To Catch a Song Thief: Inside the Anti-Pirate Patrol

BY CATHERINE RAMPELL

To SNAG college students trading copyrighted songs online, the Recording Industry Association of America uses the same file-sharing software that online pirates love. An RIAA representative recently gave a private demonstration of the program to *The Chronicle* at the organization's offices in Washington.

The employee also said that, contrary to claims by campus administrators, the group does not use this software to single out specific colleges. He spoke only on condition of anonymity because of concern that he would receive hate e-mail messages.

One way the association identifies pirates, the official explained, is with LimeWire, a peer-to-peer file-sharing program that is free online and used by many college students. (A more robust version of the program is sold for a small fee.)

Here is how the process works: The RIAA maintains a list of songs whose distribution rights are owned by member companies. It has given that list to Media Sentry, a company it hired to search for online pirates. Media Sentry runs the LimeWire program and performs searches for the copyrighted song titles, one by one, to see if any are being offered via computers connected to the LimeWire network. For popular songs, the searches can turn up dozens, if not hundreds, of hits. A search on Madonna's latest release, "4 Minutes," turned up more than 100 users trading copies of the song.

The LimeWire software allows users who right-click on any song entry and choose "browse host" to see all of the songs that a given file sharer is

How to Find Music Pirates

The Recording Industry Association of America uses file-sharing software like LimeWire, shown here, to catch college-based users who offer copyrighted songs for download.

Investigators search for copyrighted songs by typing in the name of the artist and the name of a song (for example, Madonna's "4 Minutes").

Searches often turn up hundreds of copies of a song available for download from users on the network.

By clicking "browse host," investigators can see the numerical Internet address of the user offering the pirated song, and can see a list of every other song being made available via that address.

ord of a download at the named IP address at the specified time. Association officials say that is because RIAA investigators performed only a "handshake."

PAY UP OR BE SUED

In major cases, the association sometimes sends out "prelitigation settlement letters," which ask alleged infringers to cough up several thousand dollars in lieu of going to court and potentially facing a much more expensive punishment.

Before sending out the settlement letters, Media Sentry investigators always download music files believed to be infringing on licensed songs. Staff members then listen to those songs to verify that the files are infringing. A letter goes out to the college with the date and time when investigators saw that the song was available for sharing.

While the process for generating notices and letters is largely automated, the RIAA says that before each warning is sent, a full-time employee reviews the case to make sure that the claim is legitimate and that the alleged pirate is in the United States. Because of the speed and ease of the automated process, though, the association is "able to identify hundreds of instances of infringement on a daily basis," says a spokeswoman, Cara Duckworth. She acknowledges that the group can tell only when a song is being offered for users to illegally download; investigators have no way of knowing when someone else is actually downloading the song.

