1   FEDERAL TRADE COMMISSION

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4   PUBLIC WORKSHOP

5   PEER-TO-PEER FILE-SHARING TECHNOLOGY:

6   CONSUMER PROTECTION AND COMPETITION ISSUES

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11   Wednesday, December 15, 2004

12   9:00 a.m.

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16   Federal Trade Commission

17   Sixth and Pennsylvania Avenue, N.W.

18   Washington, D.C.

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1   **P R O C E E D I N G S**

2   MR. PAHL: I'm Thomas Pahl, I'm assistant

3   director in the FTC's Division of Advertising Practices.

4   I'd like to welcome you here today.

5   Before we begin our workshop, I'd like to go

6   over a few housekeeping matters with you. First, a few

7   thoughts about logistics.

8   Each of you should have received a badge when

9   you came into the building today. Please retain your

10   badge. If you take it off, you'll have to go get another

11   one, which means you'll have to go through the security

12   process again.

13   Also, if you could wear your badge when you're

14   in the building today, that would be very helpful to our

15   security personnel.

16   Each of you also should have received a folder

17   of materials today when you came into the workshop. The

18   materials have the list of restaurants and lunch spots,

19   and that may be helpful for later in the day.

20   The bathrooms are located on the east side of

21   the building, south, in the main lobby, past the

22   elevators. If you need help finding them, ask at the

23   security desk or ask at the front desk.

24   In the case of an emergency, you can exit the

25   building through the front door that you came in, or you

1 can exit through the door on the north side of the

2 building.

3   If you have any other questions about

4 logistics, how to find things, et cetera, please out at

5 the registration desk and they should be able to help

6 you.

7   Second, some thoughts about the workshop

8 itself. We have a lot to cover today and tomorrow. Our

9 schedule is packed. We're going to do our best to keep

10 on schedule. Please be back from breaks on time and in

11 your seats so that we can begin at the times stated on

12 the agenda.

13   It's important that all of our speakers be

14 heard. I would ask that everyone turn off all cell

15 phones and pagers. And during the remarks and the panel

16 presentations, I would ask that you take any private

17 conversations out into the hallway, or outside, for those

18 of you who really like a cold day.

19   There are two tables out in the lobby. One of

20 them has materials from the FTC about P-To-P File-sharing

21 and related matters. The other table has materials from

22 some of our panelists and others. I'd invite each of you

23 to help yourselves to any materials on those tables if

24 you are interested.

25   Many of you will have questions for our

1   panelists. We are going to try our best at the end of

2   each panel today to reserve some time for questions from

3   the audience. The moderators of the panel will indicate

4   at what time the members of the audience should begin

5   forming a que at the microphone, which is located in the

6   center of our room. And if you can line up there, we

7   will ask -- let the members of the audience ask as many

8   questions as time permits.

9   As I say, we'll do our best to allow for

10   questions from the audience, but we do have a very tight

11   schedule.

12   Now, our workshop will begin with some opening

13   remarks from the FCC's chairman, Deborah Platt Majoras.

14   Chairman Majoras joined the FCC from Jones Day, in

15   Washington, D.C., where she served as a partner in the

16   anti-trust section.

17   Chairman Majoras has also served as a principal

18   Deputy Assistant Attorney General in the Antitrust

19   Division at the Department of Justice.

20   While with the Antitrust Division, her

21   responsibilities included oversight of the software

22   industry, and included working on the Microsoft antitrust

23   case.

24   Please welcome Chairman Majoras.

25   (Applause.)

1   CHAIRMAN MAJORAS: Thank you, Tom. Good

2   morning, and welcome to the Federal Trade Commission's

3   workshop on consumer protection and competition issues

4   relating to peer-to-peer file-sharing technology.

5   I want to thank you all for joining us, and I

6   would particularly like to thank our distinguished

7   panelists for coming from all over the country, and, in

8   one case, even from over seas to be here to share their

9   insights and expertise.

10   This workshop represents the latest example of

11   the Federal Trade Commission's Policy R&D. Our hosting

12   of workshops, symposia, hearings to increase learning and

13   advance public policy on competition and consumer

14   protection issues.

15   Competition and consumer protection are

16   complimentary disciplines designed to increase consumer

17   welfare, and because they comply the twin missions of the

18   Federal Trade Commission, we're able to comprehensibly

19   examine areas in which competition and consumer

20   protection issues are presented.

21   Today's workshop continues the Commission's

22   long-standing effort to assess the impact of significant

23   new technological issues, such as, in the past, SPAM,

24   spyware, and RFID, on consumers and businesses --

25   innovation, ease of communication, privacy, efficiency,

 1   choice, protection of property, obedience to the law.

 2   It inarguable that in this nation we value all

 3   of these concepts. Equally inarguably, however, new

 4   technologies spurred by creativity and innovation, while

 5   perhaps increasing communications efficiency and choice,

 6   also present new legal challenges as we strive to protect

 7   privacy and property rights in the competitive process.

 8   P-to-P file-sharing is one of the latest

 9   technologies to raise important issues. The architecture

10   offers consumers the low cost or free ability to connect

11   with each other to share different kinds of contents,

12   including music, video, or software, with other users.

13   Because P-to-P file-sharing eliminates the need

14   for a central storage point for files, it can increase

15   the speed of file transfers and conserve bandwidth.

16   While the sharing and downloading of music files is what

17   has landed P-to-P on the front pages, we are told that

18   there are many other current and potential business and

19   consumer applications for this technology.

20   Indeed, some believe that this technology is

21   expanding in ways that could allow almost limitless

22   ability to obtain and manipulate and redistribute

23   electronic content.

24   Although P-to-P file-sharing technology may

25   itself be neutral, consumers have used it in ways that

1   create and technological risks. Users may distribute or

2   receive files that may subject them to criminal or civil

3   liability under copyright infringement and pornography

4   laws. Users, including children, can be exposed to

5   unwanted and disturbing pornographic images.

6   In addition, when users download P-to-P file-

7   sharing software programs, they may also download spyware

8   that may monitor consumer's computer use without their

9   consent. It creates security risks by exposing

10   communication channels to hackers had adversely effect

11   the operation of our personal computers, including

12   slowing processing time, and causing computer crashes.

13   Some users may not understand how to properly

14   configure the software program's share folder, and may

15   inadvertently share sensitive and private information.

16   Share files also may contain viruses or other programs

17   that can impair the operation of user's computers.

18   The Commission already has been actively

19   involved in exploring some of the issues that stem from

20   P-to-P technology. For example, the FCC has issued a

21   consumer alert warning consumers that P-to-P file-sharing

22   software may be used to exchange inappropriate or illegal

23   materials, and alerting them of security risks of

24   improperly configuring P-to-P software.

