CONSORTIAL CDL
IMPLEMENTING CONTROLLED DIGITAL LENDING AS A MECHANISM FOR INTERLIBRARY LOAN

BLC CONTROLLED DIGITAL LENDING WORKING GROUP
Acknowledgements

The Boston Library Consortium’s Controlled Digital Lending Working Group would like to thank the BLC Board of Directors and members of the BLC Communities for their guidance throughout this past year to inform our recommendations for consortial implementation of controlled digital lending as a mechanism for interlibrary loan among the member libraries. We are also grateful to several colleagues from other library organizations for reviewing earlier versions of this report.
Introduction

The Boston Library Consortium (BLC) was founded upon a shared commitment to promote cooperation in making resources more readily available. Consortial controlled digital lending (CDL) powerfully expands and reimagines resource sharing across the consortium.

In September 2020, the BLC Board of Directors convened a CDL Working Group charged with investigating delivery mechanisms, technology, workflows, policies, copyright and legal issues, shared storage solutions, and other actions related to a potential consortial implementation of CDL among interested BLC member libraries.

The Working Group consisted of fourteen representatives from eleven member libraries and the BLC’s Executive Director. For almost twelve months, the Working Group researched the national and global CDL landscape, engaged extensively with the BLC community, and consulted with a range of external organizations working in the CDL space.

At its August 2021 meeting, the BLC Board of Directors approved the recommendations of the Working Group to implement CDL as a mechanism for interlibrary loan (ILL) among interested member libraries.

The pages that follow provide a summary of the Working Group’s activities and recommendations to guide the library community in navigating the role that consortial CDL might play in their resource sharing activities, and to invite other library consortia to join us in this implementation effort.
Definition and Legal Framework

Controlled digital lending (CDL) enables libraries to lend legally acquired materials in a digital format under controlled conditions. A widely adopted definition and legal framework for CDL are presented in the White Paper on Controlled Digital Lending of Library Books (2018) and the Position Statement on Controlled Digital Lending (2018). Through CDL, libraries exercise their rights under fair use, the first-sale doctrine, and other laws (17 U.S.C. §§ 107–109) to engage in the following activities:

- Digitize and retain a digital copy of the libraries’ lawfully owned physical materials
- Limit the total number of copies in any format in circulation at a given time to the number of physical copies owned by the lending library (maintaining an “owned-to-loaned” ratio)
- Lend the digital copy to one user at a time for a limited time, analogous to lending physical copies
- Use digital rights management (DRM) to prevent copying and redistribution

By this definition, CDL should include reasonable constraints on what patrons can do with digital loans. These actions preempt concerns from authors and publishers by emphasizing libraries' continued good-faith efforts to respect copyright, while also continuing to provide reasonable access for patrons. Libraries may also license reasonably priced ebooks rather than lending those titles via CDL. Usage constraints suggested in the literature include the following:

- Preventing a user from downloading, distributing, or printing a digitally loaned item
- Sequestering physical versions of digital items to maintain the owned-to-loaned ratio
- Concentrating CDL efforts on older, rare, or out-of-print materials

CDL replicates the rights afforded to libraries for interlibrary loan (ILL). ILL is a foundational library practice, long empowered by copyright law and protected by Congress, in which libraries lend materials to one another for a variety of purposes.

Environmental Scan

The COVID-19 pandemic catalyzed an emerging consensus in libraries and consortia that CDL is an appropriate, feasible, and high-impact method of lending. Since March 2020, the pandemic has severely disrupted access to physical collections and physical ILL across the United States. Libraries nationwide responded by adopting CDL to serve their communities during this period.

- UC Berkeley, the University of Florida, and many other academic libraries nationwide began using CDL for course reserves and continue to do so.
- CDL Information & Recommendation Cooperative (CIRC) is a group that identifies and evaluates existing tools to facilitate CDL, such as Box and Alma D.
CDL Implementers (CDLI) is a grassroots community of practice that meets monthly to discuss CDL best practices and implementation strategies.

