

PIRACY ON CAMPUS:
AN OVERVIEW OF THE PROBLEM AND A
LOOK AT EMERGING BEST PRACTICES
TO REDUCE ONLINE THEFT OF
COPYRIGHTED WORKS

presented to the

*Subcommittee on Courts, the Internet,
and Intellectual Property*

by

*Richard Taylor
Senior Vice President, External Affairs & Education
Motion Picture Association of America*

September 22, 2005

On behalf of Dan Glickman and the companies that comprise the Motion Picture Association of America, I very much appreciate this opportunity to testify about the film industry's efforts to address peer-to-peer (P2P) piracy on university campuses. The livelihoods of nearly one million men and women in America are impacted by the film and television industry, which entertains millions of consumers every day.

Piracy is the greatest obstacle the film industry currently faces, costing our industry approximately \$3.5 billion annually due to hard goods piracy of DVDs and VCDs alone. Deloitte and Touche estimates that approximately 400,000 films are illegally downloaded every day. CacheLogic, an Internet monitoring group, has estimated that over 60 percent of all Internet traffic in the U.S. is attributable to peer-to-peer usage. In Asia, over 80 percent of all traffic on the web is from P2P. Furthermore, well over 90 percent of all the content on P2P networks consists of unauthorized copyrighted files.

In light of these facts, it is important to understand that the film industry rests upon a fragile fiscal base. Each film is a massive upfront investment with absolutely no guarantee of return. The average film costs over \$100 million to make and market. Only one in ten films recoups this investment through its theatrical release. Six in ten films never break even. To recoup the considerable investment required to make and market a movie, the film industry relies on foreign distribution and ancillary markets (home video/DVD, pay per view, premium cable, basic cable, free TV, etc.) to make a profit or break even. It is these ancillary markets, especially home video and foreign distribution—economic engines that are essential to this industry—that are most vulnerable to the corrosive effects of film piracy.

Contrary to the repeated accusations of those who oppose reasonable content protections, the film industry has always been in the forefront of technological innovation: DVDs represent but one example. This tradition is even more important now, and the MPAA is working with the technology sector to help move our industry into the future. Our consumers have clearly shown a desire for more choices and flexibility in their filmed entertainment choices, and in turn the MPAA and its member companies are heavily involved in ongoing efforts to create the next generation of secure digital delivery platforms to meet that need. We recognize that the speeds of transfer so dazzling today will likely seem akin to a horse and buggy when new technologies such as Internet2 become the standard. To that end, two weeks ago MPAA joined Internet2 as a corporate member. MPAA plans to collaborate with the Internet2 community

to consider innovative content distribution and digital rights management technologies, and to study emerging trends on high-performance networks to enable future business models. We view secure, high speed Internet delivery of films as being integral to our industry's future, and we are excited by the possibilities this collaboration presents.

In addition, MPAA this week announced the establishment of "Movie Labs," a research and development venture that will develop copyright management and other technologies to protect against piracy. The future of film depends upon the development of innovative delivery technologies allowing new, user-friendly business models, and the film industry is diligently working to make these technologies a reality. So you can see that, while we continue our appeal for others to do their part in preventing the illegal abuse of copyrighted works, we are appropriately taking the lead in this regard.

I am particularly grateful that this Committee has recognized the pivotal role the university environment can play in curtailing the theft of movies and other copyrighted works online. As you are well aware, college campuses today harbor some of the swiftest computer networks in the country and that, unfortunately, has led to a situation where a significant level of piracy is taking place around the clock on our nation's campuses.

The MPAA is aware of the critical need to reach out to the education community, from elementary school-aged students to university administrators, in order to tackle head-on the threat of piracy and to stem the disturbing societal trend of illegal activity online by students of all ages. That is why Dan Glickman has established a new enterprise within the MPAA called External Affairs & Education. This new department, which I am honored to head, is dedicated to working with educators, administrators and student leaders to affect behavior and policy.

Since the establishment of this new department within MPAA, I have been spending a good bit of my time on the road, traveling to a dozen campuses and convening face to face meetings with administrators and students. Dan Glickman will also be doing a speaking tour of college campuses. The chief goal of these sessions has been to learn more about what universities are currently doing to address this issue of piracy. Truly, we are just at the start of the MPAA university initiative, so it is somewhat premature at this point to gauge success. However, as we get farther along into it, I would welcome the opportunity to report back to the Subcommittee about the successes we do achieve, and any ongoing obstacles we face.

