



The University of Minnesota and Peer-to-Peer Networking

August 30, 2007

For many University of Minnesota students, walking around campus without their iPod or other MP3 player is as unthinkable as showing up to class dressed as Bucky Badger. When classes begin this next week, expect a certain percentage of students, faculty and staff who are “early adopters” to show off their new iPhones, which can hold 24 hours worth of CD-quality music.

All new technologies pose new challenges, and the chief one posed by iPods and similar music players is the ability users have to fill them with illegally obtained music and video files.

Sharing copyright-protected data including music, movies, software, and games has been made significantly easier through the use of large bandwidth broadband connections, which, although once limited to colleges, universities and other large institutions, are now widely available to computer users at home, work, and elsewhere. The technology by which these files are often shared online is called peer-to-peer (P2P), and it has legitimate purposes beyond illegal file sharing. Some of the better-known P2P applications are Kazaa, Morpheus, and BitTorrent.

“We take illegal copyright violations very seriously,” said University of Minnesota Assistant Vice President and Chief Information Officer Steve Cawley. “We continue to take steps to educate students and to curb and punish illegal file sharing, but, quite frankly, the entertainment industry has made colleges and universities a disproportionate target of its rhetoric, legal action, and Washington lobbying efforts.”

According to one study cited by the Recording Industry Association of America (RIAA), college students accounted for one-quarter of music downloading on P2P networks and one-fifth of all P2P users.

And the entertainment industry, chiefly through the RIAA and the Motion Picture Association of America (MPAA), continues to be an influential one on Capitol Hill. Leaders of the House Judiciary Subcommittee on Courts, the Internet and Intellectual Property and the House Education and Labor Committee earlier this year sent an extensive survey of network and disciplinary practices to 19 universities identified as “top offenders” in illegal downloading by the entertainment industry. (The University of Minnesota was not among this group.) Several House committees have this year held hearings on peer-to-peer issues and possible technological solutions being advocated for by the RIAA and MPAA.

Most recently, the Majority Leader of the US Senate, Harry M. Reid (D-NV), was prepared to offer an amendment to a higher education bill that would have had the effect of forcing colleges and universities identified by the industry as top downloading offenders to either employ invasive technological tools to curb downloading or lose federal student aid. After a flood of calls from colleges and universities and their advocates to his office and the offices of other key lawmakers, Senator Reid dropped the main provision of his amendment.

Entertainment industry advocates have signaled that, in the fall, they will continue to push for legislation that will require campuses to install new anti-file sharing technology and penalties for colleges and universities the industry identifies as “top offenders.”

Aside from the problem of using “offender” lists generated by the industry, the University’s Cawley cautions against looking for a technological holy grail to stop illegal file sharing.

“The problem with the monitoring technologies that the industry would like to see us adopt are significant,” he said. “On the technical side, we may just find ourselves in an ‘arms race’ with students who will work to find new ‘hacks’ or work-around. On the security side, the insertion of any kind of outside, proprietary device onto our network raises all kinds of alarm bells. On the legal side, these monitoring technologies put the University in the position of peeking into the content of private data transmissions. Our attorneys tell us it may even open the institution up to significant legal liability.”

The University has invested in bandwidth-shaping technology, which allows its network to prioritize certain kinds of traffic—say for transfer of huge chunks of data needed for genetics and proteomics research—while making other types of traffic painfully slow. The University’s bandwidth-shaping application does not examine the content of the files being transferred but instead limits the bandwidth of certain entertainment applications routinely used for P2P file sharing of music and movies. This has deterred, but not stopped, file sharing.

Bandwidth shaping and filtering represent only one aspect of the University’s comprehensive approach to preventing the unauthorized distribution of copyrighted material, an approach that includes:

- New student orientation sessions have an educational component on illegal file sharing
- Students, as well as faculty and staff, are held accountable and are bound by University policy, which prohibits the unauthorized distribution of copyrighted material
- The University has progressive discipline policies for illegal file sharing, and depending on the number of offenses, a student can face action under the student judicial code of conduct, academic probation, and removal from the University’s network
- Students living in residence halls must also abide by a user agreement prohibiting copyright violations through file sharing
- The University responds to copyright holders complaints about specific files on its networks and accedes to requests to “preserve evidence”

- The University has a contract with Ruckus, an online music service that allows students access to free webstreaming of 2.7 million songs

Although illegal downloading is likely to continue to be an issue in Washington, a recent survey indicated that illegal downloading has declined among 8-18 year-olds over the past three years, with the percentage of those who downloaded without paying dropping from 60 percent to 36 percent. Perhaps this is a sign of a cultural shift that bodes well for future college students' attitudes toward copyright issues.

For its part, said Cawley, the University will continue to advocate for reasonable solutions to the challenges posed by illegal peer-to-peer networking activity.

If you would like more information on the University's efforts to reduce illegal file sharing, please contact Dan Gilchrist, Federal Relations Coordinator, at dang@umn.edu or (612) 624-3304.