Not Much Anonymity for Unprotected File-Sharers: Researchers Examine P2P Networks

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The same technology that allows easy sharing of music, movies and other content across a network also allows government and media companies easy access to who is illegally downloading that content.

In a paper called "P2P: Is Big Brother Watching You?" three University of California, Riverside researchers show that a substantial number of people on file sharing networks, approximately 15 percent, are there to troll for illegal file sharing activity on behalf of the recording industry or the government.

Graduate student Anirban Banerjee, and computer science professors Michalis Faloutsos and Laxmi Bhuyan, decided to find out whether file-sharers are always being observed. Over 90 days in mid-2006 they recorded file-sharing traffic on Gnutella, a common fire-sharing network.

"We found that a naïve user has no chance of staying anonymous," said Banerjee. "One hundred percent of the time, unprotected file-sharing was tracked by people there to look for copyright infringement."

However, the research showed that "blocklist" software such as (PeerGuardian, Bluetack, and Trusty Files) are fairly effective at reducing the risks of being observed down to about 1 percent.

Peer to Peer networks, known as "P2P," allow users to quickly and without cost, share movie, music and other digital files located on their

individual PCs with other network users. In September 2003, the Recording Industry Association of America (RIAA) filed the first of thousands of lawsuits that targeted individuals who illegally offered copyright-protected music through P2P networks, but the action did not seem to diminish the numbers of people who shared files. The film industry is taking a similarly aggressive stance on prosecution.

"P2P: Is Big Brother Watching You?" was named "best paper" at the Networking 2007 conference of the IFIP (International Federation for Information Processing) in Atlanta, GA, and was published among the conference proceedings.

Since that time, the study has been the subject of some discussion at www.digg.com and www.torrentfreak.com , two popular technology-based social networking sites.

"Of course no one is suggesting that illegal downloading is a good idea," Faloutsos said. "But the P2P technology is here to stay and these industries would be better off trying to find ways to provide affordable and convenient alternatives that would allow computer users to download their products legally," said Faloutsos.

Source: University of California, Riverside