EXECUTIVE SUMMARY
The concept of “Controlled Digital Lending” (CDL) was first postulated in 2011 by the director of the law library at Georgetown University School of Law. In 2018 a highly-publicized white paper written by Kyle K. Courtney (Harvard University) and Dave Hansen (Duke University) made CDL a common term in US libraries. In short, “CDL enables a library to circulate a digitized title in place of a physical one in a controlled manner.”

The White Paper on Controlled Digital Lending has been a foundational document for libraries considering CDL. In early 2019, ASERL -- along with numerous other libraries and library consortia -- became a signatory to the Courtney/Hansen white paper -- see https://controlleddigitallending.org/signatories for the full list of supporters. ASERL’s Scholarly Communication Interest Group authored a blog post on the subject as well: https://bit.ly/34ehiBx.

Beyond the legal issues, there are also technology and workflow challenges for libraries wanting to implement Controlled Digital Lending. The information below explores the various considerations for libraries thinking about implementing Controlled Digital Lending.
CDL DEFINED
Courtney and Hansen more fully explain Controlled Digital Lending as the following:

“CDL enables a library to circulate a digitized title in place of a physical one in a controlled manner. Under this approach, a library may only loan simultaneously the number of copies that it has legitimately acquired, usually through purchase or donation. For example, if a library owns three copies of a title and digitizes one copy, it may use CDL to circulate one digital copy and two print, or three digital copies, or two digital copies and one print; in all cases, it could only circulate the same number of copies that it owned before digitization. Essentially, CDL must maintain an “owned to loaned” ratio. Circulation in any format is controlled so that only one user can use any given copy at a time, for a limited time. Further, CDL systems generally employ appropriate technical measures to prevent users from retaining a permanent copy or distributing additional copies.”

CDL does not replace purchasing and licensing digital books. Courtney and Hansen envision CDL as a method to make 20th century books that aren’t available digitally more available and useful to our patrons.

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CDL AND THE COVID-19 PANDEMIC
Although the interest in CDL has increased with the COVID-19 pandemic, the Internet Archive has operated a CDL-like system for several years, and many libraries have partnered with IA to loan digital copies of their print books.

With the onset of the COVID-19 pandemic, two major initiatives emerged in the US to support libraries that were forced to close due to the public health threat:

1. HathiTrust’s Emergency Temporary Access Service (ETAS) allows HT member libraries to provide faculty, staff, and students of their institutions with online access to Digital copies of materials that are owned by the HT member library in physical form during an unexpected, involuntary temporary disruption to access to the library’s print collection. HathiTrust stresses that ETAS differs from how Controlled Digital Lending has been previously implemented by others, and that they have conducted their own legal analysis independent of the CDL white paper. Copies of the work are not distributed, but instead are read online in a web browser. However it is similar in that it follows the “owned to loaned” ratio as described in the Courtney/Hansen white paper. Once access to the library’s print collection is restored, access to digital copies via ETAS must be discontinued.

2. Internet Archive’s National Emergency Library, launched on March 24, 2020 and closed on June 16, 2020, allowed libraries to loan an unlimited number of digital copies during

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CDL allows a library to make a print book available to a distanced patron, digitally. The downside is that the print book is not available for checkout while being digitally circulated. Once technological issues are solved it should be possible for a distanced patron to checkout the digital version, return it, and then have a local patron checkout the print book. That is the ideal situation.

CDL does not make a digital book freely available to multiple users. It is not an Open Access monograph, nor an example of an Open Educational Resource (OER). Only patrons of the library system can access and check out the physical book and the library must maintain the “owned to loaned” ratio.
a time when many universities, schools, training centers, and libraries were closed due to COVID-19. The National Emergency Library included all the books from Phillips Academy Andover and Marygrove College, and much of Trent University’s collections, along with over a million other books donated from other libraries to readers worldwide that are locked out of their libraries. Although the National Emergency Library shared the same distribution platform as Internet Archive’s earlier CDL efforts, the National Emergency Library was not, strictly speaking, an implementation of CDL (and IA did not claim it to be) because IA did not restrict access based on physical ownership of copies.

