

**Before the United States
Library of Congress
Copyright Office**

Exemption to Prohibition on Circumvention)	Docket No. RM 99-7
of Copyright Protection Systems for Access)	
Control Technologies)	Notice of Inquiry

REPLY COMMENTS OF REALNETWORKS, INC.

RealNetworks, Inc., a publicly-traded company located in Seattle, Washington, hereby submits its Reply Comments in the above-captioned proceeding (hereinafter "NOI") in response to the comments of Massachusetts Institute of Technology Media Laboratory ("MIT"), suggesting that works transmitted in protected RealMedia formats should be exempt from the Digital Millennium Copyright Act ("DMCA") anticircumvention provision, 17 U.S.C. § 1201(a).¹

RealNetworks respects the leading-edge research conducted by the MIT Media Lab, so would not wish these comments to be misinterpreted as detracting from the significance of their work. However, in deciding whether to exempt any class of works from section 1201(a), the Copyright Office should balance requests for broader access against the potential chill to content owners' willingness to distribute their works over the Internet. RealNetworks believes that works delivered in RealMedia formats are sufficiently available to the public. Indeed, RealNetworks' software, including technological protections, has played a leading role in bringing multimedia content to a new Internet audience. Therefore, there is no reason to exempt from section 1201(a) either the RealMedia formats or the works that they protect.

¹ Comments of Eric D. Scheirer and Leonard N. Foner, Media Laboratory, Massachusetts Institute of Technology (filed Feb. 17, 2000).

Background

RealNetworks develops and markets RealProducer, RealServer and RealPlayer software that allows consumers worldwide to access video and audio content over the web.² Because we have always made a free version of the RealPlayer available to end users, our platform has rapidly proliferated. From 500,000 unique registered users in 1995, our audience increased to 14.4 million in 1997, 48 million in 1998 and more than 95 million at the beginning of February 2000. To underscore the growing popularity of streaming media on the web, Arbitron New Media and Northstar Interactive report that the number of total Internet users enjoying Internet radio grew from 19% in January 1999 to 34% in January 2000; and that 33% of RealPlayer users watch video programming and 75% tune into audio programming on a weekly basis. But RealNetworks' rapid success would not have occurred without the availability of compelling content which, in turn, stimulated the creation of more Internet technology products and services currently fueling the U.S. economy.

Content owners make RealMedia files available to Internet users in one of two ways. First, RealMedia files can be stored on servers for downloading via file transfer protocol or traditional web browsers such as Netscape Navigator. Downloaded RealMedia files can be played back using RealPlayer software or interoperable software created by other companies. Second, content owners can stream RealMedia files, using RealServer, in a near real-time transmission to the consumer.³ If a content owner elects to use the RealServer, Internet users

² Content owners use the RealProducer to encode their content into RealNetworks' format, which is stored as a RealAudio or RealVideo (generically, "RealMedia") file. The RealServer prepares RealMedia files for transmission to the end-user's computer, which reassembles the packets for performance using the RealPlayer software application.

³ Streaming thus allows a consumer to play content from the RealServer without having to download or store the file on the consumer's computer. Once the content has been played, no residual content is left on the consumer's computer.

can only access the RealMedia files using the RealPlayer or applications licensed by RealNetworks to playback RealMedia files.

In designing its technology, RealNetworks recognized that copyright owners would hesitate or refuse to release valuable content over the Internet in unprotected form. To build confidence in the streaming delivery platform, RealNetworks adopted technological protection systems that encourage content owners, from major record labels to independent video producers, to make their works available over the Internet, as an alternative or supplement to other distribution methods. Using the RealServer, content owners may determine whether consumers can only listen to or view a particular RealMedia stream or can also copy and store the content owner's copyrighted content. This is accomplished through a combination of features in the RealNetworks' software: An authentication sequence that ensures that consumers can only access RealMedia files stored on a RealServer using a RealPlayer; and a "copy switch" that, if activated by the content owner, prevents direct copying of the RealMedia data.

A federal district court recently held that these features incorporate effective technological protection measures that are protected against acts of circumvention by section 1201(a). In *RealNetworks v. Streambox, Inc.*,⁴ the court issued a preliminary injunction against the distribution of the "Streambox VCR," a software product that circumvented these protection measures so as to permit a Streambox user to record the streamed RealMedia files, against a copyright holder's wishes. The court specifically noted in its findings of fact that a large number of copyright owners rely on RealNetworks' software to protect their content from duplication, and that the ability to circumvent this protection "would likely reduce the

⁴ 2000 U.S. Dist. LEXIS 1889 (W.D. Wa. Jan. 18, 2000).

willingness of copyright owners to make their audio and video works accessible to the public over the Internet."⁵

The *Streambox* court, and the explosion of compelling media content over the Internet, attest to the importance and, in fact, necessity of the RealNetworks' protection measures in making more copyrighted works available to the public. RealNetworks demonstrates below that there is no reason to effectively override the operation of the market, and the decisions of content owners to protect their works, by exempting their content from the provisions of section 1201(a). RealNetworks' experience and expertise indicate that such a move would instead be very damaging to the marketplace of available copyrighted works, and contrary to the intent of copyright laws to encourage and stimulate innovation and creation.

