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FAQ

What impact will the recent Librarian of Congress's rulemaking on the Digital Millennium Copyright Act's anticircumvention provisions have on the ability of libraries and archives to preserve access-controlled digital information?

This FAQ is answered by Peter Hirtle. Hirtle is the Director of Instruction and Learning at Cornell University Library and also serves as the Library's Intellectual Property Officer. He is the immediate past president of the Society of American Archivists.

Before we can answer this question, it is important to understand the background, rationale, and scope of the Librarian's rulemaking.

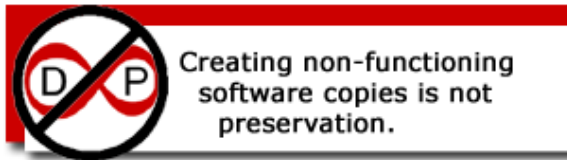
The Digital Millennium Copyright Act (DMCA, enacted in 1998) gave copyright owners important new protections. One of them is that it made it illegal for users to bypass any technological mechanisms that the copyright owner may have placed on works that control access to those works, and imposed harsh civil and criminal penalties for knowingly circumventing the controls. Passwords are one form of access control; encryption (or scrambling) of a file is another. The prohibition applies even if the intended use is otherwise lawful and noninfringing.

Recognizing that this provision might unduly affect the rights of users, Congress directed that every three years the Librarian of Congress should determine whether the implementation of access control measures is diminishing the ability of individuals to use copyrighted works in ways that are otherwise lawful. The focus of the rulemaking is on whether there are specific classes of copyrighted works the use of which is, or in the next three years is likely to be, adversely affected by the prohibition against bypassing access control mechanisms.

On October 28, 2003 the Librarian identified from the numerous suggestions submitted by the public [four classes of works](#) that will be exempt for the next three years (until the next round of rulemaking) from the DMCA's prohibition against the circumvention of technology that controls access to a copyrighted work. The third exemption addresses a preservation use:

Computer programs and video games distributed in formats that have become obsolete and which require the original media or hardware as a condition of access.

The third class of exempted works modifies an [exemption proposed by the Internet Archive](#) (pdf) intended to address the problem of preserving software. Some computer programs and video games will only operate in the presence of specific media or hardware. In some cases, the original media on which the program was distributed must be inserted into the appropriate drive in the computer for the software to operate. In other cases, a specific piece of hardware such as a dongle (a hardware lock that attaches to a computer and interacts with software programs to prevent unauthorized access to that software) must be present.



Section 108(c) of the Copyright Act authorizes libraries or archives in certain limited circumstances to preserve digital works, including computer programs and video games, by migrating them to newer formats.^[1] The

legal copies would not operate, however, if the software requires that the original media or a specific hardware device be present; the software's built-in security check would fail. Creating non-functioning software copies is not preservation.

The Librarian's DMCA exemption allows libraries that wish to preserve such software legally to bypass access control mechanisms in the software. An important requirement is that the works must be in formats that are now obsolete. A format is considered obsolete if the machine or system necessary to render perceptible a work stored in that format is no longer manufactured or is no longer reasonably available in the commercial marketplace for new equipment. It seems likely that a computer program or video game that was distributed on an 8 inch floppy disk would now be considered obsolete. The situation is much less clear with 5 1/4 inch floppy disks. The Register of Copyright in her report to the Librarian of Congress left the issue open:

In any dispute in which a library or archive relies on the exemption recommended herein to justify circumvention of access controls on software fixed on a 5 1/4 inch floppy diskette, it would be a matter of proof whether 5 1/4 inch drives are indeed obsolete.^[2]

While it is important to understand what the Librarian's ruling permits, it is even more important to understand the limitations of the ruling. Even the Register recognized that many of the important concerns that librarians and archivists have about the preservation of our digital heritage would not be satisfied by the scope of this exemption.^[3]

First, the Librarian rejected the Internet Archive's recommendation that literary and audiovisual works in addition to computer programs and video games be included in the class of exempted works. The Register did not find conclusive evidence in the submitted comments that access control mechanisms that rely upon the original hardware or software are a significant problem for e-books, sound recordings, or other digital works. The exemption is limited solely to computer programs, defined in the Copyright Act as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result," and video games (which are undefined in the Act and recommendation). It cannot be used to preserve an e-book designed to be played only on a particular reader.

Second, the exemption is limited to access control mechanisms that require the original media or hardware to operate. Other access control mechanisms, such as passwords, are not covered by the exemption. The regulation would not authorize, for example, circumventing password protection in a word processing or PDF document that might limit whether people can edit, print, or copy the document.

The requirement that limits the exemption to obsolete hardware or media is also quite strict. Preservationists know that by the time a digital work's software or hardware environment is obsolete, it may be too late to preserve it. Nevertheless, the Register concluded that Section 108(c) does not authorize the categorical preservation of any works other than obsolete works; preemptive archival activity is expressly excluded.^[4] Section 108(c) does also authorize the reproduction of "deteriorating" works, but the Register concluded that this factual determination must be made on a case-by-case basis. One cannot simply conclude that all works are deteriorating from the moment of creation.

Preservation of digital works before they become obsolete may be permissible under Section 117 (Computer Programs) or Section 107 (Fair Use) of the Copyright Act. Section 117 authorizes the making of a reproduction of computer programs when "such copy or adaptation is for archival purposes only." For the purposes of the rulemaking, however, the Register followed some court opinions that have interpreted the language narrowly, redefining archival copies as backup copies only.



