appropriately advise the SLFB if there is a point in the future when the implementation of this type of system is advantageous for UC libraries. Potential issues that may result in such a finding include the potential expansion of NRLF, the need for RLFs to shift materials in ways that would make the use of sequential barcodes difficult or if the UC libraries implement a shared ILS platform. If the UCs were to implement a shared ILS the RLFs could evaluate whether the metadata work they do now would have the same need and impact. In the current environment, the RLF work in bibliographic, holding and item metadata delivers several benefits to the campuses and system overall including support for shared print, support for the persistence and non-duplication policies, support for shared access and discovery across UC libraries.

Appendix H: RLF Tools Subgroup Report (May 28th, 2017)

Option 4a: Creating a staff view of summary holdings statements in WorldCat local (WCL):

This option is a quick, low tech, staff only solution for creating a view in WCL that would provide summary holdings statements for campuses to review when preparing material for deposit. This option would allow for searching on a variety of fields and consolidating display to show RLF holdings close together. Currently each RLF displays under the campus, that is NRLF displays under UCB and SRLF displays under UCLA.

Even though we thought this option viable, we recently learned that OCLC may not be able to pull local holdings record (LHR) information for this separate instance. CDL (Alison Ray) is following up on this. If it turns out this is doable, here is our evaluation and recommendation:

Pros:
- Quick and easy way to check by title or other indexes, such as ISSN, ISBN, etc.
- Retrieves result in real-time

Cons:
- Manual checking only
- Requires another instance of WorldCat (UC has 11 instances already)
- Cost -- both yearly OCLC fee, and cost of staff maintaining instance
- As depends on LHRs requires UCB to update LHRs more often (current update is quarterly, whereas UCLA/SRLF is updating weekly). To increase submission requires some development (which UCB has started) -- UCB plans to automate this and then do testing to determine if they can update LHRs weekly.

Another separate instance of WCL could be added for an additional cost. Initially this was quoted as $3,000 annually, with a $1,000 implementation fee, however, due to the latest news from OCLC regarding the LHRs, this may come with additional fees. The existing contract could be amended to cover this. (Per email sent by Eric Forte at OCLC to Patti Martin.)

It's not required, either technically or by the contract, that CDL needs to do the hosting. However, we recommend that CDL do the hosting, as they have experience with WCL configurations, communications, updates and escalation paths.

Option 4b, 4c: Enhancing the existing application known as the RLF Tool:

This option would enhance the ability for campuses to discover serial records using the RLF Tool. Benefits of this enhancement would be the ability for depositors to batch check for duplicates by providing summary holdings statements for serial holdings held at each RLF. Further enhancements could be made to allow for single item searching on other than OCLC number.

We propose to combine with Options 4b and 4c (CDL LHR RLF Tool enhancement - see example under "Additional Information" below). This combined option would group LHRs from both RLFs using an OCLC API to gather the information.

Pros:
- Batch processing of up to 50,000 titles at a time
- Cleaner summary holdings statements will display (vs current item display)

- Will find merged OCLC numbers for serials
- Can add campus holdings (in addition to RLF holdings) if desired

Cons:
- Processing only by OCLC number. Need to wait for a day to retrieve result when processing batch requests
- Depends on LHRs and would require UCB to update LHRs more often (current update is quarterly, whereas UCLA/SRLF is updating weekly). To increase submission requires some development (which UCB has started) -- UCB plans to automate this and then do testing to determine if they can update LHRs weekly.

Our Recommendation

We recommend that we implement option 4b. This will require staff investment at both UCB and CDL. UCB would continue to develop and host the RLF tool. Included in this work is developing a method to solicit feedback from campuses and RLFs, including a 4-6 month evaluation on use, writing best practices and recommendations. Option 4 team would be willing to reconvene to review usage and write the documentation. UCB and CDL have agreed to move forward with this work now and have started the initial work on this project.

In addition, we recommend that a joint RLF policy be published, regarding who is responsible for duplicate checking (campuses vs RLF) as consistency between the RLFs is needed. This policy may drive the use of this tool. This policy should include that any duplicate checking must happen close to submission so that the accuracy of the checking remains in effect when the item is accessioned into an RLF.

With the latest information from OCLC, we can no longer recommend option 4a at the present time.

Additional Information

Screenshots of WCL 'staff interface' (Option 4a)

https://110105.worldcat.org/oclc/3568399 (serial, held by both SRLF & NRLF)

https://110105.worldcat.org/oclc/36534256 (serial, held by SRLF, not NRLF)

https://110105.worldcat.org/oclc/13385782 (serial, held by NRLF, not SRLF)

https://110105.worldcat.org/oclc/681069558 (monograph, held by both SRLF & NRLF)

UCRLF test

Screen shot of new CDL tool (option 4c)

The following screenshot shows the results in a prototype service:

Appendix I: Holdings and Item Records Subgroup Report (May 28, 2017)

The RLFs currently use different standards for holdings and item records, causing inconsistency in display of library holdings. Standardizing some or all aspects of RLF holdings and item records would normalize display of library holdings, benefiting depositors, library staff, and patrons. A majority of UC libraries use the NISO 39.71 holdings standard (or some minor variation -- see table at end), so this would be a logical starting place for determining a wider standard.

While many differences between RLF standards are stylistic (i.e. data displays differently but is mutually intelligible), the group identified four substantive differences:

1. Whether all circulating holdings are compressed into one summary statement per RLF, or are separated by owning location
2. Whether holdings records for multivolume monographs are displayed or suppressed from public view
3. How supplements are disclosed in holdings summary statements
4. Whether RLF item records are enumerated based on depositor-provided information (e.g. spine label), or the publisher information on the piece in hand.