RealMedia Format Files Should Not Be Exempt from Section 1201(a).

In its comments, MIT suggests the following reason as to why RealMedia formatted works should be exempt from the section 1201(a) anticircumvention provision:

Technological measures that effectively control access to copyrighted works can make dissemination difficult. For example, some music on the Internet is distributed in the "RealAudio" format created by RealNetworks, Inc. A technological feature of this format is that it is difficult for users to capture and store the music data (this format is a "streaming" format, in which the data is transmitted continuously over the Internet, rather than stored in a fixed file). Because of this, the fair use of this music to serve as an example within a research presentation is adversely affected.⁶

⁵ *Id.* ¶ 26. *See, e.g.*, Statement of Cary Sherman, Senior Executive Vice President and General Counsel, Recording Industry Association of America, Inc. in response to the court's decision in *RealNetworks, Inc. v. Streambox, Inc.* "The RIAA fully supports RealNetworks' position in this case for the sake of our members and a legitimate marketplace. RealNetworks' technology is a success in large measure because it protects creators at the same time it gives consumers access to the music they want. Streambox's hacking tools rob creators of the very protection RealNetworks offers. That is precisely what the DMCA was intended to prevent." *See also* Statement of Gerry Kearby, Chief Executive Officer, Liquid Audio, Inc. "Liquid Audio strongly supports RealNetworks' legal efforts to protect the millions of copyright holders around the world by keeping Internet music secure.... As pioneers in secure Internet music delivery, we firmly believe in the Digital Millennium Copyright Act as a key legal protection that will help ensure the development of a digital music economy."

⁶ MIT Comments at 3.

Notably, MIT does not and, indeed, cannot complain that the technological protections in the RealPlayer have made sound recordings unavailable or less available via the Internet, since the opposite is true. They, like all consumers, can freely access tens of thousands of hours of new programming streamed weekly over the Internet in the RealMedia formats for viewing or listening. MIT's concern therefore appears to be that, although they have free access to hear the works, they believe that they are unable to copy them for further use. With due respect, RealNetworks believes that MIT's concerns are misplaced, for three reasons.

1. RealNetworks Copy Protection Systems Do Not Adversely Affect Noninfringing Research Demonstration Uses in a Substantial Way.

Contrary to the view expressed in MIT's comments, research entities such as MIT still can readily secure works for research and demonstration purposes.

First, research capabilities as to streaming will not be hindered by these technological protections measures, because entities such as MIT can create their own RealMedia formatted content at no cost. Versions of the RealNetworks' RealProducer and RealServer software are available to anyone by download, without charge, at

<http://www.realnetworks.com/products/producer/> and

<http://www.realnetworks.com/products/basicserver/>. These free products allow anyone to encode content into RealNetworks formats, either with or without activating the technological protection measures, and to stream the content to as many as 25 simultaneous users.

Consequently, MIT can perform research on streaming and gain access to RealMedia files by encoding and streaming the content itself.

Second, not all works encoded in RealMedia formats are protected against copying. As noted previously, some content owners make their works available for downloading (*i.e.*,

transmission and copying of a phonorecord or copy of a work) in the RealMedia format.

Other content owners elect not to activate the RealNetworks technological protection measures for their streamed content. Also, RealMedia content streamed using the Hypertext Transfer Protocol (“HTTP”) is not secured against copying.

Third, alternative sources for the copyrighted works are readily available. Recorded works streamed using RealNetworks’ software generally are available in commercial release on compact discs, digital video disc and other formats. Moreover, the RealPlayer technological protection measures only prevent copying of the direct digital transmission stream, hence the material still can be copied by other means, such as through the audio or video outputs of the receiving computer. Thus, even live broadcasts using RealPlayer, which are not otherwise available for purchase, could be copied in other formats by the consumer.

Finally, MIT does not seem to be arguing that their research demands that they have access to a particular content owner's works or to a specific work. It is difficult to imagine that MIT is experiencing any substantially adverse affects stemming from the fact that some content cannot be copied, when other content can. As the Copyright Office properly recognized, the legislative history accompanying the DMCA makes it clear that Congress did not intend that exemptions be granted easily. The negative effect must be substantial.⁷ Mere inconvenience, individual cases and *de minimis* impact are not enough to justify a proposed incursion on content owner's rights.⁸

⁷ *NOI* at 66141 (stating that the exemption "must be based on a determination that the prohibition has a *substantial* adverse effect on noninfringing use of [a] particular class of works.") (emphasis added).