Larger-scale initiatives include the Internet Archive’s Open Library and the National Emergency Library, which briefly lifted CDL loaned-to-owned limits during the pandemic’s peak. IA faces a lawsuit from five publishers opposed to this action. HathiTrust’s Emergency Temporary Access Service (ETAS) offers controlled online access to digital materials while the physical equivalents are unavailable in libraries due to “an unexpected or involuntary, temporary disruption to normal operations.” HathiTrust uses its own legal analysis and does not characterize ETAS as CDL.

Library consortia and vendors are active in the CDL space. The Association of Southeastern Research Libraries (ASERL) wrote a CDL environmental scan. The Virtual Library of Virginia (VIVA) crafted CDL guidance for Virginia’s academic libraries. The International Federation of Library Associations (IFLA) issued a statement advocating for CDL. The National Information Standards Organization (NISO) is exploring development of standards for CDL. The Consortial Approaches to CDL group brings together library leaders to strategize consortium-level CDL efforts, while the CDL Co-op brings together several communities of practice to coordinate work.

The CDL Position Statement has been signed by the Association of Research Libraries (ARL), the Boston Public Library, the Center for Research Libraries (CRL), the California Digital Library, and more than fifty other organizations. In September 2021, a new statement, developed by the CDL Co-Op will be released making the case for CDL as a mechanism for ILL.

In August 2021, the Library Futures Foundation together with the Intellectual Property and Information Policy (iPIP) Clinic at Georgetown Law developed a policy document expanding upon the legal rationale laid out in the original White Paper. This document articulates how CDL maximizes a library’s ability to loan works, thereby making the entire loaning system more efficient and equitable.

The CDL landscape is evolving rapidly amid a growing consensus among libraries around the value and feasibility of CDL. The BLC is positioned to lead and partner in this space.
Value Proposition

By transforming the ways by which patrons access the BLC’s physical collections, consortial CDL is a value multiplier for the BLC, amplifying the benefits of engaging in CDL institutionally. The Working Group’s vision for consortial CDL is for any BLC member’s patrons anywhere in the world to have convenient access to BLC library collections in the format of their choice.

Why CDL?

Without CDL, patrons cannot access most library books digitally. As few as 10% of academic books are available to academic libraries as licensed ebooks, according to a 2018 SCONUL study. Other ebooks are sold only in collections, which are unaffordable for most libraries. Only 68% of titles profiled by GOBI are published simultaneously in print and electronic editions.

CDL offers patrons the choice of format best suited to their needs. It supports patrons who may be medically quarantined, homebound, on sabbatical, traveling, studying abroad, or otherwise unable to access physical materials because of geographic distance or other constraints. CDL also supports online and hybrid education—a growth area for many BLC member institutions. These use cases hold true regardless of COVID-19, though the pandemic galvanized thinking around remote access. For libraries that are not members of HathiTrust, CDL may also facilitate accessibility and access to materials for patrons with print disabilities.

In addition to supporting patron needs, CDL advances preservation and sustainability. CDL will ultimately make resource sharing more environmentally sustainable by reducing the financial and environmental costs of mailing books between libraries. (In 2019-2020, 34,353 books and other returnables were exchanged among the BLC’s 19 full member libraries.) Additionally, CDL facilitates preservation of collections by providing digital access to materials that are brittle or otherwise unsuitable for routine shipping and handling. Preservation is particularly important if the print materials are committed to a shared print program such as the Eastern Academic Scholars’ Trust (eighteen BLC members currently participate in EAST).

Why Consortial CDL?

Consortial CDL reflects the BLC’s mission and purpose and builds on traditional BLC strengths and expertise in resource sharing. The BLC’s bylaws (Section 1) state that “it is the purpose of the Boston Library Consortium to share human and information resources so that the collective strengths support and advance the research and learning of the members’ constituents.” CDL takes the BLC to the next level of fulfilling this purpose, and moreover reflects the BLC’s core values and 2019-21 strategic directions. Consortial CDL is a natural next step toward the BLC’s resource sharing and collective collections of the future.
Why the BLC?

The BLC contains a range of institutions and technology infrastructures. Because of its diversity, consortial CDL models and tools pioneered by the BLC will effectively scale across libraries of all types. In particular, the BLC’s emphasis on interoperability can lead to the development of solutions that meet the needs of nearly all consortia, whether using shared systems or not.

