November 2003

DRM and Research Libraries: Common Ground?

Bill Rosenblatt

GiantSteps Media Technology Strategies, billr@giantstepsmts.com

Follow this and additional works at: <https://docs.lib.purdue.edu/atg>

Part of the [Library and Information Science Commons](#)

Recommended Citation

Rosenblatt, Bill (2003) "DRM and Research Libraries: Common Ground?," *Against the Grain*: Vol. 15: Iss. 5, Article 7.

DOI: <https://doi.org/10.7771/2380-176X.4155>

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.

See: <http://www.house.gov/boucher/internet.htm>

2. **Benefit Authors without Limiting Advancement or Net Consumer Expectations (BALANCE) Act of 2003** (H.R. 1066) — Introduced 3/4/03. **Purpose** — To amend the DMCA to preserve consumers' rights to make digital copies of music, movies and books for their own use. BALANCE is designed to specifically extend fair use rights to the digital environment, allowing lawful consumers the tools to utilize digital entertainment in their home, car, or on mobile devices.

See: http://www.house.gov/apps/list/press/ca16_lofgren/pr_030304_consumerrights.html

3. **Digital Consumer Right to Know Act** (S. 692) — Introduced 3/24/03. **Purpose** — To amend the DMCA in establishing a requirement that consumer-electronic devices or media such as music CDs be clearly labeled with explanations of any anti-copying restrictions. Designed to be informational to consumers, allowing them to see a product they are about to buy has restrictions.

See: http://wyden.senate.gov/media/2003/03242003_digitalrights.htm

4. **Intellectual Property Protection Restoration Act of 2003** (S. 1191 and H.R. 2344) — Introduced 6/5/03. **Purpose** — To restore the ability of copyright owners to obtain appropriate remedies for infringement by States. Under current law, based on Supreme Court rulings in 1999, States have broad Eleventh Amendment immunity (known as sovereign immunity) to claims for intellectual property infringement, including copyright.

See: <http://www.publishers.org/press/releases.cfm?PressReleaseArticleID=158> and <http://www.publishers.org/press/monthly.cfm#126>

See also the US Copyright Office statement: <http://www.copyright.gov/docs/regstat061703.html>

5. **Piracy Deterrence and Education Act of 2003** (H.R. 2517) — Introduced 6/19/03. **Purpose** — To allow copyright owners to target the massive pirating of copyrighted songs via illegal file sharing on peer-to-peer networks. It calls for the FBI to "develop a program to deter members of the public from committing acts of copyright infringement," including increased information sharing of suspected online copyright violations among law enforcement agencies, copyright owners and Internet service providers (ISPs). In addition, the Department of Justice would be required to formulate programs to educate the public on copyright laws.

See: <http://lamarsmith.house.gov/news.asp?FormMode=Detail&ID=264>

6. **Public Domain Enhancement Act** (H.R. 2601) — Introduced 6/25/03. **Purpose** — A proposed modification to U.S. copyright law. Under this law, all copyrights would expire after fifty years - unless a small fee (\$1) is paid to keep the copyright active. This act would restore the flow of works into the public domain.

See: http://www.house.gov/apps/list/press/ca16_lofgren/pr_030625_PublicDomain.html

7. **Public Access to Science Act** (H.R.2613) — Introduced 6/26/03. **Purpose** — To allow free public access to scientific research that has "substantial" federal funding. This is an expansion of sorts of public domain, which applies to all works authored by employees of the United States Government.

See: <http://www.house.gov/sabo/pr03-20.htm>

8. **Author, Consumer, and Computer Owner Protection and Security (ACCOPS) Act of 2003** (H.R. 2752) — Introduced 7/16/03. **Purpose** — To provide authors, consumers, and computer owners with much-needed protection against several online threats. Law enforcement authorities would be given additional tools to effectively deal with online scams, crimes, and illegalities.