On June 16, 2020, the Internet Archive returned to its normal CDL operations -- called Open Library -- once again restricting digital loans to the “owned to loaned” limits that were in place prior to the pandemic, putting any additional users on wait lists. IA continues to operate in this manner to this day. Nevertheless, IA’s lifting of the “owned to loaned” limits for the three months in Spring 2020 brought about a lawsuit on June 1, 2020 from publishers Hachette, Penguin Random House, Wiley, and HarperCollins. As of this writing, this legal action persists despite IA’s return to its previous owned to loaned limits.

**Opposition to CDL**

Numerous authors groups and publishers have opposed the use of Controlled Digital Lending. In 2019, the Authors Guild posted a column, “Controlled Digital Lending Is Neither Controlled nor Legal” criticizing CDL “as a recently invented legal theory” that offers “as patina of legality.” Despite the fact that libraries using CDL have already purchased a copy of the print item, the Authors Guild believes the use of CDL robs authors of just compensation for their work and has posted a public letter urging users of CDL to “respect the rights of authors.” The Association of American Publishers posted a similar statement in February 2019. See the list of authors and publisher groups that oppose CDL, as of February 2019.

As noted above, on June 1, 2020, four publishers -- Hachette, HarpersCollins, Wiley, and Penguin Random House -- filed a lawsuit against Internet Archive alleging copyright infringement for the distribution of books by IA both through the temporary National Emergency Library and through its normal CDL “Open Library” operations. The impetus for the lawsuit appears to be, at least in part, the National Emergency Library which allowed multiple users to check out the digital version of the same book, lifting the “owned-to-loaned” ratio that the Open Library had maintained.

After the lawsuit was filed, Internet Archive suspended the National Emergency Library but continues to operate the Open Library, which began in 2006. In July 2020, the Internet Archive filed its response to the complaint. In addition, Brewster Kahle, founder of Internet Archive, wrote a blog post on July 29, 2020 which outlines the position of IA.

The publishers’ complaint alleges that Internet Archive has infringed their copyrights by making inferior scans of their books freely available on the Internet Archive website. The publishers also question the legitimacy of the Internet Archive as a library under the traditional understanding of libraries in our society. The publishers are seeking monetary damages as well as an injunction to stop IA from operating the Open Library and loaning scanned books through CDL. Unless it is settled, this lawsuit will likely take a number of years to go through the legal process. In the meantime, Internet Archive continues to loan books through CDL and libraries are continuing to adopt approaches of lending their collections through CDL.
LEGAL CONSIDERATIONS
The legal concepts underlying CDL include the First Sale doctrine, or Section 109 of U.S. Copyright Law, and Fair Use, or Section 107 of U.S. Copyright Law. This legal foundation was outlined in the Position Statement on Controlled Digital Lending, including a Fair Use analysis. The Courtney/Hansen white paper which followed noted that, “At its core, CDL is about replicating with digital lending the legal and economically significant aspects of physical lending. To do so, we libraries must truly exercise control in the process.” There are six specific recommendations for Libraries to follow in order to exercise an appropriate level of control to legally operate a CDL system:

1. Ensure that original works are acquired lawfully;
2. Apply CDL only to works that are owned and not licensed;
3. Limit the total number of copies in any format in circulation at any time to the number of physical copies the library lawfully owns (maintain an “owned to loaned” ratio);
4. Lend each digital version only to a single user at a time just as a physical copy would be loaned;
5. Limit the time period for each loan to one that is analogous to physical lending; and
6. Use digital rights management to prevent wholesale copying and redistribution.

As noted above, CDL is not without controversy. However, libraries base a number of services on the First Sale doctrine and Fair Use, such as lending books and course reserves. A risk management strategy like those employed for other library services based on Fair Use can help move a CDL project forward.