In addition, the BLC began its concerted exploration of CDL far in advance of most consortia and consequently has been at the forefront of discussions with leaders and potential partners working in this space. This timely engagement has created a historic leadership opportunity for the BLC to help shape the form that CDL takes as it evolves into a standard library practice.

Implementation Recommendations

Consortial CDL Model: “CDL for ILL”

The Working Group recommends that the BLC implement what is referred to as “CDL for ILL.” In this resource sharing model, items that traditionally would be loaned physically (to local patrons or consortial partners) could instead be digitized and lent digitally under controlled conditions. The CDL for ILL model takes advantage of libraries’ expertise in resource sharing by weaving CDL into existing workflows.

Advocacy and Partnerships

The Working Group recommends that the BLC continue to lead and engage in comprehensive advocacy efforts to make CDL successful at scale. Some of these efforts are already underway. In June 2021, the BLC was the first consortium to become a Coalition Partner of Library Futures. Meanwhile, the BLC executive director chairs the Consortial Approaches to CDL Group and is an active member of the CDL Co-Op and the Ex Libris Controlled Digital Lending Advisory Group.

However, there is much more work that remains to be done to advance CDL across the library sector. To this end, the Working Group recommends the BLC take the following steps:

- Sign the CDL Position Statement.
- Endorse the Statement on Using Controlled Digital Lending as a Mechanism for Interlibrary Loan (forthcoming in September 2021).
- Actively partner with other organizations and communities working in the CDL space, such as Project ReShare, Digital Public Library of America, and Library Futures.
- Engage with Ex Libris, Project ReShare, OCLC, and Atlas Systems to advocate that all CDL resource sharing solutions are interoperable based on ISO standards.
Copyright Guidance

The Working Group recommends that the BLC develop and offer copyright guidance to member institutions concerning CDL, with a focus on (1) helping each member assess its institutional risk tolerance and (2) offering talking points and consultations to help BLC members gain the support of their campus legal counsel and administration, or others as appropriate. The BLC welcomes the generosity of Library Futures, Harvard Law School’s Cyberlaw Clinic, and other sources of pro bono legal expertise in preparing these best practices and talking points.

To align with current recommended best practices for implementing CDL, the Working Group recommends the BLC adopt usage constraints as part of its implementation. Preparation for consortial CDL implementation will include steps aimed at developing this guidance.

User Experience

In working with vendors on the development of technologies to support consortial CDL, the BLC should strongly emphasize two principles with respect to patrons’ user experience of CDL:

1. Patrons’ requesting process should be as seamless as possible and should be integrated with existing requesting processes whenever possible (e.g. ILL borrowing requests). The primary additional decision point for the user should be the choice between obtaining an item in physical or digital format. An additional requesting path should not be part of the implementation.

2. Constraints placed on usage of an item should not create a subpar reading experience or erect unnecessary barriers for patrons. For instance, it should not require the installation of a new application on patrons’ computers to support reading items borrowed via CDL.

For the staff experience, the intent of the BLC’s CDL implementation is to automate workflows wherever possible and to enable staff to use as few systems for managing CDL requests as feasible.

Opt-in Approach

An expectation built into the recommendation is that BLC member libraries may choose to opt-in to the consortium’s CDL activities. Because of the potential range of legal and/or logistical hurdles, libraries understandably may be unable to implement consortial CDL early on.

In addition, the expectation is that participating member libraries would also be able to decide the degree to which they participate in consortial CDL. For example, participating member libraries may determine locally the parts of their collections to be made available for consortial CDL, the duration of CDL loans, and so on.
**Workflow and Workload Planning**

Workflow and workload associated with CDL activities were a consistent concern raised by members of the BLC community throughout the development of these recommendations. The Working Group envisions three important ways to streamline workflows and minimize workloads associated with CDL:

1. Developing optimal workflows and best practices (e.g., for turnaround times and quality of scans) for libraries participating in CDL, based on past experience with digitization workflows and the features of the technology that the BLC adopts for CDL.
2. Developing a shared repository of scanned documents (loanable through CDL) as part of an automated workflow, detailed in the functional requirements that the BLC has drafted and shared with Ex Libris, Project ReShare, and other potential strategic partners. This shared repository could be pre-populated to further help ease CDL-related workloads.
3. Pursuing load-balancing functionality as part of the technology solution adopted by the BLC to balance fulfillment across participating libraries.