25   Just last week, the Commission notified

1   Congress of our efforts to work with P-to-P file-sharing

2   program distributor's efforts to improve their disclosure

3   of the risks associated with their program taken in

4   response to concerns raised by the Commission and

5   Congress about the inadequacy of existing disclosures.

6   The Commission stated that industry members

7   have developed proposed risk disclosures that we believe

8   would be a substantial improvement over current practice.

9   We intend to monitor and report to Congress on the extent

10   to which distributors implement these proposed risk

11   disclosures.

12   Through this workshop, we continue our efforts

13   to address P-to-P issues and development. Over the next

14   day and a half, we'll bring together government

15   officials, business leaders, researchers and consumer

16   advocacy groups to discuss the development and use of

17   this emerging technology.

18   The workshop will begin with the basics, a

19   description of the P-to-P file-sharing technology and an

20   explanation of how some of the popular file-sharing

21   programs operate.

22   We'll also hear about trends relating to file-

23   sharing. How the technology has actually been used, who

24   is using it, and what types of files are being shared.

25   We'll discuss the nature and prevalence of

1   risks to consumers, and the new consumer risk

2   disclosures, which I just mentioned.

3   Later, panelists will examine what can be done

4   to reduce risks to consumers from using P-to-P file-

5   sharing programs. We'll discuss whether blocking,

6   filtering, or other technology can lessen the risks, and

7   whether better consumer education can reduce the risk or

8   create market pressure for more user-friendly

9   applications.

10   We'll also discuss what government can do to

11   protect consumers from the risk associated with the

12   P-to-P programs if technological improvements and

13   education are not enough.

14   Our workshop is also going to address

15   competition issues, as P-to-P file-sharing technology

16   develops and allows for faster and more efficient

17   transmission data, it may hold promise for many

18   perspective commercial and business applications spanning

19   a variety of industries.

20   The last group of panelists today will tell us

21   about the possible future uses of the technology and the

22   impact it could have on the competitive marketplace.

23   Tomorrow's sessions will open with remarks by

24   my colleague, Commissioner Pamela Jones Harbour, who has

25   been particularly interested in P-to-P issues. She will

1   discuss issues related to P-to-P file-sharing's impact on

2   copyright holders and music distribution.

3   As you know, these issues have been at the

4   forefront of the P-to-P debate, and they will continue to

5   hold prominence, particularly given the Supreme Court's

6   recent decision to review the Ninth Circuit's decision

7   affirming the dismissal of copyright infringement claims

8   in MGM Studios v. Grockster.

9   The Grockster case squarely presents the

10   question of whether secondary copyright infringement

11   liability should be imposed on the creators and

12   distributors of computer software that enables individual

13   users to copy computer files provided by other

14   individuals over the Internet.

15   Picking up on those important issues, the first

16   panel tomorrow will focus on the impact of file-sharing

17   on copyright holders. On the one hand, the technology

18   provides consumers with a fast, efficient way to obtain

19   and exchange content. On the other hand, the technology

20   can be used to infringe copyrights, thus decreasing the

21   incentive to create copyrighted material.

22   The final panel tomorrow is going to present a

23   case study using the P-to-P sharing of music files as the

24   subject. And this panel will discuss the model for

25   distributing music, and the impact of file-sharing on the

1   distribution model, the copyright holders, and other

2   parties.

3   Panelists are going to share their empirical

4   research on these issues and debate the lessons that we

5   can learn from this experience.

6   I trust that these discussions over the next

7   two days will help us all to better understand the

8   complicated issues that stem from this technology, and

9   will constructively inform the public debate about the

10   use and development.

11   Again, I would like to thank the panelists for

12   their participation. We have between today and tomorrow

13   over 40 panelists, and they reflect the tremendous amount

14   of experience and expertise, and we really look forward

15   to hearing your perspective.

16   Now, this morning we're very fortunate to have

17   with us a member of Congress who is actively involved in

18   technology issues. Straight from the silicon forest,

19   Senator Gordon Smith, Chairman of the Competition,

20   Foreign Commerce, and Infrastructure Subcommittee of the

21   Senate Commerce Committee, has shown a keen interest in

22   protecting consumers from unscrupulous practices.

23   In his role as a member of the high tech task

24   force, Senator Smith has explored ways to ensure that

25   consumers are adequately protected on-line without

1 stifling innovation.

2   I appreciate his attendance today and his

3 support of the FCC in its mission to protect consumers,

4 and I welcome Chairman Smith.

5   (Applause.)

6   SENATOR SMITH: Good morning, ladies and

7 gentlemen, the temperature outside suggests Santa may be

8 near, the Visa bill right behind him.

9   It's great to be with you, and, Madam Chairman

10 and members of this Commission, the FTC, thank you for

11 giving me the opportunity to help kick off your workshop

12 today. I want to commend you and your staff on the

13 efforts you have already made and will yet make in the

14 future, and especially in putting together these very

15 distinguished panelists.

16   Many of you know the Senate Commerce Committee

17 spent a good deal of time in the 108th Congress examining

18 the Internet, and the way our day-to-day lives have been

19 forever changed by the PC, the Blackberry, Instant

20 Messaging, on-line banking, and so many other services

21 that are made available by instant wireless global

22 technology.

23   There is no question that the Internet has

24 revolutionized many aspects of our lives, much of it in

25 very beneficial ways, but some of it in a manner that

1   raises very new and serious concerns.

2   I recently chaired a hearing on peer-to-peer

3   file distribution technology, known as PTP, and my

4   colleague and friend, Barbara Boxer, from the neighboring

5   state of California, she and I made inquiries regarding

6   P-to-Ps with this Commission, trade associations, and

7   others representing to P-to-Ps and others knowledgeable

8   about the burgeoning and exciting new technology this

9   presents.

10   This issue has been a hot topic throughout the

11   country. Not only have concerns about P-to-Ps been

12   addressed by the Senate Commerce Committee, but also by

13   the Senate Judiciary Committee, several House committees,

14   the General Accounting Office, and various federal

15   agencies, and many state Attorneys General and local

16   government agencies.

17   You will undoubtedly hear different

18   descriptions of the activity conducted over P-to-P

19   networks. For example, there are tens of millions of

20   users of P-to-P software who trade nearly a billion files

21   a month. They call their activities sharing.

22   Then there is America's entertainment industry,

23   which is incensed over the siren call of free music, or

24   movies, or video games, or software that lures people to

25   the P-to-P sites. They call this activity theft.

1   Then there are the P-to-P companies that make

2   money through pop-up ads and marketing data based on the

3   number of people who use their software. They say they

4   play no role in determining how their programs are used.

