The Digital Millennium Copyright Act: Taming the Wild Web

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On October 28, 1998, President Clinton signed into law the Digital Millennium Copyright Act, complex and detailed legislation amending current U.S. copyright law to address some of the specific copyright needs of the computer-networked environment.[2]

In a statement released at the time of the signing, the President praised the World Intellectual Property Organization treaties as essential tools in combating copyright infringement by affording ''global protection from [copyright] piracy in the digital age'':[3]

> The World Intellectual Property Organization (WIPO) Copyright Treaty and the WIPO Performances and Phonogram Treaty mark the most extensive revision of international copyright law in over 25 years. The treaties will grant writers, artists, and other creators of copyrighted material global protection from piracy in the digital age.
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> These treaties will become effective at a time when technological innovations present us with great opportunities for the global distribution of copyrighted works. These same technologies, however, make it possible to pirate copyrighted works on a global scale with a single keystroke. The WIPO treaties set clear and firm standards—obligating signatory

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2 Digital Future Coalition, The President's Remarks, (visited April 11, 1999) <http://www.dfc.org/issues/graphic/2281/presidn/presidn.html>.

3 *Id.*

> countries to provide ''adequate legal protection'' and ''effective legal remedies'' against circumvention of certain technologies that copyright owners use to protect their works, and against violation of the integrity of copyright management information. This Act implements those standards, carefully balancing the interests of both copyright owners and users.[4]

The Digital Millennium Copyright Act consists of five sections:[5]

- Title 1 amends current Federal law to implement the WIPO Copyright Treaty and the WIPO Performances and Phonogram Treaty.
- Title 2 limits liability for online computer service providers who comply with specified ''safe harbor'' requirements.
- Title 3 limits exclusive rights in computer programs with respect to the performance of computer maintenance and repair.
- Title 4 makes miscellaneous amendments to current U.S. Copyright Act, including changes to the rights in ephemeral and sound recordings.
- Title 5 provides protection for certain original designs.

While not all of the Digital Millennium Copyright Act deals strictly with the online computer environment known as the Internet, there are a

4 *Id.*
5 H.R. 2281 § 2 (1998).

number of provisions of the Act that do just that. These areas provide the focus for this brief description of the Digital Millennium Copyright Act.[6]

World Intellectual Property Organization Treaty Implementation

A key aspect of the Digital Millennium Copyright Act is its amendment of U.S. copyright law to bring it into compliance with the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty, which were adopted at the WIPO Diplomatic Conference in December, 1996.[7] Title I of the Act includes several provisions that deal substantively with the computer and computer network arena.

Copyright Protection Systems

A major provision of the Act is the addition of § 1201 to the U.S. copyright law (Title 17 of the United States Code), which prohibits circumventing a ''technological measure that effectively controls access to a work protected [by copyright].''[8] Such prohibited circumvention includes, under the code, descrambling a scrambled work, decrypting an encrypted work, or acting ''otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner''[9] if that technological measure ''requires the application of information, or a process of a treatment, with the authority of the copyright owner, to gain access to the work.''[10]

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6 For a detailed analysis of the Digital Millennium Copyright Act, see Jonathan Bands, The Digital Millennium Copyright Act, (visited April 11, 1999) <http://www.ari.net/dfc/html/jb_memo.html>.

7 *Id.*

8 17 U.S.C. § 1201(a)(1) (1998).

9 17 U.S.C. § 1201(a)(3)(A) (1998).

10 17 U.S.C. § 1201(a)(3)(B) (1998).

Enforcement Provisions

To afford copyright holders a mechanism with which to control access to their protected works, the Act also prohibits manufacture, import, or making available ''any technology, product, service, device, or component that is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work protected [by copyright].''[11] This provision, as enacted, does not apply to legitimate products or services, but only to those that are ''primarily designed or produced for the purpose of circumventing a technological measure,'' have ''only limited commercially significant purpose or use other than to circumvent a technological measure,'' or are knowingly ''marketed . . . for use in circumventing a technological measure.''[12]

Several exceptions allow circumvention for legitimate purposes by specifically authorized agencies and persons:

- Law Enforcement, Intelligence and Government Activities—The Act's prohibition on circumvention of copyright protection systems does not apply to ''lawfully authorized investigative, protective, information security or intelligence activities'' of government officers, employees or agents, nor to individuals acting ''pursuant to a contract with the United States, a State, or a political subdivision of a State.''[13]

- Reverse Engineering—The Act likewise does not prohibit such circumvention by an individual ''who has lawfully obtained the right to use a copy of a computer program'' to analyze that program to identify the ''elements of the program that are necessary to achieve interoperability of an independently created computer program with other programs.''[14] This exemption

11 17 U.S.C. § 1201(a)(2) (1998).
12 *Id.*
13 17 U.S.C § 1201(e) (1998).
14 17 U.S.C § 1201(f) (1998).

facilitates development of new computer software that will operate properly with existing operating systems and software applications.