**Functional Requirements**

The Working Group developed functional requirements for a CDL technology solution to scale most effectively across the BLC.

1. The technology supports the building and automated use of a shared repository of previously scanned titles, ensuring one existing scan per title.
2. Supports a digitization workflow for requested titles that are not already available in the shared repository.
3. Leverages consortial holdings to determine how many copies of a given title exist in the consortium, and how many items are available to lend.
4. Enables libraries to indicate through holdings info what items are lendable via CDL.
5. Adds newly scanned and lent items (of items previously not stored in the shared repository) to the shared repository for future consortial digital lending.
6. Lends an item automatically to a patron when a previously scanned version exists in the shared repository, and forwards the request to an owning library when no previously scanned version exists.
7. Automates the process of removing an item from circulation within the owning libraries’ integrated library system, and indicating to libraries when an item has been lent and needs to be taken out of circulation. Notifies the owning library when the borrowed item has been returned by the patron (or access for the patron removed) and can be put back into circulation, and automates the process of making the item available in owning libraries integrated library system.
8. Applies collection-specific digital lending controls for how long an item can circulate, and makes the item available to a specific patron for the specific duration of time, automatically removing access to the item at the end of the duration.
9. Notifies patrons when items have been made available to them, and provides patrons with digital access to the items subject to access controls.
10. Enables patrons to view their items borrowed via CDL alongside other items borrowed from their institution.
11. Applies digital rights management (DRM) controls to patrons’ borrowed items, preventing them from copying, distributing, or retaining them.
12. Enables patrons to renew borrowed digital items, pending approval by the lending library.
13. Facilitates integration of CDL-related requesting options and discovery of already-digitized titles into participating libraries’ discovery services.

Technology

No technology currently exists to enable consortial CDL, and the vendors and communities working in this space offer competing visions for how to facilitate CDL and consortial resource sharing generally. What technological solutions will be developed, and when, remains uncertain.

Consequently, the Working Group recommends that the BLC take a multi-pronged approach to supporting the development of technologies needed for consortial CDL. The BLC should:

1. Collaborate with Project ReShare on development of consortial CDL functionality based on the BLC’s functional requirements.
2. Engage with Ex Libris as part of their development planning for both Rapid and Rapido, to ensure that both are designed to facilitate CDL using interoperability standards.
3. Engage with Atlas Systems and OCLC to encourage development of CDL functionality based on interoperability standards for ILLiad, Tipasa, and other systems.
4. Evaluate the implications of implementing CDL via Rapid or Project ReShare as their development paths take shape. Select one or the other as the BLC’s platform for CDL once the needed functionality is available.

This multi-pronged approach lays the foundation for the BLC to implement consortial CDL on the principle of interoperability, enabling member libraries to continue to choose the systems that best meet their needs while optimizing for the unique needs and goals of the consortium.
Background and Technical Information

Implementation of consortial CDL hinges on the development of two integrated technologies:

- A resource sharing request management system that can handle CDL transactions based on interoperability standards (e.g. ILLiad, Rapido)
- A resource sharing broker system that facilitates CDL transactions, again based on interoperability standards (e.g. Rapid, ReShare), maintains load-balancing, collects statistics, etc.

In both cases, it is imperative for the BLC that vendors develop their systems based on the ISO 18626 standard, which defines interoperability for resource sharing systems and transactions. This will ensure that libraries continue to have choice in their resource sharing technologies.

The BLC will also need to evaluate which resource sharing broker system will best meet the consortium’s long-term needs. If both Rapid and ReShare support CDL, then the choice for the BLC will be one of either/or—the BLC will be able to work with Rapid or ReShare as its broker system for consortial CDL, but not both. Each system will offer different benefits.