⁸ *NOI* at 66141 citing Section-by-Section Analysis of H.R. 2281 as Passed by the United States House of Representatives on August 4, 1998, Committee on the Judiciary, House of Representatives, at 6 (1998) and H.R. Rep. No. 105-551, pt. 2, at 37 (1998) (stating that the decision to grant an exemption must be based on "distinct, verifiable, and measurable impacts, and should not be based on *de minimis* impacts.").

2. *RealNetworks Formatted Files are Not a “Class of Works.”*

Congress gave the Librarian of Congress the authority to exempt certain classes of works from the DMCA's anticircumvention provision.⁹ RealNetworks respectfully submits that RealMedia files do not constitute the narrow "class of works" that Congress envisioned when enacting section 1201(a)(1)(D).

The legislative history of the DMCA clearly indicates Congress' intent that the definition of an exempt "class of works" be given narrow scope. The House Managers and Commerce Committee intended that a “group of works” exempt under section 1201(a) should be smaller than the universe of works covered by any one category of works under section 102(a).¹⁰

By contrast, RealMedia is a technical format for storing and transmitting any copyrighted audio or audiovisual works over the Internet and other networks. Content streamed in RealMedia format covers the gamut of copyrightable audio and video broadcasts, sound recordings and motion pictures. Thus, an exemption for the entire RealMedia format would expose to copying multiple categories of copyrighted works, flouting legislative intent and gutting the protections afforded by section 1201(a).

3. *Congress Intended to Promote the Availability of Copy Protection Measures in Streaming Applications.*

When Congress passed the DMCA, it amended section 114 of Title 17 to provide a statutory license for eligible nonsubscription performances of sound recordings – including webcasting – subject to specified conditions. One condition is that, if the webcasting

⁹ 17 U.S.C. § 1201(a)(1)(D).

¹⁰ *NOI* at 66142 citing Section-by-Section Analysis of H.R. 2281 as Passed by the United States House of Representatives on August 4, 1998, Committee on the Judiciary, House of Representatives, at 7 (1998); H.R. Rep. No. 105-551, pt. 2, at 38 (1998).

technology so permits, a transmitting entity should set that technology so as to prevent the recipient of the transmission from making direct digital copies of the transmission stream.¹¹ This condition was part of the balance struck by Congress to induce the dissemination of copyrighted sound recordings over emerging technologies such as Internet webcasting.

Thus, Congress already appears to have answered the question posed by MIT. It would be unusual, to say the least, for Congress to have so specifically provided for protections over streaming audio broadcast content, only to suggest that they ought to be exempted under another section of the same statute.

4. An Exemption Could Hinder Access to Copyrighted Works over Broadband.

The most compelling evidence against MIT's requested exemption comes from the dynamic growth of Internet webcasting over the past 16 months. Following the passage of the DMCA, copyright owners unquestionably have taken bolder steps to make their music available online. More Internet media companies have launched new music retail and webcasting services. More consumers are experiencing multimedia over the web as part of their daily media consumption. Yet this is still only the beginning.

Widespread consumer access to cable modem and digital subscriber line services promises to propel web multimedia from today's constrained 56k modem streams into the mainstream. Internet companies and content owners alike are enthusiastically embracing broadband streaming to create rich media experiences and new business models not subject to the statutory license.

An exemption for streamed media files, however, threatens to toss aside all progress and send the parties back to square one. Without the assurance of copy protection for high quality streaming, copyright owners may revert to the pre-DMCA perception of the Internet

¹¹ 17 U.S.C. § 114(d)(2)(C)(vi).

as a risk rather than an opportunity. If, as a result, content owners again resist making their most commercially valuable content available online, then – ironically – the exemption will result in the availability of fewer, rather than more, copyrighted works. Therefore, undoing the protections of section 1201(a) for streaming media would strike a greater blow to the public interest than would leaving those protections intact.

Conclusion

In enacting the DMCA, Congress balanced the public interest in maximizing access to copyrighted works against the copyright owners’ desire for effective technological measures to secure digitally distributed content. Congress therefore provided explicit safeguards against the potentially harmful effects of overzealous protection, but noted that additional exemptions to section 1201(a) should be amply justified and narrowly drawn. RealNetworks has demonstrated that its technology has increased public access to copyrighted works, and that research efforts such as those pursued by MIT are not adversely affected by the protection technologies employed in the RealNetworks software. RealNetworks therefore urges the Copyright Office to use its exemption authority judiciously and find that MIT has not justified its request. Otherwise, the DMCA exemptions will swallow the rule.

Respectfully Submitted,

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