



*iSAFE America Inc.*

5963 La Place Court Ste. 309 Carlsbad, CA 92008

Tel: (760) 603-7911

[www.isafe.org](http://www.isafe.org)

## Understanding Peer-to-Peer Networking

It all started becoming popular when millions used Napster to download their favorite song rather than trekking to Wal-Mart to buy the CD. Although, Napster is now legal, others aren't, and nowadays a whole lot more than music can be found on peer-to-peer networks.

So just what is peer-to-peer networking (P2P)? When you access the internet you open a browser such as Netscape, Internet Explorer, etc. P2P is a similar concept. It is an application that runs on your computer and allows you to share files.

P2P networking allows computers to communicate directly with one another rather than through a central server like a website. With P2P software you can allow anyone in

the world to copy files directly from your computer. This could be a single file, a whole folder, or even your entire hard drive. "Without care, you may be sharing more than you think."

Like a search engine on the Internet, P2P software allows a user to type in a search term. The search will turn up files with that term in them. "The search pulls from any computer currently connected to the Internet running that P2P software." You can then select the files you want to download; you could be downloading files from a computer in China.

While P2P can be neat and fun to use, there are definitely many dangers associated with it.

P2P networks have been

the centerpiece of intellectual property lawsuits, especially those involving illegally downloaded music. Numerous P2P users have been sued by record companies for illegally downloading copyrighted music that they didn't pay for. It's not just music, either. Pirated Hollywood movies and software are frequently traded across P2P networks. File-sharing across the peer-to-peer network can lead you to inadvertently breaking copyright laws.

File-sharing over P2P networks also puts the user at risk for computer viruses attached to the shared files.

While P2P networks are useful and provide a beneficial service, they also provide an opportunity for abuse and computer virus transmission.

## Spyware: Are You Aware?

Most peer-to-peer networking software now comes entangled with all types of spyware and adware. To download Kazaa, Blubster, or others you must automatically accept the inclusion of this other "software." In addition, removal of spyware or adware often causes the peer-to-peer software to stop working. So what is the big deal about a little spyware or adware?

1. You are being spied on. The spyware and adware snoop on your behavior and transmit information over the Internet to third parties. This can include private data such as credit card numbers.
2. Spyware and adware cause your system or network to run slower. The constant transferring of information uses up bandwidth and computer resources.
3. It's annoying. Spyware and adware can cause frequent pop-up browsers and other annoying hassles while online or surfing the Internet.

## Peer-to-Peer: Unknown Dangers

Over 150 million people worldwide use P2P software. However, not all of them are safe, responsible, and law-abiding users.

So why is peer-to-peer file-sharing so dangerous? There are a number of reasons:

- **Illegal, Unethical, and Immoral**—Unfortunately the most common uses of P2P are illegal ones such as copyrighted music, copyrighted software, pornographic material, and even child pornography
- **Viruses**—When downloading a shared file, one big danger is to download a computer virus or Trojan horse onto your computer. These viruses can cause all kinds of problems from erasing all files on the hard drive to the automatic sending of pornographic e-mails to all of your friends in your mail directory. The worst part is virus protection software which works on the Internet and e-mail, isn't

protecting you while running P2P software.

- **Pornographic Downloads**—Today, 35% of all peer-to-peer downloads are related to pornographic material. This equates to approximately 1.5 billion pornographic file downloads every month. When children access a pornographic website usually what they end up viewing is a number of still photographs of objectionable material. The really bad stuff, the most graphic material, is usually not available unless it is purchased with a credit card. With peer-to-peer file-sharing, children can download a free triple-x rated movie full of hard-core pornography. What's more, most Internet filters don't work well or sometimes even at all with P2P software.
- **Spyware**—Many of the peer-to-peer programs automatically install spyware on your computer as part of the P2P

installation process. These spyware programs can range from a simple nuisance to a true invasion of privacy. They can cause numerous pop-up ads, banners to appear, track your viewing patterns, and more. If you've noticed that you are getting numerous annoying popup messages, odds are that you may have a Peer-to-peer file sharing program installed.

Peer -to-peer software is out there and being used by youth. Without being aware of the dangers and understanding the risks and consequences, they are opening themselves up to untold risks.

### Interesting Peer-to-Peer Facts

- *There are 150 million + users of peer-to-peer software. (Internetfilterreview.com)*
- *Students 12-18 years old make up 41% of American P2P users. (Recording Industry Association of America)*
- *56% of files found using innocent search terms were pornographic. (House committee on Government Reform and General Accounting Office)*