Even at this early stage, however, it is clear that there are a range of measures available to universities today that can significantly reduce piracy on campus. This emerging set of what the MPAA would call “Best Practices” provides a roadmap for administrators to follow in order to meaningfully impact the problem of network abuse and illegal copyright theft. I’d like to use the remainder of my time to share with this Committee what we have discovered and what we would recommend university administrators adopt to impede their students’ illegal activity via campus networks.

Our suggestions focus on four areas in which schools have taken action: (i) network filters and other technological measures, (ii) legitimate online services, (iii) education, and (iv) enforcement. Undoubtedly, education and enforcement continue to be important components in any program schools undertake to address piracy. However, experience has shown that the offering of a legitimate online service, coupled with an effective network technology that decreases or, preferably, eliminates illicit peer-to-peer (“P2P”) file-sharing traffic, produces the best results for colleges and universities.

Technological Measures

As you are undoubtedly aware, a significant proportion of piracy on campus is occurring through illicit P2P services, which enable individuals to copy and distribute millions of unauthorized songs, movies, software applications and games. The P2P applications that enable this illegal activity, freely available as downloads over the Internet, are hugely popular at colleges and universities where students have access to extremely fast computing networks.

In the much-publicized Grokster case, the U.S. Supreme Court recently stated that “there is evidence of infringement on a gigantic scale” on P2P systems, and it has been estimated that over 90 percent of the use on these systems is infringing. (Of course, other studies have also reported that pornography, including child porn, and identity theft are prevalent on such systems.) With such a disproportionate amount of illegal traffic on certain P2P protocols (and given the threat to network security and individual PCs from viruses and other malware), it seems entirely appropriate to restrict the use of these illicit P2P systems generally. While prohibiting the use of predominantly illegal P2P applications, universities can still protect and promote the legitimate use of other P2P applications for research and scholarship.

This approach has already been employed at certain universities to extraordinary effect. For example, the University of Florida developed Icarus, a network-based system, that can selectively prohibit the transmission of any information bearing the signature of an unapproved P2P application, and manages adherence to University policies. The Icarus architecture supports other capabilities to address the full range of security management issues including: viral and worm attacks; spyware; and other outbound malicious behavior. All of these can have huge effects on the operation and cost efficiencies of the university network.

Some statistics on implementation of Icarus tell the whole story. In the first year of operation, there were nearly two thousand students that attempted to use P2P systems. They were effectively stopped and reminded online through an educational message that such activity was against University policy. Only 20 percent tried a second time and only 2 percent a third time. As new classes of students were introduced in the next two academic years, these numbers were reduced by 50% and 80 percent respectively. Additionally, the school has received no DMCA infringement notices since the inception of Icarus. Additionally, last year the developers of ICARUS were recognized by the Davis Productivity Awards for their work. The awards are part of a government improvement initiative in Florida and sponsored by Florida TaxWatch. The awards panel estimated that ICARUS saved the University of Florida nearly \$500,000 by reducing the flow of illicit P2P onto UF computer networks and automating the notification process when a violation of policy did occur.

While exceptions can be made for appropriate use of such applications, it is not surprising that the school has received very few requests for permission to use illicit P2P systems. Indeed, it is questionable whether such P2P applications are at all necessary (or beneficial) in an academic environment. Faculty and students remain able to share and distribute academic material through such secure and reliable means as websites, FTP, and email. In addition, there are legitimate and licensed P2P networks emerging—such as Penn State’s LionShare—which are dedicated to, and specially configured for, academic environments.

Should a university not find feasible the implementation of programs such as Icarus, MPAA suggests installing a network filtering system. Rather than prohibiting all P2P or other applications based on a particular protocol, these systems filter out infringing transmissions by matching them against a master database. While these types of applications are content-based filters, this

technology is in fact no more intrusive than what most schools are already employing to scan for viruses and other malware.

A third option is to effectively implement a bandwidth shaping tool such as Packeteer. Although limiting the resources available for infringement is always a positive step, the way such technology is being implemented at most schools too often renders the application ineffectual. These schools ratchet down bandwidth allowance during the peak hours of the day, then provide increased bandwidth at night. While this process may indeed reduce infringement to some extent, it unfortunately sends the wrong message that illegal file-sharing is acceptable - as long as it's done at certain times. This is a minor and short-term fix for a much larger and long-term problem. By sanctioning such "windows of infringement," schools do little to discourage students from engaging in piracy (and, of course, fail to impart a sense of ethical behavior and appropriately prepare their students for life after college as moral and law-abiding citizens).