See: <http://www.house.gov/berman/press/pr071603.html>

Other

1. In May 2003, the RIAA settled separate lawsuits with four university students for running services that searched computers connected to their college networks for MP3 song files. The students also shared copyrighted music

from their own computers. The settlements range from \$12,000-\$17,000 per student, payable to the RIAA.

See: <http://news.com.com/2100-1027-999332.html>

2. In June 2003, the RIAA issued a release stating it will actively pursue individuals who illegally download music on the Internet. Presumably, this is based on the RIAA's success in the **Verizon** case. As of mid-September, the RIAA had brought 261 copyright infringement lawsuits against individuals who downloaded music on the Internet.

See: <http://www.riaa.com/news/newsletter/062503.asp>, and http://www.usatoday.com/tech/news/techpolicy/2003-09-15-riaa-parents_x.htm

3. In June 2003, **Rep. Orrin Hatch** stated that he favors developing technology to remotely destroy computers used for illegal downloads, with a "three strikes and you're out" approach to deal with individuals who illegally download copyrighted music on the Internet.

See: http://www.usatoday.com/tech/news/techp.../2003-06-18-hatch-wants-computers-dead_x.htm

DRM and Research Libraries: Common Ground?

by **Bill Rosenblatt** (President of GiantSteps Media Technology Strategies and Publisher of *DRM Watch* newsletters) <billr@giantstepsmts.com>

There's a lot of hype and misconception surrounding digital rights management (DRM) these days. Most media attention involves the music industry and Hollywood, where DRM is a core technology in legitimate online content services, like **RealNetworks's Rhapsody** and the Hollywood studio joint venture **MovieLink**, which compete with pirate activities on peer-to-peer networks, like **Kazaa** and **LimeWire**. DRM's influence on the publishing industry is just as profound, although it has yet to infiltrate the research library world to any great degree.

In this article, we'll examine how DRM is gaining traction in publishing and look at ways that it could bring value to the world of research libraries.

Defining DRM

Before we explore DRM's impact on our industry, let's look at its various definitions. The narrower definition applies to systems that use encryption for controlling access to digital content, where the primary purpose is to prevent abuse of copyright or licensing terms. A broader definition refers to any system that tracks and/or controls rights to content that are acquired and made available. Systems that fit the broader definition may include encryp-

tion-based copy protection schemes, but not necessarily, such as an academic publisher's internal system for granting permission requests.

Acceptance in the Content Administration World is Limited

Since its birth in the mid-1990s, DRM technology has been in an early adopter phase, with most implementations pilot projects. But over the past few years, DRM has taken hold in niche markets such as eBooks, which should become popular as textbooks in secondary and higher education. Another promising application is e-periodicals, which are digital facsimiles of print newspapers and magazines.

Yet DRM adoption in the world of site-licensed serials and reference content has been limited. Aside from general objections, one reason is research content tends to be embedded in publishers' and vendors' proprietary delivery systems and interfaces (e.g., password-protected Websites); it would be expensive to re-engineer those systems to include DRM functionality. Another reason is many vendors' proprietary environments already contain some of the functionality associated with DRM, such

continued on page 24

as various forms of *authentication*, or verification of users' identities.

While aspects of DRM make it undesirable to those responsible for administering access to site-licensed digital content as well as those who use it, other aspects, such as efficiency and reporting, can be valuable. If institutional content administrators look at DRM as a beneficial tool to them, instead of publishers, then perhaps the value will become clear.

The Challenges of Administering Site-licensing Contracts

Today, administration of site-licensing contracts is a tedious task that combines contracts and paperwork with processes that differ for each content source. Content vendors use different schemes to ensure their customers are respecting access terms, such as site licensing for up to N simultaneous users or N named users. The problem is each of these models has a loophole: for example, the named-user model typically relies on usernames and passwords for authentication, and these can be shared. And, perhaps the worst thing about these schemes is they do not interoperate; librarians and users must track which schemes apply to which content sources, and users must track potentially dozens of user IDs, passwords, and other means of authentication.