DETERMINING YOUR RISK PROFILE
AND MITIGATING RISK
While understanding the legal landscape is helpful, each institution has its own risk profile and should make administrative decisions grounded in the risk tolerance for the institution. It might be helpful to consult your university’s General Counsel for guidance as well. One approach to risk management can be to create categories of low, medium, and high risk works based on year of publication, and create workflows with checks and balances for the higher risk materials. The six recommendations outlined in the Courtney/Hansen CDL white paper are part of the risk profile for Controlled Digital Lending, intended to provide conditions for lending which are analogous to the print world. Stanford University offers a useful guide to Fair Use risk assessment: https://fairuse.stanford.edu/overview/fair-use/four-factors/

Another Fair Use consideration is whether an active market for the ebook -- either purchased or licensed -- exists. An active market is likely to exist for books published more recently. If a book is currently available in the marketplace, the impact on the market should be taken into consideration as part of the fourth factor of the Fair Use analysis.

An additional consideration which can mitigate risk is the type of materials the library chooses to make available via Controlled Digital Lending. For example, libraries frequently begin a consideration of Controlled Digital Lending with books rather than other materials which have more complex rights issues, such as films. The age of the materials can also be used to tailor a risk profile, and it can be easier to determine the date of publication of books from catalog records. As Courtney and Hansen note in their white paper:
“Selecting books based on date of publication does not guarantee that the work is in the public domain, but it is an efficient way to use readily available bibliographic data to increase the chances, which in combination with CDL as an access strategy, could lower the overall risk of making those books digitally available.”

Understanding copyright terms and which materials are more likely to be in the public domain -- or no longer protected by copyright -- is also a way to identify lower-risk materials and manage overall risk for a CDL program. A good resource to help public domain works is Cornell’s Copyright Term and the Public Domain. For example, books published in the United States from 1925 through 1963 were subject to a requirement of renewal to keep copyright protection. The New York Public Library analyzed these books and found only approximately 25% had their copyright status renewed. In a long-running copyright review program, HathiTrust has determined that over 50% of the single-authored works it has examined have expired copyrights (e.g. were not renewed), or never qualified for protection.

Lastly, libraries should consider who is taking the risk:

■ When a library adopts IA’s Open Library, the library is merely adding a link in the library’s catalog - IA is doing the scanning, hosting the copies, and thereby absorbing all the risk.
■ When a library implements a form of CDL technology, the library is doing the scanning and hosting, and thereby the library is directly taking the risk.

A library should weigh their desire / need to control the collection balanced against the risks that might bring about.

**IMPACTS ON RESOURCE SHARING**

CDL is not without impact on Resource Sharing and Interlibrary Loan. One of the main tenets of CDL is maintaining the "owned to loan" ratio - if the electronic version of the text is made available, the print version of the text must be made unavailable / sequestered, and vice versa. The physical text is not loanable to other patrons or to other libraries. This can lead to access issues with certain texts if they are made available through CDL at multiple libraries. As an example, texts made available through HathiTrust ETAS are not allowed to be checked out by their users or lent through Interlibrary Loan. This has led to difficulties on borrowing libraries attempting to get the physical copy for their own users through Interlibrary Loan - the text has been rendered “in use” by many libraries making it available through ETAS, so it becomes more difficult to obtain for libraries without ETAS. Electronic copies of texts made available through CDL are eligible for lending through interlibrary loan.

**OTHER IMPLEMENTATION CONSIDERATIONS**

As of February 2021, there are limited technological platform options for CDL. The CIRC project is tracking initiatives and evaluating options as they evolve. Since several companies are working to develop CDL solutions, particularly for reserves, it would be prudent to refer to CIRC for the most up-to-date platform information.

Many libraries currently use large-scale CDL platforms, for example MIT (Open Library via Internet Archive) and Hathitrust ETAS (for Hathi members). However, few options are available for libraries uploading individual books. Because of the pressure created for online reserves access during the pandemic, several
library technology companies (Atlas, Alma-D, E-reserves Plus, and others) have software solutions in development, although none have launched as of February 2021.