By employing technologies that prohibit infringement-based P2P-networks on campus or at least make it harder for students to infringe on such systems, schools are laying the groundwork for the second component of a proven anti-piracy campaign: the successful implementation of a legitimate online service on campus.

Legitimate Online Services

Adoption and sign up rates of legitimate online music and movie services by students is often highest when the school has first reduced the availability of illegal file-sharing, thus developing the thirst for legal content. Services and schools alike have reported particularly positive results from this staggered approach. (Experience has also shown that it may be unwise to implement both network filtering technology and a legitimate online service simultaneously, as students tend to blame the online service for the cutoff in illegal file-sharing.) Without first addressing the illicit P2P problem on campus, it is extremely difficult for legitimate services to take root. If students have unfettered access to enormous amounts of pirated content, no service—regardless of pricing or content offerings—will be successful in that environment.

Overall, the growth of legitimate online services at colleges and universities across the country has been exceptional. In the past year alone, the number of schools partnering with a legitimate service has grown more than threefold to

nearly 70. Services such as Cdigix, Napster, RealNetworks's Rhapsody, and Ruckus offer students a wide array of entertainment content in a fun, safe, and legal way, and help to build a sense of community on campus

Of course, it is true that legitimate online movie services are not yet a compelling substitute for the illegal P2P services. Besides the little matter of price point, no legal online movie service currently has the breadth of selection, new releases, ease of use, and interoperability of the illegal P2P services.

Why is this? Not for a lack of incentive or effort. As for-profit enterprises, MPAA member companies have every incentive to tap the clear consumer demand for online access to movies. MPAA member companies are committed to developing compelling, consumer-friendly online movie services, and each one devotes considerable resources to this effort. The MovieLabs and Internet2 announcements are just the latest evidence of their commitment.

However, in order to protect their huge investments, our member companies must ensure that their services operate in a secure environment. Learning from the experience of the music industry with its initial rollout of legal services, they also know it is critical that the consumer's first experience with a legal service a happy one. Thus, legal services must be out of beta and fully ready for mass consumer adoption before they are rolled out widely.

Education

Obviously, education is an extremely important component of any anti-piracy campaign. Colleges and universities are in the best position to inform students of the importance of respecting copyright and valuing the creative effort invested in copyrighted works. Further, as creators, developers, and owners of intellectual property themselves, colleges and universities have a huge incentive (and responsibility) to instill in their students such respect and values. The following are some examples of steps schools can take toward educating students about illegal file-sharing and copyright infringement generally:

- Institute Acceptable Use Policies that clearly outline the appropriate use of school resources. Such policies should illustrate unacceptable behavior, including illegal file-sharing, and provide details on penalties imposed for failure to abide by such regulations. A comprehensive policy, however, is only as useful as it is accessible; administrations should conduct surveys or otherwise ensure that students (and others) are able to find them, including on the school website.

- Include information on copyright, piracy, and illegal file-sharing in orientation materials.
- Inform parents, through letters and at orientation, of the seriousness of copyright infringement and the penalties imposed, both legally and academically, for violations. Encourage them to discuss the risks with their children.
- Require students to pass a quiz about P2P and piracy before allowing access to the school's computing network. This educates the student and provides documentation negating any claim of lack of awareness.
- Engage students by incorporating discussion of illegal file-sharing on school websites and radio stations, and in papers and classrooms.
- Launch pervasive and visible anti-piracy campaigns using posters, brochures, banners, videos, fliers, etc.
- Send students periodic emails directly from the President/Provost/Dean to remind students that the school takes copyright infringement very seriously and to indicate the seriousness of any offense.

While it is indeed beneficial to offer an in-depth look at copyright, P2P, and illegal file-sharing, the first step in any educational campaign is to express concisely and unequivocally that copyright infringement, through physical or online piracy, is illegal and simply wrong. The U.S Supreme Court in *Grokster* not only clarified its *Sony Betamax* decision, it voiced a very clear message to users of the Internet: theft of intellectual property is wrong, whether it takes place by stealing a physical copy of a movie from a video store or by stealing a movie in cyberspace. As Justice Breyer said in his concurring opinion, "deliberate unlawful copying is no less an unlawful taking of property than garden-variety theft."