How DRM Could Bring Value to the World of Research Libraries

An alternative model, in which content access is controlled by infrastructure owned by the library or a library service provider, and not the publisher or content vendor, could bring value to our industry. In this model, publishers would make their content available in ways that are compatible with libraries' content repositories, while libraries would control content access to publishers' satisfaction. DRM functionality would be an essential part of this picture.

How would such a scheme work? Publishers and vendors could still implement search-and-browse interfaces, which would be optimized for the publishers' content. But actual content access would be through a standard DRM scheme controlled by the library. For example, libraries could require all content to be in PDF and use Adobe's DRM scheme (**Adobe Content Server**, <http://www.adobe.com/products/contentserver/main.html>) or one of the third-party DRM tools, or a DRM scheme like that of **SealedMedia** (<http://www.sealedmedia.com>) that works with multiple file formats. Publishers would have to make their content compatible with libraries' chosen DRM schemes and ways of distributing content. Libraries would control user authentication, which would be done in a single, transparent way.

Furthermore, libraries could have tools enabling them to set licensing terms according to contracts with publishers and other vendors. Contract terms such as N-named-user site licensing could be specified and enforced through the same system that controls single sign-on,

and the system could generate reports on actual usage for both librarians' and publishers' benefits. This would require standards to be set for how institutional licensing terms are specified.

Rationalizing authentication and license administration processes would be a huge win for library administrators and users. The librarian's task of administering content licenses would be much easier. And, users' lives would also be made easier by the virtual elimination of the need to remember dozens of passwords and retype personal information.

Possibility of Universal Online ID Schemes

One of the Holy Grails of e-commerce is a universal, online identification scheme that would allow users to access favorite Websites and services without memorizing dozens of user IDs and passwords and re-entering personal information. However, privacy concerns get in the way of such a scheme ever being implemented. (The closest thing to a universal online ID scheme today is **Microsoft's Passport**, which many do not trust to protect privacy.)

Yet a universal online ID scheme works in an institutional setting. Many corporations have single sign-on authentication schemes for their networks, and an increasing number are integrated with DRM systems so a user's ID on the corporate network determines the ability to access corporate documents, email, and other information.

A similar scheme could be implemented in the academic and research world. If a user logs on to the institution's network, he or she would immediately and transparently have access to content for which he or she is licensed, no matter where he or she is, without having to remember different usernames and passwords. The content would be controlled by a traditional DRM scheme, satisfying the publisher that the institution is respecting its licensing terms, copyright, and pricing model.

How DRM Systems Govern Use

The ways DRM systems govern content use are also worth examining. If you acquire an unprotected digital file — PDF, Microsoft Word document, HTML page — technology enables you to make as many copies as you want at very little cost. Of course, copyright law still applies, meaning you could be liable for infringement, but it's too hard to police given how easy it is to infringe. This has led to the development of DRM systems, which provide technological protections to back up legal ones.

DRM systems purport to solve the infringement problem by allowing publishers to specify exactly what they want to allow users to do with the content: print it X times, view it for X days, copy-and-paste up to X chunks of text up to X words each. The technology prevents any use beyond those specified. And, different DRM technologies allow greater or lesser degrees of precision in how usage limits can be specified.

Users Are Skeptical of DRM's Benefits

From the user's perspective, there are two problems with DRM systems. First, they require the installation of special client software

that authenticates the user; verifies the right to invoke the requested operation on the content; and decrypts the content for viewing, printing, or other operations. Such software can be a hassle to install, inconvenient to use, and can create annoying unforeseen problems on the user's PC (or other device). These problems are dissipating slowly as DRM technology becomes part of the general computing infrastructure.

The second problem from the user's perspective is copyright. A legitimate complaint about DRM is that it supports contract (license)-based content transactions rather than those based on the legally defined set of rights reserved for the public under copyright law, allowing publishers to grant whatever rights they wish to readers rather than those specified in the "copyright bargain."