The organization does not perform similar automated investigations for file traders on commercial Internet-service providers, which are
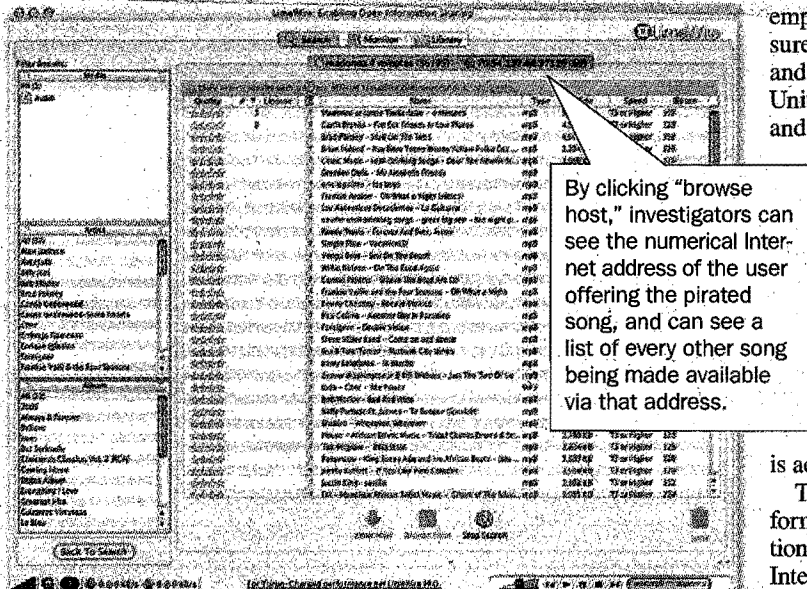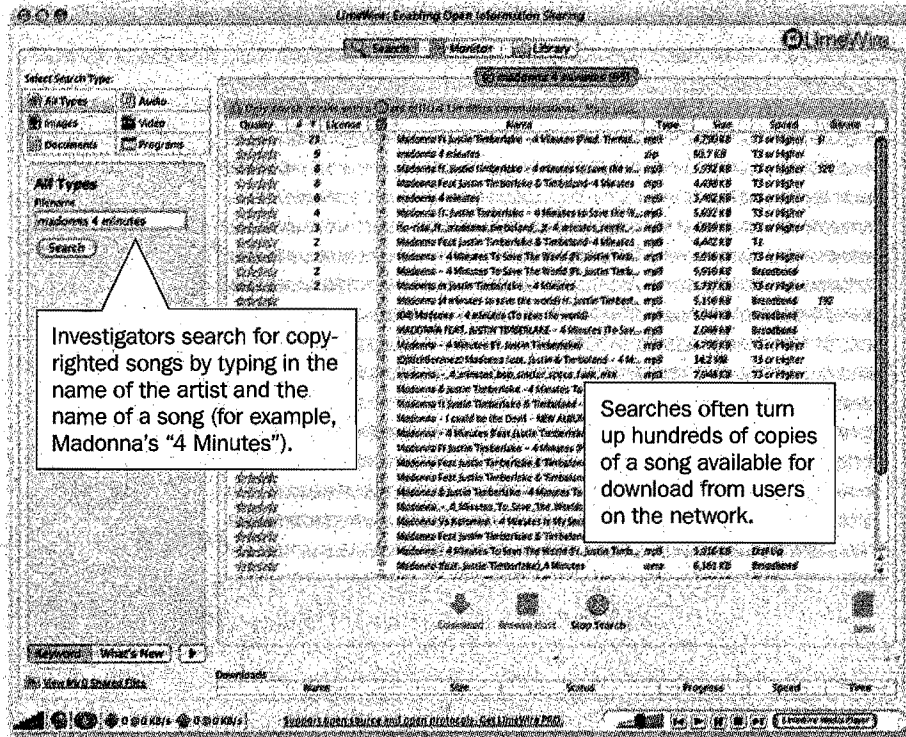
offering to others for download. The software also lists the Internet-protocol addresses of active file sharers. (An IP address is a unique number, assigned by Internet-service providers, that identifies every connection to the Internet.) While the names of the people associated with particular IP addresses are not public, it is easy to find out which addresses are registered to each provider. Using public, online databases, like those at arin.net or samspade.org, Media Sentry locates the name of the Internet-service provider and determines which traders are on college networks. Investigators can then ask colleges to identify the individuals.

The process mimics how pirates themselves locate files, but with a significant difference: speed. Media Sentry has automated the process by using scripting software that types in the songs, grabs the IP addresses, checks them, and forwards the information to the RIAA.

The industry association's first step against what it sees as campus piracy is usually to send a takedown notice, based on the Digital Millennium Copyright Act, asking the college to remove infringing content from its network.

TAKE IT DOWN

In collecting evidence for those takedown notices, Media Sentry investigators do not usually download suspect music files. Instead the company uses software to check the "hash" of each offered file, a sort of unique digital fingerprint, to verify that it is identical to a copyrighted song file in the RIAA's database. In the rare cases in which the hashes don't match, the investigators download the song and use a software program sold by Audible Magic to compare the sound waves of the offered audio file against those of the song it may be infringing upon. If

the Audible Magic software still doesn't turn up a match, an RIAA staff member listens to the song.

If there is a match, Media Sentry investigators then engage in a so-called TCP connection, or an electronic "handshake," with the computer that is offering the file to verify that the computer is online and is ready to share the song.

With that information, the association sends a letter to the college asking that the song be removed. The letter lists the name of the file and the date and time when Media Sentry investigators saw it available online. (State lawmakers are also beginning to push colleges to take action against alleged student pirates. See article on Page A4.)

On e-mail lists and in interviews, some college administrators have questioned the validity of some of these takedown notices. Those officials say they do not have any rec-

not operated by colleges. All notices sent to commercial Internet-service providers are processed manually.

"The automated takedown-notice program we have right now is solely university-focused," said the anonymous employee. "We're trying to make universities aware that they have an issue with peer-to-peer file sharing on their network, and so we don't send automated notices to commercial ISP's, I think because they are generally aware that there's a problem."

The music-industry association says it does not select particular academic institutions to be "made examples of."

"We have no capability of targeting any school at all," said the RIAA representative, who argued that campus administrators mistakenly think that individual colleges get picked on. "We find what we find with this process, and that's what we send to schools."