5   Especially disturbing to me is the amount of

6   pornographic material that is not only traded over these

7   P-to-P networks, but disseminated through intentionally

8   misnamed files that intrude into our homes, into our

9   families, into the minds of our children.

10   I'm not naive. I know that one can go to

11   Google and ask for explicit images, but on Morpheus, when

12   children type in a search for Elmo or Sleeping Beauty, or

13   baseball, they invariably receive files containing

14   unspeakable images often involving children and pre-

15   teens.

16   Many studies show that P-to-P threatens

17   consumer security and privacy because of the viruses, ad

18   ware, and spyware prevalent on P-to-P networks.

19   Too many consumers are too casual about

20   downloading P-to-P software, and click through the

21   screens by hitting next, next, next, next until the

22   program is loaded.

23   Not only is that the expedient way to go, it is

24   to be expected because the adhesion contracts attendant

25   to them are incomprehensible. The small type, the

1   paragraphs are long, the legal and technical jargon is

2   difficult to decipher by the layman. Worse yet, when one

3   family member or office mate installs P-to-P software on

4   a shared computer or local network, the others may not

5   know that their personal files, private files, may be

6   shared with everyone looking in.

7   I have seen P-to-P demonstrations that can call

8   up tax returns, financial and medical records, and credit

9   cards of total strangers. Public safety was recently

10   compromised as far back as August, 2002, when a Toronto

11   man accessed Aspen, Colorado's computer network,

12   including passwords and log-ins of the police department

13   through Kaza.

14   In August, 2004, my colleague, Conrad Burns, on

15   the Commerce Committee, sent a letter to the Army

16   Secretary because of the national security implications

17   raised when a computer user in Germany found military

18   duty rosters, discussions of tactics and other secret

19   files on P-to-P program line wire.

20   I recognize that there are some using P-to-P

21   networks to legitimately distribute content, including

22   software, video games, and music. I was encouraged to

23   read recent reports about a venture called Snowcap, where

24   copyright owners are working with P-to companies who want

25   to play by the rules and compensate the artists who

1   entertain them.

2   Some scientists are closed and secure P-to-P

3   networks, they have aided in their collaborative efforts

4   at medical research and global weather prediction.

5   University officials are investing in closed P-to-P

6   services for traditional educational and academic

7   pursuits among the people authorized to use their

8   network.

9   Penn State's LionShare is an especially good

10   example of a secure P-to-P environment and may be a

11   precedent for other schools.

12   However, given the abundance of viruses and ad

13   ware on the most popular public P-to-Ps and the breaches

14   of privacy, security and copyrights they facilitate, it

15   is clear that open P-to-Ps put American consumers and

16   their families at great risk.

17   This forum will likely give the agency the

18   record it needs to reign in the bad actors, but if you

19   find the Commission does not have the legal tools it

20   needs to protect consumers, I look forward to working

21   with you, to hearing from you, to craft legislation that

22   will enable you to control them.

23   At the very least, we need to regularly and

24   systematically inform consumers about the P-to-Ps they

25   are using, and the need to do is clear, in unmistakable

1   language.

2   I was pleased to see that the trade association

3   for P-to-P operators have promised to improve the

4   disclosures made to P-to-P users, but I am reminded of

5   the wise advice of President Reagan; trust, but verify.

6   I will be watching to see whether the notices are

7   implemented by the biggest P-to-Ps, and how they are

8   implemented.

9   I certainly hope that the FTC will dedicate a

10   team of its famous mystery shoppers to this very task,

11   and that you will insist on quarterly reports from the

12   associations involved. And I'm not at all convinced that

13   this disclosure program goes far enough. They do not

14   tackle the pornography problem.

15   They do not necessarily address my privacy

16   concerns, because people still may not know the share

17   function is on, and it may be that we should insist

18   P-to-P software regularly and conspicuously reminds

19   consumers of this fact.

20   If the P-to-Ps can send their user pop-up ads

21   to make money, they can most definitely send other

22   pop-ups to keep consumers safe. If they want to be

23   legitimate players, they should provide links for

24   permanently and completely un-installing the software, as

25   well as the ad ware and spyware that go along with these

1   things.

2   Why am I so skeptical? The parental filters

3   offered by P-to-Ps when the software is first downloaded,

4   can be easily circumvented by the kids we seek to

5   protect. If the P-to-Ps can filter for porn, they should

6   be able to filter for copyrighted works posted without

7   the permission of the creator.

8   Be it Sean Flemming's Snowcap, audible magic

9   box, or other digital fingerprinting technology,

10   filtering has shown real promise. It is absurd that I

11   can go to Torrent, or EDonkey, and find an about to be

12   released song or album or one still on the billboard

13   charts, or a movie still in the theaters, or a DVD not

14   yet released.

15   If the P-to-Ps want to be legitimate actors,

16   they should focus their efforts to filter out illegally

17   copyrighted movies, music, and software on their

18   networks.

19   I want to see such filters not only to protect

20   these great American artists and industry, but also to

21   keep people from being sued because they use services

22   that, let's face it, are designed to facilitate copyright

23   theft.

24   Madame Chairman, I appreciate your courtesies

25   and the Commission's attention to these issues. I look

1   forward to working with you to better protect America's

2   consumers from the misuse of promising and exciting new

3   technologies that are provided by P-to-Ps.

4   And I wish you all a Merry Christmas, a Happy

5   Hanukkah, or however you celebrate this holiday season.

6   Thank you so very much.

7   (Applause.)

8   MR. PAHL: Thank you, Chairman Majoras and

9   Senator Smith. I would like to turn now to our first

10   panel of our workshop, which is an introduction to P-to-P

11   and how it works.

12   The moderator of this panel will be Mary Engle,

13   who is an associate director in the FTC's Division of

14   Advertising Practices. I would like to ask Mary and the

15   panelists to come forward now.

16   MS. ENGLE: Good morning, and thanks to

17   everyone for joining us today. We would like to start

18   off the workshop with an introductory panel to provide

19   some background information on peer-to-peer technology

20   and popular file-sharing programs.

21   We'll cover how to P-to-P technology works, and

22   the differences between some of the most commonly used

23   file-sharing programs.

24   We'll then move to a discussion about some of

25   the trends in file-sharing activity. For example, who is

1   using file-sharing, what types of files are being shared,

2   which file-sharing programs are being used the most.

3   And now I would like to introduce the panelists

4   who will provide us with this information.

5   First, to my left, is Professor Keith Ross.

6   Professor Ross is a -- chair professor in computer

7   science at Polytechnic University in Brooklyn, New York.

8   He is an authority on peer-to-peer networking and

9   computer networking in general.

10   Professor Ross has also served as an expert

11   witness in a major P-to-P copyright case. He will

12   provide a sort of P-to-P 101 tutorial, explaining P-to-P

13   technology, and how some of the most popular file-sharing

14   programs work.