The RLFs moving to a common practice in the four areas above would positively impact depositor and patron ability to identify RLF holdings and gaps, better informing deposit, withdrawal, and access decisions. It would also aid in future deduplication efforts between the RLFs. Moving to a common practice in the above areas would not necessarily require that the RLFs adopt a shared stylistic standard for holdings and item records; however, doing so would yield some additional benefits at an increased cost.

The group has identified potential changes (detailed below) that, if implemented, would improve the efficacy of RLF holdings and item records by specifically addressing the above four differences. These changes could be undertaken independently or simultaneously. However, due to the complexity of systems impacted by these changes, the group would like more time to better understand the consequences and cost of each change before making a final recommendation.

1. In cases where NRLF has multiple holdings records for a title, collapse into a single holdings record
   a. **Expected benefit:** NRLF currently creates a separate holdings record for each library with deposited volumes for a title. Collapsing these would greatly improve users' ability to determine what volumes NRLF does and does not hold for a title.
   b. **Known cost:** While we could potentially do some of this work programmatically, it will likely involve staff manually reconstructing summary statements for 18,000+ holdings records. Time spent would depend on the number of holdings gaps present in the holdings.
   c. **Next steps:** Determine the following:
      i. Extent of work that can be done programmatically in Millennium
      ii. Impact on Millennium-related functions (statistics, loan rules, etc.)
      iii. Impact on display and user experience in OskiCat
2. Unsuppress NRLF holdings records for multivolume monographs
   a. **Expected benefit:** Unsuppressing NRLF holdings records would enable sending of LHRs to OCLC. This allows the holdings summary statements to appear in Melvyl, easing depositor's duplicate checking work.
   b. **Known cost:** Likely, minimal programmatic work needed to unsuppress these records.

    c. **Next steps:**
        i. Determine impact on display and user experience in OskiCat
        ii. Further explore potential costs and consequences of this action

3. Normalize practices that contribute to substantive differences in RLF holdings and item records, but retain the stylistic standard of the local (host) campus (also addresses difference 4)
    a. **Expected benefit:** Enumeration and chronology tracking would be normalized across RLFs. RLF holdings records would be easier to compare for when checking for gaps and/or duplication.
    b. **Known cost:** NRLF would need to verify item enumeration for new deposits upon arrival (re-enumerating as appropriate), record supplement information at a higher level, and create and maintain a workflow to update records for existing NRLF items. This would potentially significantly reduce processing time for enumerated material (e.g. serials) at NRLF, thus requiring more staff to process the same amount of material.
    c. **Next steps:**
        i. Develop potential workflow changes at NRLF to include the new practices
        ii. Perform cost-analysis studies on the workflows to determine the true impact on production

In addition to the above, the group would like to further explore the value and cost of the RLFs moving to a single stylistic standard for holdings and item records before making a final recommendation.

1. Normalize RLF holdings records to a single stylistic standard (e.g. NISO 39.71)
    a. **Expected benefit:** The experience of users (depositors, RLF staff, patrons) viewing NRLF and/or SRLF holdings records would eventually approach parity.
    b. **Known cost:** Re-training at one or both RLFs would be required. Some or all existing holdings records might have to be modified to the new standard, most likely through a manual process, significantly increasing staff workload. One or both RLFs would have holdings records that appear significantly different than those of the local (host) campus.
    c. **Next steps:**
        i. Determine if local (host) campus practices would inhibit or prevent either RLF from moving to a different holdings standard
        ii. Further explore potential strategies for programmatically converting RLF holdings records to a different holdings standard
        iii. Determine impact on display and user experience in local catalogs
        iv. Establish how many records would require manual conversion to realize the end goal

Comparison of common holdings summary statement display by library

Example: All parts of volumes 1-20 held, except volume 11 is missing all numbers, and volume 12 is missing numbers 1-2 [published quarterly].			
NISO Standard Z39.71	Levels 3 & 4	Adjacent chronology	v.1(1970)-v.10(1979),v.12:no.3(1981:July)-v.20:no.4(1989:Oct.)
NISO Standard Z39.71	Levels 3 & 4	Separate chronology	v.1-v.10,v.12:no.3-v.20:no.4 (1970-1979,1981:July-1989:Oct.)

Library	Standard	Notes	Example Summary Holdings Field
Berkeley	Local	Same as NRLF	v.1(1970)-10(1979), 12:3(July 1981)-v.20(1989)
Davis	NISO 3 or 4	Includes local variations for chronology after enumeration	v.1:no.1-v.10:no.4(1970:Jan.-1979:Oct.),v.12:no.3-v.20:no.4(1981:Jan-1989:Oct.)
Irvine	NISO 3	Partial vols. not delineated	v.1(1970)-v.10(1979),v.12(1981)-v.20(1989)
Los Angeles	Local	Same as SRLF	v.1-10(1970-1979),v.12:no.3-4(1981)v.13-20(1982-1989)
Merced	Local	Holdings records not used	N/A
NRLF	Local	Same as Berkeley	v.1(1970)-10(1979), 12:3(July 1981)-v.20(1989)
Riverside	Local	No spaces after commas	v.1(1970)-10(1979),12:3(1981)-20(1989)
San Diego	NISO 3 & 4		v.1-v.10,v.12:no.3-v.20:no.4 (1970-1979,1981:July-1989:Oct.)
San Francisco	Local		v.1(1970)-v.20(1989) Missing: v.11(1980)-v.12:no.2(1981)
Santa Barbara	NISO 3 & 4	partial vols. not delineated; includes some local variations	v.1(1970)-v.10(1979),v.12(1981)-v.20(1989)
Santa Cruz	Local		1-10(1970-1979), 12:3-4(1981), 13-20(1982-1989)
SRLF	Local	Same as Los Angeles	v.1-10(1970-1979),v.12:no.3-4(1981),v.13-20(1982-1989)