

Association for Computing Machinery
Comments to the Copyright Office of the Library of Commerce
Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access
Control Technologies

February 17, 2000

Pursuant to the "Request for Comments on Section 1201(a) of the Digital Millennium Copyright Act," the Association for Computing Machinery urges you to criminalize only those who circumvent technological protection mechanisms with the intent to infringe. The legislation must be revised to ensure the freedom of scientists to bypass copy protection schemes for fair use purposes. Scientists must be legally permitted to circumvent access technologies in order to recognize shortcomings in security systems. Prohibitions on such legitimate behaviors would undermine efforts to create a robust system that can endure rigorous scrutiny.

The Association for Computing Machinery is a leading society of computer scientists in education, industry, and government. ACM facilitates communication between computer professionals and policymakers on issues of concern to the computing community.

The Digital Millennium Copyright Act must expressly allow the use of circumvention measures for fair use purposes. The fair use doctrine is fundamental to copyright law, which is derived from the U.S. Constitution and underscores the necessity "to promote the Progress of Science and the useful Arts" (U.S. Constitution, Article 1, 8). The draconian criminal measures imposed for violation of section 1201 will deter individuals from conducting bona fide forms of science and technology research that is fundamental to innovation. A recent high-profile case in the media pertains to the discovery of the weak encryption algorithm of the copy-protection system of DVDs. Scientists must be legally permitted to circumvent access technologies in order to recognize shortcomings in security systems. Critical to the scientific endeavor is the freedom to explore, to understand, and to assess. It is simply inappropriate for the government to attempt to regulate basic research techniques.

The anti-circumvention provision of the Act criminalizes research that is necessary for computer and network security. Although the bill sets out exceptions on encryption research, the majority of computer security research does not involve encryption. Even the exceptions for encryption are limited and will not cover sufficiently a wide range of computer research. Computer security researchers believe that not only will their research be prohibited, but even the teaching of many of the standard security techniques will constitute a crime. As a consequence, experts in computer security may not be able to take the steps necessary to safeguard the nation's computer systems.

The exceptions in the DMCA to permit the circumvention of technological protection mechanisms are overly narrow and restrictive, and many legitimate noninfringing uses are ignored. For example, a firm might want to test a computer system before purchasing

it to ensure that it is trustworthy and secure. The Act allows computer security testing only by the owner or operator of a system, so the firm would be able to test the robustness of the system only with the producer's permission. In another case, a copyright owner might suspect that another Internet user is infringing his work. The only way to test his assumptions would be to bypass the encryption scheme of the suspected work to assess the material. Amendments to the legislation should distinguish between infringing and noninfringing uses and assign liability only to those who use circumvention technology with the intent to infringe.

A further problem is that anti-circumvention exemptions become meaningless if access mechanisms are not allowed. The Act provides an exemption for nonprofit libraries, archives, and educational institutions permitting them to circumvent copy-protection schemes to obtain authorized access to a work, yet the Act bans equipment and services designed to enable circumvention. A prohibition of the manufacture, import, and use of tools necessary to enable circumvention essentially annuls any effective means to obtain access to a work for a legitimate use.

We urge you to recognize the distinction between circumvention for the purpose of obtaining unauthorized access to a work and circumvention for the purpose of making a non-infringing use of a work. Absent some clear criminal intent, scientists should not be penalized for conducting research that is crucial to developing and testing copyright protection systems. The ability of computer scientists to engage in critical research and to exchange ideas and information that enable innovation are fundamental to science. Thank you for this opportunity to offer our comments. Please contact us with additional questions.

Respectfully submitted,

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Association for Computing Machinery