15   Then, we'll hear from Marc Ishikawa. Mr.

16   Ishikawa is chief executive of Bay TSP, Incorporated. He

17   is an expert in the fields of Internet content

18   distribution, spidering, peer-to-peer applications,

19   digital rights management, and data base design.

20   Mr. Ishikawa has served as an expert witness

21   for the Justice Department on peer-to-peer technology.

22   After Mr. Ishikawa's presentation, we'll hear

23   from Adam Toll, who is a co-founder and chief operating

24   officer of Big Champagne, LLC. He has worked with

25   companies across the globe to develop Internet services

1   as a management consultant.

2   Mr. Ishikawa and Mr. Toll will discuss the use

3   of file-sharing programs and some of the trends they see

4   related to this issue.

5   If there is time after their presentations,

6   we'll take a few questions. Let's begin with Professor

7   Ross.

8   MR. ROSS: Good morning, and it's very exciting

9   to be here at this conference, and I thought what we'd do

10   today, is we'd just describe -- we'll have a little

11   P-to-P 101, and go through some of the more important

12   technologies that are taking place in the P-to-P space

13   right now.

14   Also, one thing I'd like to keep in mind

15   through this short presentation is, you know, what are

16   the limitations of judicial and legislative action in

17   this -- in the P-to-P arena. What can really be done to

18   perhaps stop this technology.

19   So anyway, let's get on with the talk here. So

20   as a brief -- I'm just going to give a quick overview of

21   what's going on in terms of the traffic trends in P-to-P,

22   and then talk about three technologies; Napster --

23   although, of course, Napster is now essentially defunct,

24   it's an important architecture that we need to keep in

25   mind when we talk about some of the more contemporary

1   P-to-P technologies.

2   Then I was going to talk about Fast Track,

3   which is a sub-straight to Grockster and to Kaza as well.

4   After that, Bits Warrant, which is of course very popular

5   and in the press quite a bit today.

6   Then I want to just say a few words about some

7   of my own research on pollution in file-sharing, and just

8   a few words then about my views on the untapped

9   resources.

10   So just a quick slide here. These are some

11   slides that come from the company, Cash Logic. You can

12   get these -- download these directly from the Cash Logic

13   web site. This is a UK company that has put sensors into

14   ISP links, tier one ISP links to measure traffic.

15   And this is data that has been collected from -

16   - in the first half of the year of 2004, and we're

17   looking at the total number of traffic on the Backbone

18   Internet link here.

19   And what we're seeing here, is we see the gray

20   is Bit Torrent, the -- I guess the purple is EDonkey.

21   The light blue is Fast Track, which includes Kaza, and

22   then the blue at the bottom -- I'm sorry, you don't see

23   the green in there.

24   But anyway, what we see here is that the green,

25   the purple and the blue are really sort of -- account for

1   more than 50 percent of the traffic on an Internet

2   background here. And we'll get a closer look at that as

3   well.

4   So here is another graph, country by country.

5   What we're seeing here, is that HDP in all cases, that's

6   the web, HDP, amounts for really less than 10, 15 percent

7   of the traffic in every country right now. That's the

8   red. And again, P-to-P is 60, 70 percent or more.

9   In fact, in Asia, according to this study here,

10 we see that P-to-P consumes over 80 percent of the

11 traffic in the Asian ISPs.

12   Just a mix of what is popular and what is not

13 popular. If you went back to January, 2004, the leading

14 P-to-P application was Fast Track, which, again, includes

15 Kaza and Grockster. And now, there has been this

16 emergence of Bit Torrent, which now occupies 53 percent

17 of the P-to-P traffic. This is, of course, as of June,

18 of 2004.

19   So let's now take a look at the architectures

20 behind these technologies. So Napster is an important --

21 is important because it was first, of course. It was the

22 first one to really get the name out there. There

23 haven't been many systems of -- before that. But let's

24 talk about how Napster worked.

25   Now, Napster had a centralized directory, which

1   is to notify this box, this server box there, and we'll

2   refer to that as Napster.com. And then, around that, you

3   have the different peers that would connect to it. By

4   connecting to it, we don't mean having a direct physical

5   connection. We mean having a so called TCP connection.

6   So they had connections to it, and so what

7   happens; Alice comes along. She's a new user, she

8   connects to Napster. So she starts up her Napster

9   application, which automatically connects to the Napster

10   site. And then Alice up-loads not her songs, but her

11   song titles. So essentially meta-data about the songs.

12   Then Bob comes along, and Bob wants to get a

13   particular file, say, XYZ.mp3. So he sends a query to

14   the centralized director saying, who has XYZ.mp3? The

15   centralized directory responds by saying that Alice does,

16   and provides the IP address of Alice's computer.

17   Now that Bob knows the location of the file --

18   that is, he knows the IP address -- he sends a message

19   directly to Alice. This is the P-to-P functionality.

20   This is now Alice and Bob are communicating directly with

21   each other. It is P-to-P communication.

22   So Bob sends a message directly to Alice,

23   saying, send me XYZ.mp3. And Alice then responds with

24   the file itself, and now, Bob has a copy of the file as

25   well as Alice.

1   So that is the description of Napster. You

2   know, one important fact of it is -- some people would

3   not call -- there is some debate about whether this is

4   really P-to-P or not. I consider it P-to-P because there

5   are direct file transfers between peers.

6   Some people would argue it's not a pure P-to-P

7   system because it relies on a centralized directory that

8   was maintained by Napster. And because it had a

9   centralized directory, it was very easy to shut down.

10 You simply had to pull the plug on that server in the

11 middle, and the whole system breaks down.

12   Now, let's talk about the Fast Track network.

13 Fast Track is really a network that supports many

14 different P-to-P applications. I should say, P-to-P user

15 programs, would be more accurate. And that includes

16 Kaza, which is owned by the Chairman Corporation.

17 Grockster, IMesh, and also a hack version of Kaza that's

18 been popular called Kaza Lite.

19   And of course, Fast Track, Kaza, supports

20 arbitrary file types. Meaning any file type whatsoever.

21 It can be audio, video, it can be a recipe in a document,

22 games, software, pictures, family pictures, any kind of

23 file whatsoever can be inserted into Fast Track.

24   So the architecture of Fast Track is very

25 different from that of Napster, and the main -- it's a

 1   very innovative architecture in my opinion, in that it

 2   doesn't rely on a centralized server at all. It's a

 3   purely distributed, self-organizing, autonomous system.

 4   And what it is, is that they have built a two

 5   tier architecture consisting of what's called Super

 6   Nodes, which are the bigger computers here, and ordinary

 7   nodes.