In the past, libraries have often turned to publisher-supported ebook vendors for digital checkout, including limiting the number of simultaneous users. Libraries also rely on ebook vendors for digital rights management (DRM) controls such as downloading and copying limitations. However, no established ebook platform that works with libraries has, as of this writing, been willing to allow libraries to upload and circulate their own content. And while there are digital lending systems, there are no tools currently available that interact with an existing ILS to automatically restrict access to physical items when the digital copy is in use. Internet Archive does provide both the checkout/simultaneous use control as well as DRM, and Hathitrust allows users to have authenticated access to content -- but no downloads.

Some institutional repository platforms also offer solutions that could be used for CDL. A few libraries have created hybrid solutions that use combinations of existing software and other tools/resources to provide CDL access to users -- typically for course reserves in libraries that have restricted access to their print collections due to the pandemic. These homegrown solutions usually take the form of a user request system combined with tools that provide limits to simultaneous use and download/copy controls. Some examples of the above solutions are as follows:

- **ALMA Digital:** For those who have purchased ALMA Digital, this repository allows libraries to limit the number of users who are allowed access to a digital item, as well as limit the time they are allowed access to this work. This solution is in use at Oregon State University Library for reserves materials access.

- **Hathitrust ETAS:** Some libraries are adding locally-digitized textbooks to Hathitrust ETAS. If your library is a Hathitrust member and meets the requirements for ETAS -- including limited access to your collection -- this provides solutions for checkout while preventing further redistribution. It has the added benefit of allowing other Hathitrust members who are also using ETAS to access the items scanned by your library -- but only if they own a print copy of the item in their local collection. This process can be very labor intensive, especially for reserves items.

- **Internet Archive:** Another option for a library-wide scale CDL project is the Internet Archive. Over 80 libraries are using the Internet Archive’s Open Library to provide access to their collections, such as MIT Library and also Bay State College.

- **LibCal/email (checkout) with Digify (DRM):** This solution is in practice at Carnegie Mellon for students to access reserves content. Students place requests for access to materials via LibCal (Springshare) and access is limited via Digify. In this example, library staff must email links to the materials to patrons. Although labor intensive, librarians using this setup have confirmed that it is working well.

- **Campus Learning Management System (checkout and DRM) and LibCal (reservations/user request):** Canvas LMS has the ability to limit downloads and copying. It can also limit the time a PDF is available, a feature usually used to allow students access to a test or assignment for a limited time. LibCal is used for students to request the time they would like to “check out” this material. Other LMS’s may have this ability as well.

- **Google Drive:** The licensed version of GSuite from Google enables system administrators to impose download and time limit controls on content made available via Drive for users with Google accounts. (These features are not available in the free version of Google.)
These are just examples of currently employed solutions in this evolving landscape. The above list will become outdated -- please visit the CIRC project to see the evaluations of current, publicly-known solutions.

**CONCLUSION**

It’s important that libraries continue to build, preserve and provide meaningful access to collections that meet the needs of their communities. Controlled Digital Lending can be implemented in a variety of ways, and offers options to meet some of our community’s needs.

- CDL allows access to library content for remote users.
- It allows readers to access library content when the library is physically inaccessible because of renovation, a pandemic, or other disruptive event.
- CDL can offer users with print disabilities the additional functionalities offered by many digital book interfaces.
- CDL offers access to the many print books that will never have digital versions made available to libraries by publishers -- including many books from the 20th century, self-published books, books from or about marginalized groups, or books published by small presses.
- Implementing a Controlled Digital Lending service is not without risk.
- Opposition from publishers and others is evident.
- The technology to support individual selection and upload/checkout of library books is evolving, but currently requires significant staff time and effort.
- A few large scale services exist, as do institutional repository solutions. The CIRC project is tracking new technological developments as they arise.

Libraries considering CDL should understand the benefits and the risks they are undertaking, possibly in consultation with their legal counsel and library copyright experts. Special consideration should be given to finding a good technological match for the needs the library seeks to meet as well as their risk tolerance. There are many ways to meet the underlying principles of Controlled Digital Lending via different platforms and combinations of tools. More options and better solutions should be on library horizons soon.

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