Enforcement

As with any education campaign, it is necessary to ensure adherence to rules and regulations through consistent and meaningful enforcement measures. The administration should remind students that entertainment and other content industries have sought to enforce their copyrights through lawsuits

against students and other individuals. Students clearly are not immune to legal action, and this awareness is reflected in the many steps taken by schools to curb piracy on campus, as well as in the overall change in attitude of administrations and students alike. Yet, there undoubtedly remains a feeling by some students of “safety in numbers” inherent in a nationwide campaign. The threat of disciplinary action by schools, however, resonates locally and can quickly diminish the sense of security from enforcement (and anonymity) mistakenly felt by students.

We are not suggesting that enforcement is solely the responsibility of these institutions. In addition to bringing action against theft enablers such as Grokster, our industry has also sued individuals engaged in copyright theft. We have also pursued those using I2Hub, a pirate file trading network catering exclusively to university students. This “darknet” system took extraordinary steps to exclude individuals from outside of university networks in order to frustrate enforcement efforts by rights holders. However, our investigators were able to learn a great deal about this phenomenon. For example, on April 11 at 4:23 p.m. EST, there were 7,070 users connected to I2hub sharing 99.21 Terabytes of content, enough space for 99,000 movies! As you can see, this closed network of activity can inflict a great deal of damage. I raise this particular form of piratical activity to demonstrate that there are unique areas where we do need the university networks administrators to be particularly aware and vigilant. The scale and scope of illegal activity within this campus-linked arena is significant.

I would like to add that school-wide Acceptable Use policies regarding online piracy and the appropriate use of school resources are not merely for the benefit of copyright owners. Such rules and regulations, just as with those regarding hacking and other violations, safeguard the security and integrity of the school’s computing system. Illegal file-sharing applications and illicit P2P networks threaten such systems with increased bandwidth costs, as well as with malicious viruses, worms, Trojan horses, and spyware.

Students should understand that there are extreme repercussions for violation of these policies. Accordingly, schools must be diligent in learning of such infractions and in carrying out swift and appropriate punishment. Most schools take a tiered “three strikes” approach:

- First offense: Remove the offending computer from the network until the student complies with any obligations and understands the

repercussions for further violations. Some schools require the student to talk to a University administrator before network access is restored.

- Second offense: Students lose network access for a certain period of time. Some schools are increasingly imposing fines.
- Third offense: Students usually permanently lose all network access privileges and must report to the Dean of Students or Judicial Affairs for formal disciplinary proceedings. While rare, some schools have suspended or even expelled students for third offenses.

Of course, enforcement measures vary widely from school to school. For example, Harvard University has stated that it will terminate a student's network access for one year upon a second offense. Students at UCLA will be summoned to the Dean of Students after their second offense. In any case, experience has shown that recidivism is rare at schools with well-defined and strongly-implemented policies.

It is important to note that the model enforcement policies described above only work when a copyright owner is able to find an infringement taking place and notifies the university. And, in most cases, copyright owners will not be able to find all infringement on campus. While setting out and implementing a strict enforcement program is important, it is the application of effective technical measures that can best stop the vast majority of piracy before it takes place. This reduces the burden of processing potentially dozens of DMCA notices and directly targets the problem of student piracy on university networks.

We believe strongly that universities taking these measures will significantly reduce the level of illegal activity taking place via their networks by students under their charge.

While I know today's session is devoted to a discussion of college campus piracy, I think it is worth noting that the MPAA is also working diligently to reach and educate students at the secondary school level as well as educating parents of school-aged children. We are working with well-respected Internet safety organizations such as WiredKids and iSafe to raise awareness and understanding of this issue to the emerging generation of computer users so that, hopefully, when they do arrive on the campuses of this nation, they will be

better equipped to understand and adhere to the rules of the university and the law of this land.

I thank the Chairman, the Ranking Member and all Members of this committee for holding this hearing. I know that if I were to ask anyone in this room to name their favorite film, a lively conversation would begin. Such is the love of this uniquely American art form and all the more reason that we all have a stake in its continued health and survival as well as the health of all of the creative industries from music to books to software. The stakes are very high, not just for those who have the privilege of working within these industries but to the overall economy of this great nation.