 8   Now, the super nodes are just -- are not owned

 9   by Kaza or Fast Track or Grockster. They're just

10   ordinary user's computers. My computer at my home can

11   very easily become a super node, and it becomes so

12   automatically. I have no choice in the matter really.

13   It just automatically promotes itself to a super node.

14   And so the way the architecture is that each of

15   these super nodes act essentially as a Napster min-hub.

16   If you have other nodes -- an ordinary node, connects to

17   some super node, and sends queries to that super node.

18   So here's Alice here, and she'll send -- she

19   connects to a super node, and she sends a query for

20   whatever. Whatever file. Here we send key words to the

21   query, just like in Google, send key words.

22   And that super node, which acts like a Napster

23   hub, will look into its index and see if there are any

24   matches. And if there are matches, it will respond with

25   indications it matches.

1   The super node will optionally forward that

2   query to other super nodes, which is shown here. In this

3   case, we forward it to one other super node, and then

4   that super node will also look to see if it has any

5   matches, and will spun back to Alice.

6   Now, Alice now has a list of matches, and for

7   each match there is an associated ISP address. She

8   clicks on one of those matches, and sets up a direct

9   peer-to-peer connection with the corresponding ISP

10   address, and obtains the file. And that's what is done

11   here.

12   So here, she chose the file that was in this

13   computer towards the bottom, and is downloaded to her

14   directly.

15   So once again, the point here is that there is

16   no infrastructure. No server is being maintained by

17   Kaza, Grockster, or Fast Track, or anyone else.

18   So now we come to a quick definition of what is

19   P-to-P file-sharing. My own definition, it is a

20   distributed software application running in users'

21   computers, allowing a group of users to pool their files,

22   and this is a distributive pool. Not all the files are

23   in one location. Allowing users in groups to search the

24   pool files with key words, and, finally, allowing users

25   in groups to download discover files from peer-to-peer.

1   Now, let's talk about the third technology that

2   I want to cover, and that's Bit Torrent. Of course, it's

3   in the press a lot now. As we just showed, it's

4   contributing more traffic to the Internet than any other

5   application currently, and by some accounts over 50

6   percent of the traffic today.

7   So let's take a look at it. For one thing,

8   it's not really sharing files if you look at it closely.

9   Instead, if you look at it, it's very different. It's

10   peers helping one another obtain a particular file.

11   So I'm going to go through an example here. So

12   here, first of all -- before we get into it. Here's how

13   a positional client server file distribution works.

14   You have a server that has a file, for example,

15   Web Server. And suppose there are four peers, four

16   clients out there, that want to get a copy of the file.

17   Then, each one would request that file, and the server

18   would have to transmit the file, the entire file, four

19   times.

20   Now, in this example, the file -- we're going

21   to break up the file into four parts, four chunks. We're

22   going to consider the files consisting of four chunks.

23   So the server has to send each of the four chunks to each

24   of the four peers.

25   So that is -- imagine if there is a thousand

 1   peers, or 10,000 peers, the tremendous amount of work for

 2   -- can you hear me from this way, or I need to speak like

 3   this. That's fine. That's fine.

 4   Okay. So it's a lot of work for the server.

 5   It can be very expensive if the server has sent a large

 6   file to tens of thousands of users because of the

 7   bandwidth cost, and also it would take a long time.

 8   So here is how Bit Torrent works. This is the

 9   basic idea. Bit Torrent, there is a seed -- one node

10   acts as a seed. That's the site, a node, that gets the

11   entire file. Once again, the file is broken up into

12   chunks of equal size. In Bit Torrent, each chunk is

13   about a quarter of a megabyte.

14   Then, what happens, is you can -- you have four

15   peers that are interested in participating. So the seed

16   could send a chunk to each of the four peers. So it

17   sends one chunk to each peer.

18   Now, each peer has a chunk. So the seed, so

19   far, has only had to send one copy of the entire file.

20   It's sent it to four different places, but it has only

21   sent one copy total. Okay. So very little -- relatively

22   little transmission has been performed.

23   Once the four peers each have a chunk, they

24   simply exchange the chunks with each other. So they

25   start sending the chunks to each other, and at the end,

1   now, all four -- excuse me, all five peers, have a copy

2   of the file.

3   In this way, every single peer now has

4   participated in the file distribution. In the original

5   way it was only the server that was distributing the

6   files. Now, every single file, if you go back here, is

7   sending every single peer is participating in

8   transmitting the file.

9   And so each peer is using bandwidth,

10   transmission bandwidth.

11   So this makes things very, very efficient and

12   Bit Torrent for distributing files. Now, so, Bit

13   Torrent, in its essence, the Bit Torrent program in its

14   essence, is nothing but what I just really said. I mean

15   there's a little bit more complexity behind it, but it's

16   just a way to -- for people to help get a file. Work

17   together to get a file. It's not really a file-sharing

18   system. There is no search available in the basic Bit

19   Torrent system.

20   So here's how it works in that system. To get

21   the Torrent to -- a lot of people to search for files in

22   Bit Torrent, you have to interact with something else.

23   And so they have these things trackers in URLs.

24   And just to go through it very quickly, is what

25   happens is you have a site. Where it says, URL. That

1   might be a site like Super Nova.com -- org, which is very

2   popular now.

3   You send a -- you would visit that web site.

4   That site would redirect you after you choose a

5   particular file, you would be redirected to a tracker.

6   This tracker -- the importance of the tracker is that

7   tracker is keeping track of all the peers that are

8   participating in this sharing of the file.

9   So maybe the file is XYZ.mp3, and the tracker

10   is keeping track of all the peers that are currently

11   sharing with each other portions of that file. And then

12   you can join that group, and you get to participate with

13   that group.

14   So right now, the leading site to go to for Bit

15   Torrent files, is a site called SuperNova.org. You'll

16   probably read about that in the press now. And so it's a

17   big -- I think it's maintained in Slovenia.

18   And there, you'll see, there is a huge amount

19   of content. A lot of the content consists of movies. It

20   consists of like TV shows. It consists of not just

21   songs, but full albums, and, of course, games and -- and

22   some of it is probably authorized content, and some of it

23   is unauthorized content.

24   In that event, you click on that, and by doing

25   that, you get the participate in one of these so called

1   Torrent, or swarming operations.

2   Very quickly, I want to just mention a little

3   bit of research that I think is interesting that we've

4   done, and that has to do with pollution or spoofing in

5   P-to-P file-sharing systems.

6   And just to talk about how that works, this is

7   something that's going on quite a bit today. It hasn't

8   received that much press, but I think it deserves to

9   receive more press, this idea.

10   What happens is you have a company, like a

11   record label, for example, who -- who wants ad polluted

12   files to the network. So what they do, is they hire a

13   pollution company, such as Over Pier is one; and they

14   take -- the pollution company will corrupt the file,

15   corrupt the song for example, by adding white noise to

16   the song.