One aspect of copyright that generates a lot of controversy is Fair Use and how it relates to DRM. Fair Use refers to consumers' rights to make free copies of copyrighted works, without publishers' permission, for certain purposes such as research or criticism. Yet as a legal construct, Fair Use is not a list of specific "approved uses" to which a person or a system can refer. Instead, it is a set of broad criteria that judges and juries use, in addition to precedents from past cases, when considering defenses to charges of copyright infringement. The criteria include what type of work was copied, how much was copied, for what purpose, and with what effect on the market for the original work.

The problem is DRM systems have no general way of distinguishing between "fair" and "unfair" reasons for making copies of digital content. Thus, DRM systems can at best only approximate fair-use allowance; furthermore, usage parameters are usually set by publishers and tend to be designed conservatively, so potential fair uses are restricted. Technical solutions to this problem either do not exist or are too expensive. As a practical matter, content providers who use DRM often let users convert digital content to analog form (e.g., by printing), from which they can make copies for any purpose, "fair" or otherwise.

In short, from the user's perspective, DRM systems have some disadvantages, and despite DRM vendors' and publishers' efforts to the contrary, users will never believe that DRM technology exists for their benefit.

DRM Could Provide Librarians with Efficiency and Knowledge

The potential advantages of appropriately designed DRM systems to librarians who administer site-licensed content are undeniable. Despite momentum growing behind the COUNTER initiative (<http://www.projectcounter.org/>), which establishes a code of practice for content vendors when tracking and reporting usage of content in their proprietary environments, it is more valuable and efficient for library administrators to control this information themselves. Better visibility into actual content usage leads to more informed decisions on what content to acquire, how many seats to take in a site license, and so on.

The kind of content infrastructure described
continued on page 26

Ameliorating the Effects of Term Extension © 2003

by **Laura N. Gasaway** (Director of the Law Library and Professor of Law at the University of North Carolina)
<laura_gasaway@unc.edu>

On January 15, 2003, the U.S. Supreme Court ended speculation and debate about the constitutionality of the 1998 expansion of the term of copyright to existing works. In *Eldred v. Ashcroft*,¹ the Court upheld Congressional authority to determine the "limited times" for which copyright may be available as provided in the U.S. Constitution and thus upheld the change in copyright duration from life plus fifty to life plus seventy. Just because the span of years for protection was expanded and applied retroactively, does not mean that it ceases to meet the limited times restriction contained in the Constitution. There is little way to view this decision as other than a major setback for the library and scholarly community.

This article discusses the *Eldred* decision briefly and then raises some potential ways of ameliorating the effects

of term extension, especially for digital works and for analog works that libraries want to digitize. For example, the **Copyright Term Extension Act (CTEA)** added a new provision to the library exemptions that will help libraries for works still under copyright but for which the author has been deceased for fifty years or more. Additionally, there are a number of efforts

underway to create open source archives into which authors will deposit digital copies of their work, which then may be freely used by others. Finally, there is a legislative proposal that would require copyright holders to file a form and pay a nominal \$1 fee in order to maintain the copyright in the work beyond fifty years after the author's death.

The *Eldred* Decision

The **Sonny Bono Copyright Term Extension Act (CTEA)**² was signed into law on October 27, 1998, and it extended the term of copyright from life of the author plus fifty years to life plus seventy years. *Eldred* did not challenge the basic twenty-year term extension for newly created works, but rather the retroactivity provision, which applied to all works still under copyright. The *Eldred* appeal addressed only two issues: the retroactivity of term extension and whether a law that extended the term of copyright is immune from free speech challenges under the First Amendment. Based solely on year of publication, only works published before 1923 in the United States are clearly in the public domain. For works published between 1923 and 1964, the work had to be renewed for copyright after its first twenty-eight years. If the works were not renewed, they are now in the public domain. If they were renewed, then the copyright will extend for ninety-five years after the date of first publication. In fact, it will be the end of 2018 before any other published work enters the public domain, and then only if there are no further extensions of the term for existing works.