- Encryption Research—The Act permits the development of improved mechanisms by which copyright holders can protect their works,[15] the Act allows circumvention in pursuit of efforts to advance encryption technology, provided that 1) the research is conducted in good faith, 2) the individual has lawfully obtained the encrypted copy of the work, 3) such circumvention is necessary to conduct the research, 4) the individual made a good faith effort to obtain authorization from the copyright holder prior to circumvention, and 5) such circumvention is not itself an infringement under the Act or otherwise a violation of other applicable law.[16]

- Minors—The Act permits the development, manufacture and distribution of devices designed specifically to circumvent copyright protection measures if such devices have the ''sole purpose to prevent the access of minors to material on the Internet.''[17]

- Personally Identifying Information—The Act also allows individuals to circumvent copyright protection systems for the purpose of preventing dissemination of their own private, personal information. [18] The most pervasive example of this, in the online environment, is the internet ''cookie,'' a small file containing ''personally identifying information reflecting the online activities of the user.''[19] This file is stored on a user's hard disk drive, only

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15 Jonathan Bands, The Digital Millennium Copyright Act, (visited April 11, 1999) <http://www.ari.net/dfc/html/jb_memo.html>.

16 17 U.S.C § 1201(g) (1998).

17 17 U.S.C § 1201(h) (1998).

18 17 U.S.C § 1201(i) (1998).

19 Jonathan Bands, The Digital Millennium Copyright Act, (visited April 11, 1999) <http://www.ari.net/dfc/html/jb_memo.html>.

to be read by another program when that user later logs onto an Internet web site.

- Security Testing—The Act excepts those who, in good faith, gain access to computer systems or computer networks for the purpose of ''testing, investigating, or correcting, a security flaw or vulnerability'' when that individual is authorized by the owner or operator of the computer system or network.[20]

Copyright Management Information

Another major aspect of the Act is the addition to Title 17 of the United States Code of § 1202, which prohibits the removal or alteration of copyright information.[21] Specifically, the Act creates civil and criminal liability for individuals who:

- Provide false ''copyright management information.''[22]
- Distribute or import for distribution copyright management information that is false.[23]
- Intentionally remove or alter any copyright management information (unless done with the authorization of the copyright holder).[24]
- Distribute or import for distribution copyright management information knowing that information has been removed or altered without authorization of the copyright holder.[25]

20 17 U.S.C § 1201(j) (1998).
21 17 U.S.C § 1202 (1998).
22 17 U.S.C § 1202(a)(1) (1998).
23 17 U.S.C § 1202(a)(2) (1998).
24 17 U.S.C § 1202(b)(1) (1998).
25 17 U.S.C § 1202(b)(2) (1998).

Civil Remedies and Criminal Penalties

The Act also provides for the addition to Title 17 of the United States Code of §§ 1203 and 1204, which create civil remedies[26] and criminal penalties[27] for individuals violating either § 1201 or § 1202.

- Section 1203 allows civil actions to be brought in U.S. District Court,[28] affording that court the power to issue temporary and permanent injunctions,[29] impound equipment,[30] award damages,[31] costs [32] and attorney's fees.[33]

- Section 1204 creates criminal penalties for persons who violate §§ 1201 or 1202 ''willfully and for purposes of commercial advantage or private financial gain.''[34] These penalties go up to a $500,000 fine and/or up to a five-year prison sentence for a first offense[35] and can be as high as a $1,000,000 fine and/or a ten-year prison sentence for subsequent offenses.[36]

The court also retains broad power to reduce a civil award if a violator can prove that he or she ''was not aware and had no reason to believe that [his or her] acts constituted a violation'' of §§ 1201 or 1202. [37] Similarly, the court can reduce an award against a nonprofit