17   And then the pollution company will attach many

18   servers to the P-to-P file-sharing system and put copies

19   of the polluted content in their servers. And then when

20   -- Alice and Bob will then come along, and Alice will

21   want a copy of that.

22   And so she'll do a search and she'll see it's

23   available at this top server, with a high value of

24   connections. So she'll go ahead and download it. Maybe

25   while she's downloading it, she goes to have dinner, or

1   she goes to sleep and she hasn't actually listened to the

2   music or watched the movie until the next day.

3   And so while it's sitting in her shared folder,

4   Bob comes along and downloads it directly from Alice.

5   So in this way, the polluted file, or the

6   spoofed files, probably came through the network very

7   rapidly. And so Bob finally listens to it, of course,

8   and he says, yuck.

9   Just a quick study here. We did a study this

10   past year on -- on seven songs, seven popular songs to

11   see what levels of pollution exist in these file-sharing

12   systems. So we did this for the Fast Track Kaza Network.

13   And one thing we found, is that various songs,

14   for example, if you look at Hey Ya, has a huge number of

15   different versions of the same song. Because every time

16   someone rips a song, you create a new version.

17   And so there are about 50,000 different

18   versions of the same song sitting out there.

19   And if we look at the results of pollution

20   here, for example if we look at the left here, you'll see

21   that -- for example if you look at the song My Band,

22   you'll see that roughly 75 percent of the copies of the

23   song My Band that are in Kaza today are polluted or

24   corrupted files. There are only 25 percent are clean.

25   So this is -- this was done by so a called

1   crawler that we've established that culls the entire Fast

2   Track to grab meta-data from every super nova. I don't

3   have time to get into that.

4   By the way, during the day today, if anyone has

5   any questions about any file-sharing systems, feel free

6   to, you know, come and talk to me during the coffee

7   break, or during lunch. And also, two of my Ph.D.

8   students are here in the audience too, and they can

9   probably answer all the questions better than I can.

10   So okay. So just a few words. I have my own

11   views about a few things. A few words I want to say

12   about what we refer to as the untapped resources.

13   So all those computers in homes and office, we

14   have all these computers in all these homes and offices,

15   right. Sitting there typically, not doing anything. At

16   night, you know, when people are not using them, they are

17   just sitting there.

18   They have giga-bytes of unused storage. Most

19   computers have -- you know, have giga-bytes of unused

20   storage, gigahertz of unused CPU, and mega-bits per

21   second of unused bandwidth.

22   When you're sleeping, typically your computer

23   is not working. You're not using the bandwidth that's

24   available to you from AVLS connection or your cable

25   connection, or your office, with your Ethernet

1   connection.

2   So imagine the possibilities of what can be

3   done with all that unused -- all these unused resources

4   just sitting out there. It would be great if we could do

5   something so that we can exploit those resources to build

6   new great applications.

7   Okay. And so, that's one point of mine, is

8   that I -- that there is a huge potential out there, and

9   peer-to-peer file-sharing is just sort of the beginning,

10   the tip of the iceberg perhaps, of beginning to exploit

11   those resources.

12   And there's just many, many other possibilities

13   that we'll probably hear about throughout this workshop

14   that we won't get into, but some of those possibilities

15   include voice over IP, file storage, content video

16   streaming, video on demand; there's many, many other

17   opportunities that can take advantage of the P-to-P

18   architecture.

19   An observation here, it's just something -- an

20   observation on my own. There's nothing that magical and

21   mysterious about P-to-P. An undergraduate student, a

22   bright undergraduate student, can very easily put

23   together a P-to-P application.

24   There are already 50, a hundred P-to-Ps out

25   there. Some are more popular than others, but there are

1   hundreds of them out there right now. It's nothing.

2   It's just a matter of developing software. That's all it

3   is. You have a good software developer, you can put

4   together a good one.

5   So Microsoft, if they wanted to, could very

6   easily bundle in its next release a P-to-P application.

7   Just like they bundle Microsoft Internet Explorer with

8   the release of Windows XP, they could develop a P-to-P

9   application. A very nice one, if they put their

10   resources into it, and bundle that with all their

11   distributions.

12   This could possibly allow communities of users

13   to form and pull their files, search through the files,

14   download those files. But why won't this happen?

15   Microsoft would never do this in a current legal and

16   legislative and judicial environment. It's just --

17   they're just too scared. Of course it's going to be too

18   much bad press, possibility of lawsuits, everything else

19   can go along.

20   But if we were allowed to do them, then maybe

21   all these issues that we heard about a little bit earlier

22   this morning, about spyware and ad ware would go away.

23   Everyone would just adopt the Microsoft P-to-P system,

24   and hopefully --

25   A PARTICIPANT: Did you say they would go away

1   if Microsoft made the software?

2   MR. ROSS: Well, okay. I don't want to get

3   into that now. Okay?

4   A PARTICIPANT: I just want to make sure I

5   heard a professor of networks actually say that.

6   MR. ROSS: I guess -- maybe I'd like to retract

7   that statement, because I think it's a long discussion to

8   get in there. Okay?

9   A PARTICIPANT: Thank you very much.

10   MR. ROSS: Okay. So just to wrap up here.

11   Just, again, on the untapped resources again, I just want

12   to say imagine the possibilities and, once again, file-

13   sharing is the first step.

14   So thank you very much.

15   (Applause.)

16   MS. ENGLE: Thank you, Professor Ross. And

17   before we move to Mark Ishikawa's presentation, I just

18   want to say it should go without saying, but Professor

19   Ross' characterization of a polluter as the devil does

20   not necessarily represent the views of the Federal Trade

21   Commission.

22   (Laughter.)

23   MS. ENGLE: Mark.

24   MR. ISHIKAWA: Hi, my name is Mark Ishikawa.

25   I'm the chief executive officer of Bay TSP. I'm going to

1   give you a little bit of an overview of trends that we

2   see on the peer-to-peer networks. Give you a little bit

3   of background on our company.

4   We provide intellectual -- on-line intellectual

5   protection and monitoring of content for clients that

6   range everything from the movie industry, to the

7   entertainment space, soft video games; you name it, and

8   we protect it.

9   We have a fairly unique view of the Internet.

10   We're able to surf and identify content being traded on

11   all of the major peer-to-peer networks. Some of the

12   upper level protocol IRC, FTP, use net.

13   Typically what we find, and then we'll

14   categorize what our view of file trading or the majority

15   of what we find on the file trading networks is piracy.

16   Piracy is what we identify when somebody is trading a

17   copyrighted work without the proper permissions.