Although *Eldred* was the named plaintiff in the case, other parties include a nonprofit Internet distributor of rare books, a sheet music distributor, a choir director and a film preservation company. **Mr. Eldred**, the owner of **Eldritch Press**, takes public domain works,

digitizes them, adds hypertext references and then makes the freely available on the Web.³ Plaintiffs sued for a declaratory judgment that the **CTEA** was unconstitutional. The federal district court ruled against **Mr. Eldred** and upheld the constitutionality of term extension.⁴ Along with the other plaintiffs, he appealed to the Court of Appeals for the District Columbia, which agreed with the district court.⁵ Several library associations filed *amicus* briefs in the case on the side of *Eldred* for the Supreme Court appeal.⁶

In an opinion authored by **Justice Ruth Bader Ginsburg**, the U.S. Supreme Court held that Congress acted properly when it voted to extend the term of copyright even retroactively, as Congress has done on several other occasions. Moreover, extensions to existing copyrights are still for limited times, and it does not mean that such terms cease to be limited times if they are later expanded.

On the second issue, the Court held that the D.C. Circuit Court of Appeals spoke too broadly when it declared that copyrights were "categorically" immune from First Amendment challenge. *Eldred* claimed that the **CTEA** was a content neutral regulation of speech, which failed heightened scrutiny, the so-called mid-level test for determining the constitutionality of a statutory provision. The Court refused to apply strict scrutiny, the highest-level test or even heightened scrutiny to the First Amendment claim. Instead, it applied the lowest-level test, rational basis, and found that this act of Congress, even applied retroactively, satisfied the rational basis test. Although the library community would have preferred the Court to declare that heightened or strict scrutiny should be used, the fact that the Court struck down the broad language of the court of appeals, which would have immunized copyright statutes from free speech challenges, was a positive result.

The majority pointed out that the term of copyright had been extended several times before and applied retroactively to works still under copyright. What was missing from the analysis was the fact that each of the other expansions of the term of copyright had come about as a part of a total revision of the Copyright Act, so the underlying policy considerations were actually addressed by Congress. The **CTEA**, in contrast, was only an extension of the term and not a total revision of the Act.

There were two strong dissents in this case. **Justice Paul Stevens** argued that Congress had exceeded its authority in enacting the **CTEA** because it ignored the policies that favor the public domain and the limited times provision of the Copyright Clause of the Constitution. **Stevens** pointed out that economic reward to the copyright holder is a secondary consideration; benefit to the public is the primary reason that Congress was given the power to enact copyright laws. Publishers had argued that ex-

continued on page 28

DRM and Research Libraries: from page 24

here does not exist in a single, integrated system. Yet key components, such as single sign-on network identification and content and document management systems that can store content for enterprise-wide access, are becoming more common in research libraries and the institutions that surround them.

In addition to these components, standards-based DRM technology, license management, and usage tracking and reporting components need to be added. With regard to the former, the rise of *rights expression languages* — ways to express content rights in detail that could theoretically be understood by multiple DRM systems — is an encouraging development towards the ideal of publishers submitting content along with rights descriptions to libraries, which would

then package them in their own DRM schemes. Finally, license management systems already exist, from vendors like **Macrovision**, for software in corporations, and there is little reason to suggest that these systems cannot be adapted for use in institutional digital content licensing.

It's possible to conceive of systems that use DRM technology to control and track content usage in research environments in ways that are, on balance, as valuable to institutions as they are to publishers. Factions in the library, publishing, and technology industries will need to come together to make it happen. Perhaps one day we will find common ground between institutional research libraries and DRM after all.

Thanks to **Gail Dykstra of Dykstra Research** for her help with this article.