26 17 U.S.C § 1203 (1998).
27 17 U.S.C § 1204 (1998).
28 17 U.S.C § 1203(a) (1998).
29 17 U.S.C § 1203(b)(1) (1998).
30 17 U.S.C § 1203(b)(2) (1998).
31 17 U.S.C § 1203(b)(3) (1998).
32 17 U.S.C § 1203(b)(4) (1998).
33 17 U.S.C § 1203(b)(5) (1998).
34 17 U.S.C § 1204(a) (1998).
35 17 U.S.C § 1204(a)(1) (1998).
36 17 U.S.C § 1204(a)(2) (1998).
37 17 U.S.C § 1203(c)(5)(A) (1998).

library, archive or educational institution for a likewise unknowing violation.[38] Nonprofit libraries, archives and educational institutions are exempt from criminal penalties[39] for violations of §§ 1201 or 1202.

Safe Harbors for Online Service Providers

Another key provision of the Digital Millennium Copyright Act is the addition of § 512 to Title 17 of the United States Code. This new section protects online service providers from liability for copyright infringement committed by those to whom they provide online services.[40] Under the code, an online ''service provider'' includes entities ''offering the transmission, routing, or providing of connections for digital online communications, between or among points specified by a user, of material of the user's choosing, without modification to the content of the material as sent or received.''[41]

System Caching

The Act creates a safe harbor to protect online service providers from liability for copyright infringement for ''system caching,'' or the temporary storage of information on a computer system or network.[42] In general, service providers are not subject to monetary or equitable relief for such activities if 1) the stored materials are ''made available by an individual'' other than the service provider, 2) the materials are transmitted to another individual at the direction of the receiving party, and 3) the storage activities are ''carried out through an automatic technical process'' which purpose is to make the information available to system or network users at the request of those users. [43]

38 17 U.S.C § 1203(c)(5)(B) (1998).
39 17 U.S.C § 1204(b) (1998).
40 17 U.S.C. § 512(a) (1998).
41 17 U.S.C. § 512(k)(1) (1998).
42 17 U.S.C. § 512(b) (1998).
43 17 U.S.C § 512(b)(1) (1998).

Online Storage

The Act also creates a safe harbor to limit online service providers' liability for information stored on a computer system or network when that information is at the direction of users.[44] In general, service providers are not subject to monetary or equitable relief for infringing works that are stored on their computer systems or networks if the service provider 1) lacks ''actual knowledge that the material'' is infringing, is unaware of ''facts or circumstances from which infringing activity is apparent,'' or expeditiously acts ''to remove, or disable access to, the material,'' 2) does not directly benefit financially from the infringing activity, and 3) expeditiously acts ''to remove, or disable access to, the material that is claimed to be infringing.''[45]

General Requirements of Safe Harbor Eligibility

These safe harbors generally provide additional defenses to charges of copyright infringement other than those already available under copyright or other law.[46] In order to qualify for safe harbor, an online service provider must adopt and reasonably implement a policy providing for the termination of subscribers and account holders who repeatedly infringe copyrights. The online service provider must also inform subscribers and account holders of this policy.[47] The online service provider must also work to accommodate and refrain from interfering with ''standard technical measures''[48] used by copyright holders to

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44 17 U.S.C. § 512(c) (1998).
45 17 U.S.C. § 512(c)(1) (1998).
46 Jonathan Bands, The Digital Millennium Copyright Act, (visited April 11, 1999) <http://www.ari.net/dfc/html/jb_memo.html>.
47 17 U.S.C. § 512(i)(1)(A) (1998).
48 17 U.S.C. § 512(i)(1)(B) (1998).

‘‘identify or protect copyrighted works.’’[49] (Digital watermarks or copy protection algorithms are good examples of such technological measures.[50])

Conclusion

There are those who believe that existing law adequately accommodates the computer-networked environment of the Internet. Clearly (and thankfully), Congress and the President have thought better of this with the passage of the Digital Millennium Copyright Act. Together, they have at once provided stronger copyright enforcement tools for the owners of copyrighted materials and afforded greater protections from liability for those service providers who are unwitting accomplices to the infringement of those materials. In so doing, they have taken the first small steps into the Digital Age of the 21st century.

49 17 U.S.C. § 512(i)(2) (1998).

50 Jonathan Bands, The Digital Millennium Copyright Act, (visited April 11, 1999) <http://www.ari.net/dfc/html/jb_memo.html>.