18   We find the piracy typically starts with your

19   more sophisticated users. They start off on Internet

20   relay chat with private file transfer servers, or on the

21   usenet, or the usenet archived distributions. Then they

22   start working their way down to the general population

23   for mass distribution.

24   Peer-to-peer file trading is when you basically

25   have one -- remember the old commercial, the old shampoo

1   commercial, you tell two friends, they tell two friends,

2   and suddenly the whole screen fills up with people.

3   That's what file trading is working. One

4   person ends up putting it on the peer-to-peer networks,

5   and the next thing you know, we find thousands and

6   thousands of them.

7   Our system captures the IP address infringing

8   on the content location for the DMCA, the Digital

9   Millennium Copyright Act. The ISP that's providing the

10 connectivity. The file-sharing application they're

11 using.

12   There are different file-sharing applications

13 that run on the different protocol; Fast Track is a

14 generic name for a product that runs -- or, sorry. Kaza

15 is a private protocol that runs on top of Fast Track

16 network. There are other products that ride on similar

17 networks.

18   Some of our clients use us to monitor for what

19 infringing activity is occurring on their networks.

20 Others have us send out DMCA take down notices. We send

21 out just about a million of those a month.

22   To give you an idea of the volume of the

23 Internet piracy that we find, we find that there are

24 about 50 to 60 million people that have used, and we have

25 been able to identify as unique users with peer-to-peer

1   applications.

2   It's a really strange phenomenon. Music

3   down-loaders don't see what they do as really bad.

4   People understand that downloading a piece of software or

5   downloading a movie is bad.

6   So we really need to change the mind set of our

7   current generation. The current consumer, the kids today

8   are going to be the consumer of tomorrow, and if they

9   thin it's free on the Internet, they're just going to go

10   ahead and grab and -- without any thought to whether it's

11   legal or not.

12   File trading is not on the decline, and I will

13   show you some graphs in our -- a couple of slides down

14   that will show you the number of users that are actively

15   trading files on the networks.

16   To give you an idea of how quickly content

17   propagates through the Internet, one particular song went

18   from 0 to 41,000 copies being available on peer-to-peer

19   networks in 31 days. A particular movie went from 0 to

20   6,000 copies in one weekend.

21   Movies appear on-line within hours of their

22   theatrical release. We find them on the peer-to-peer

23   networks, we find them within several days being

24   distributed in Southeast Asia.

25   In Southeast Asia market, what we find is they

1   actually have different grades of movies. First grade of

2   movie comes out, it's a camcorder. I'm sure everybody

3   has seen one. There's somebody holding a camcorder,

4   people bobbing their heads up and down in the theater.

5   What we find is the second and third generation

6   copies come out, and you now have somebody that has a

7   shop from the video or projection booth and they get

8   better audio.

9   Some of the releases that we find, we can

10   actually attribute back to Internet piracy, have

11   subtitles, they have camera art, essentially they are not

12   the mass produced disks that you find -- you know, that

13   you create one-by-one in your garage, but these are

14   actually being sent to a true production facility, and

15   you can buy them overseas for several dollars.

16   For our movie studios, we generate a report

17   which shows the top 10 movies being traded on the

18   Internet. We'll see that Alien versus Predator is number

19   one this month; 34,000 copies were identified during the

20   month of November. If you look at the number of users

21   that we find, and the number of copies that we find,

22   these numbers are huge.

23   There is currently no filtering that we've seen

24   on the peer-to-peer networks that is effective and has

25   worked. That's really one of the things that our clients

1   really need to see for the peer-to-peer networks to

2   really become a legitimate player in the space.

3   Softwares, we talked about is another big

4   problem. Software companies you would expect to be

5   really ahead of the curve. You would think since they've

6   been in the space long enough, they've faced the piracy

7   issues for years.

8   They understand the physical piracy space, but

9   when it comes to piracy on the Internet, we go and talk

10   to them and say, hey, you know, there are 10,000 copies

11   of your software out there, what are you going to do

12   about it.

13   And you know, you see the deer in the

14   headlights looks, like what do you mean 10,000 copies of

15   my software out there. What do we do about it?

16   Here is a graph that shows the number of Fast

17   Track users. The different Internet protocols, or the

18   different filing sharing protocols have evolved over

19   time. We have seen the Napster model, we've seen Fast

20   Track, and then we've seen the newer and better

21   protocols, EDonkey and Bit Torrent.

22   Those two protocols are self-healing. They're

23   also designed for large distribution of files, and

24   they're also very resilient to what the professor called

25   pollution. The common industry term is called

1   interdiction, and what they do, is they try and confuse

2   the user. They try and make the user -- they try and

3   make it so the user cannot get the file.

4   These upper level protocols, Bit Torrent and

5   EDonkey, are, again, self-healing. So what happens, is

6   you try and insert a bad segment into a file, you know,

7   try and spoil the experience, try and ruin the code, try

8   and put black dots on the screen to make the file

9   un-viewable; these protocols identify the fact that

10 you've tried to inject something into their download

11 stream, and reject it.

12   So that way, it may take you longer, but you

13 will ultimately still get a copy of the content.

14   We're going to EDonkey. You'll see that

15 EDonkey has been on the rise over the last 12 months.

16 EDonkey started off as a primarily European network. We

17 still see about 60 percent of the infringements coming

18 off of EDonkey on the current peer-to-peer searches, and

19 a majority of those are overseas. We see probably 70 to

20 80 percent of those coming from Europe, although it is

21 starting to pick up here in the U.S.

22   We detect three and a half, to 5 million

23 infringements of content -- of our client content on the

24 peer-to-peer networks today. We send out a million take

25 down notices internationally.

1   We have what's called a recidivism rate. It's

2   the percentage of times that we send a notice to a user,

3   and how often they come back. 85 to 90 percent of the

4   time that we send out a notice, that user gets the

5   message, they understand, and they don't come back.

6   What we find is that people -- people will

7   claim that they didn't know it was illegal to download

8   content. Once they're caught, we get these great apology

9   letters, I'm sorry, I didn't know, you know, my kids were

10 doing it. The neighbor came over and downloaded it, and

11 the trend stops there once we -- once somebody realizes

12 that you can be identified on the Internet.

13   There's this belief that you're just a number

14 on the Internet, you can't be found. Once you get a Fed-

15 Ex envelope from us or a DMCA takedown notice from your

16 ISP, you go, oh, my god, you can actually find me; and

17 they stop.

18   We also find that TV piracy is on the rise. TV

19 piracy is, you know, where somebody will take a show off

20 HBO, or ER, or one of the television programs, and you'll

21 find people that have entire series of them up on their

22 servers. You can get an entire series on-line. Download

23 it, and a couple of hours later, you're watching -- you

24 know, the 2004 version of ER.