It would be unfortunate if the Copyright Office began to think of the rights in Section 108 as a cap on activities by libraries and archives, rather than a floor.

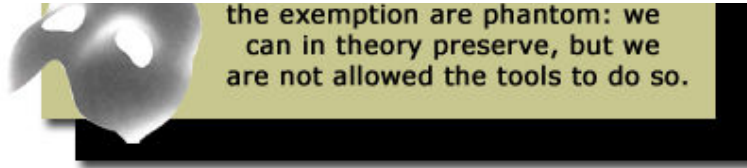
The Register gave two reasons for rejecting preservation arguments based on fair use. First, in spite of Congress's clear intention when creating this rulemaking process that fair use rights be preserved, the Register has interpreted the

Library's mandate very narrowly. The rules specify the category of works that are exempted, and not the use that will be made of those works. The Register concluded that there can be no general usage-based exemption for preservation; such an approach should be explicitly endorsed by Congress. In addition, the Register rejected a reliance on Section 107/fair use because preservation is covered in Section 108: "...it would be improper in this rulemaking to go beyond the express congressional parameters contained in the DMCA amendments to §108." (p.54-55). Section 108 itself, however, says that "nothing in this section ... in any way affects the right of fair use as provided by section 107."^[5] It would be unfortunate if the Copyright Office began to think of the rights in Section 108 as a cap on activities by libraries and archives, rather than a floor.

Lastly, the Librarian's rulemaking does not affect the prohibition found in 1201(a)(2) against the manufacturing or distribution of devices that can circumvent access control mechanisms.^[6] It may be legal for a library or archives to create devices to help them circumvent an access control mechanism during the next three years, but it is illegal for that library or archives to purchase such a device from others. Nor can they share a solution with other cultural institutions. Few repositories are in a position to reverse engineer obsolete access control mechanisms. In many ways, the preservation rights granted in the exemption are phantom: we can in theory preserve access-

The preservation rights granted in

controlled obsolete computer programs and video games, but we are not allowed the tools to do so.



The DMCA exemptions are a chimera as far as preservation is concerned. Given the narrow scope in which the Librarian of Congress feels he must operate, the focus on classes of works rather than uses, the limited number of exempted classes of works, and the continuing ban against the tools that could bypass access control mechanisms, there is little that the exemptions can do to help librarians and archivists. There are steps, however, that the library and archival community can take to begin to address the gaps in the Librarian's rulemaking.

First, we should begin to prepare now for the next round of rulemaking in 2006. Each round of rulemaking begins anew. If we want to preserve even the limited rights granted this time, it will be necessary to resubmit and re-establish the need for the existing exemptions. Furthermore, we can begin now to identify additional classes of works in which access-control mechanisms have limited our rights (especially our ability to exploit Section 108 rights). It is important that the library and archival communities identify concrete examples of when access control mechanisms interfere with preservation and to report those examples to groups such as the Society of American Archivists who are interested in the preservation of electronic information. Many proposed exemptions in this round of rulemaking were rejected precisely for lack of such concrete examples.

Librarians and archivists should also continue to challenge the Librarian's narrow interpretation of his authority in the rulemaking proceeding. The Assistant Secretary for Communications and Information of the Department of Commerce, who is required by law to advise on the rulemaking proceeding, has noted that "in some circumstances, the intended use of the work or the attributes of the user are critical to a determination whether to allow circumvention of a technological access control." The law itself requires that the Librarian when conducting the rulemaking examine "the availability for use of works for nonprofit archival, preservation, and educational purposes."^[7] The Librarian's continued narrow definition of what is meant by "classes of works" subverts the clear intention of Congress and the public interest in favor of the narrow interests of the intellectual property monopolies.



Ultimately, the need for mechanisms that allow for the legal preservation of digital information is more appropriately addressed by congressional legislation than the DMCA rulemaking process.

In the end, however, it is unlikely that the solution to the digital preservation problem will emerge from DMCA rulemaking by the Librarian of Congress. As the Register herself notes, the

need for mechanisms that allow for the legal preservation of digital information "is more appropriate for congressional consideration and properly crafted legislative amendment than it is for this rulemaking."^[8] As the prevalence of digital information with digital rights management systems that control access or with embedded copy controls increases, so will the need for legislation that will enable the preservation of the information.

Notes

[1]For more on the legal bases for digital preservation, see Peter B. Hirtle, "[Digital Preservation and Copyright](#)". ([back](#))

[2] [Memorandum\(pdf\)](#), Mary Beth Peters to James Billington, Recommendation of the Register of Copyrights in RM 2002-4; Rulemaking on Exemptions from Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 27 October 2003, p. 50. ([back](#))

[3] Ibid., p.63. ([back](#))

[4] Ibid. ([back](#))

[5]17 U.S.C. § 108(f)(4). ([back](#))

[6]Similarly, while it may sometimes be legal for individuals and repositories to make reproductions of digital files that contain controls against copying, it is illegal to distribute hardware and software that would allow you to do this. 17 U.S.C. § 1201(b)(1). ([back](#))

[7] 17 U.S.C. § 1201(a)(1)(C). ([back](#))

[8]Register's Recommendation, p. 63. ([back](#))

Publishing Information

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