The principal differences between ReShare and Rapid include the following:

- ReShare is both a consortial borrowing system and a resource sharing request management system, whereas Rapid is just a request broker system. In addition, ReShare is interoperable with other request management tools. Therefore, if the BLC decides to use ReShare as a consortium, BLC libraries retain their ability to choose which request management system they use (e.g. ILLiad or Rapido) because ReShare will support integrations with these tools. In contrast, if the BLC were to use Rapid as a group, BLC libraries would be unable to use ReShare for the purposes of request management and fulfillment within the consortium.

- ReShare conducts load-balancing among consortium members. Rapid does not.

- ReShare is designed for interoperability using codified standards (such as ISO 18626). Rapid has been interoperable with a range of request management systems, though its future development path is unclear and subject to the business decisions of Ex Libris.

- ReShare could be developed to include a shared digital repository that will be used as part of the automated CDL workflow (particularly if the BLC can advocate for this as a member). Ex Libris has confirmed that Rapido will not have this feature.

- ReShare uses a consortial holdings index that is available to the consortium for additional uses beyond consortial lending (e.g. collective collection evaluation). Rapido also uses a consortial holdings index, but it is not available to libraries.
Overall, ReShare is less expensive than Rapido, even if libraries continue to participate in the RapidILL resource sharing network.

Membership in the ReShare community grants the BLC a voice in governance matters, the ability to participate in committees, and the opportunity to take part in deciding the development roadmap. Membership costs are viewed as an investment in sustaining the ReShare platform and community. ReShare development priorities are determined through a community governance model that aligns with the BLC’s collaborative spirit.

Overall, the two systems are very similar, but these key differences do make the BLC’s choice of broker system consequential. The inclusion of the shared repository is one of the most important distinctions. As mentioned earlier, the workload associated with scanning for CDL was a recurrent concern, and the repository feature is designed to address that. If ReShare includes this feature, this would be an incentive for the BLC to consider shifting to ReShare for CDL at least, if not all consortial resource sharing activities.

But the implications of doing so are important to recognize. Specifically, implementing ReShare would give BLC member libraries their choice of tools for managing CDL requests. But those libraries who use a tool other than ReShare will not have access to the shared repository as part of their automated CDL workflow. All other functionality would likely be comparable, but this critical functionality would not be possible outside of the ReShare client.

Finally, it is important to recognize the uncertainty in both Ex Libris’s and ReShare’s development paths. ReShare is resource-constrained, so development of CDL functionality will depend on an infusion of resources from the BLC and other consortia. Ex Libris’s development paths for Rapid and Rapido are unknown, though it has been made clear that consortial CDL functionality will require a Rapido subscription. Also unknown is whether the result of Ex Libris development will be an interoperable system, which the BLC needs.

This uncertainty makes it imperative that the BLC actively engage with both Ex Libris and Project ReShare as their development moves forward, and be prepared to evaluate the solutions they both offer, to determine which best meets the BLC’s long-term needs.

**Implementation Plan**

The consortial CDL implementation is governed through the leadership of a CDL Steering Committee whose membership is representative of the BLC’s diverse member libraries and stakeholder communities. The CDL Steering Committee reports to the BLC’s Board of Directors, collaborates with the BLC Communities to enact elements of the implementation plan, and is responsible for ongoing assessment and evaluation.
The BLC’s implementation plan, commencing in September 2021, consists of three phases: (1) preparation and advocacy, (2) (opt-in) implementation, and (3) assessment.

During Phase I, the CDL Steering Committee will develop fully-articulated consortium-wide CDL best practices and service standards, identify an initial title list to seed the shared repository, partner with the library community in the development of interoperable technology infrastructure, develop copyright guidance in collaboration with legal scholars and legal counsel from the member institutions, and design a framework for assessment and evaluation.

During Phase II, the CDL Steering Committee will lead the implementation of the technology solution developed in Phase I and support libraries interested in adopting it. Phase III will include a formal assessment of the consortial CDL implementation to evaluate impacts for member libraries and their patrons. During Phase III, the CDL Steering Committee will also develop recommendations for continued evolution of the BLC’s CDL implementation, including support for local CDL implementation for course reserves and other use cases.

Whenever possible throughout this implementation, the BLC will collaborate with other consortia who are implementing CDL to engage in shared exploration of best practices, assessment frameworks, and long-term visioning for consortial CDL.

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