25   And there are some interesting phenomena.

 1   We've done some work with some releases that were done

 2   overseas first, and, you know, they have not been aired

 3   in the U.S.

 4   What we find is people in the U.S. really

 5   wanted to get their hands on the content, so they went

 6   across and found it on the Internet and downloaded

 7   because it was not going to be made viewable here in the

 8   U.S. till spring of 2005.

 9   So in general, what we find is that Internet

10   piracy is still on the rise. What's fortunate is it's

11   beginning to have a pretty good effect. People are

12   beginning to understand that piracy is illegal. You can

13   get caught. We like to tell people, you know, you can

14   hide, but we can still find you. And that's pretty much

15   it.

16   A PARTICIPANT: How do you ensure --

17   MR. ISHIKAWA: If you're referring to the DHCP

18   IP IPS address -- our system is based on what's known as

19   an IP address. Occasionally ISPs will go and rotate

20   those IP address using something called dynamic host

21   protocols.

22   What we do is go back and statistically sample

23   IP addresses on each network to see if that IP address

24   has changed. We'll make a query to the IP address, and

25   we'll say, okay, are you still using that protocol; are

 1   you still sharing this file.

 2   And we'll go back and check on a periodic

 3   basis. So we know if it's Road Runner, they rotate every

 4   X number of days. So that way we know that if we

 5   continue to see that user on that IP address, that it is

 6   in fact the same user.

 7   A PARTICIPANT: [Away from microphone.]

 8   MR. ISHIKAWA: How do I know that they're not

 9   still pirated. They're not longer making the content

10   available on the protocol.

11   A PARTICIPANT: Excuse me, Mr. Ishikawa. You

12   seem to have documented that the technology is

13   extremely --

14   MS. ENGLE: Excuse me, everybody. Actually,

15   before we take questions, we still need to hear from our

16   last panelist, Adam Toll. So I'd like to reserve

17   questions for later, please.

18   MR. TOLL: I'm sorry, that sounded like some

19   interesting questions.

20   My name is Adam Toll, I'm with Big Champagne,

21   and we are -- briefly, an on-line measurement company.

22   What we seek to do is take a comprehensive look at what

23   is happening on peer-to-peer networks, and rather than

24   focus on specific files, for example, we seek to focus on

25   users.

1   Catalog in the case of what people are sharing,

2   for example, the full contents of their folders to help

3   us develop a deeper view and slice and dice that data in

4   many different ways, looking at different types of

5   content and patterns of this activity over time.

6   I just want to offer up a few quick slides that

7   maybe might just provide a little color. We were asked

8   to specifically take a look at indicators that might

9   provide some insight into the presence of kids on these

10   networks.

11   Quickly, just as Mark said, we also see that

12   peer-to-peer activity measured by simultaneous usage at

13   any given moment continues to rise.

14   Kids and teens, I was digging through some

15   recent lists of popular movies, and this is just based on

16   a snap-shot of a particular set of data, but it struck me

17   that four of these top six films here are all films that

18   skew towards children. And you can see this is a mix of

19   current release and titles recently out on DVD.

20   When we looked at music, we wanted to pick a

21   set of artists that might give some insight, again, into

22   the presence of kids on-line, and we used the middle two

23   artists there, Lindsay Lohan and Hillary Duff.

24   For those of you who are not aware, those are

25   young artists that skew towards young girls, in this

1   case. The pre-teens and early teens, what are sometimes

2   referred to as tweens. So keep in mind this is a subset

3   of the broader category of kids and teenagers.

4   And just for comparison, we threw in some of

5   these other artists that you see there who skew

6   particularly towards -- more towards adults. And so, you

7   know, you've got Dave Matthews and Alan Jackson, Dixie

8   Chicks are very popular mainstream artists.

9   So you can see clearly that there is a

10   significant presence, and these percentages here

11   indicate, for those of you who are interested, it's in

12   this sample that we looked at, the percent of users who

13   have anything, one or more MP3s from these artists.

14   And then, just finally, and I guess maybe to

15   some extent kind of leading into the next panel, we're

16   just considering thinking about the consumer protection

17   issues and P-to-P, and wanted to pose the question, you

18   know, are there -- and, you know, and can we come up with

19   consumer protection considerations that are unique to

20   P-to-P.

21   And just to run down these very quickly, and I

22   think the senator and the chairman in their introductory

23   remarks really touched on this stuff. So we don't need

24   to really get into it.

25   But the point here being that to a large

1   extent, the kind of threats to particularly kids and

2   minors on P-to-P are, at least broadly speaking, also

3   problems on Internet eMail -- chat.

4   And maybe one of the things that would be

5   really productive during this conference is to try and

6   get at some of the ways in which we can define some of

7   these threats on P-to-P being a little bit more unique to

8   that environment.

9   So that's it, and I'll be happy to take any

10   questions. Thank you.

11   (Applause.)

12   MS. ENGLE: We do have time for a few

13   questions. There is a microphone in the back. If you

14   could line up there for questions.

15   A PARTICIPANT: Thank you. Mr. Ishikawa, my

16   question is, is what is wrong with the following

17   conclusions I drew from your presentation, if anything.

18   In a nutshell, it seemed you made a very

19   persuasive case that the technology, the protocols

20   themselves, afford significant opportunities to the

21   owners of copyrighted content to do what they have done

22   under copyright law appropriately for a long time, which

23   is enforce their rights and you sell help that is within

24   the law.

25   It seems like those networks are efficient ways

1   of transmitting all kinds of information, including

2   notices to take down that seem extraordinarily effective

3   at the 85 to 90 percent rate.

4   So am I wrong, or have you documented a very

5   substantial, and important substantial, non-infringement

6   use of peer-to-peer technology?

7   MR. ISHIKAWA: We are unable to send notices

8   directly through the peer-to-peer networks. We have to

9   use a mechanism that has been provided to us through the

10   DMCA, which is to send a digitally signed notice to the

11   ISP, and have the IS -- work with the ISPs to make sure

12   that they communicate the infringing activities to the

13   end user.

14   A PARTICIPANT: A quick follow-up. Could the

15   files that you inject into the network include notices,

16   and can those notices include hyper links?

17   MR. ISHIKAWA: Our company is not in the

18   interdiction space. We do not send anything on to those

19   networks. What we do, is we identify people trading

20   content on the networks, and send out eMails to the ISPs

21   informing them of their activities.

22   The companies that you're referring to are the

23   interdiction companies.

24   A PARTICIPANT: Thank you. I'll question them.

25   A PARTICIPANT: Just to quickly follow up on

1   that, as it's certainly possible for the interdiction

2   companies or pollution companies to include notices in

3   those files saying you shouldn't be sharing, or have you?

4   MR. ISHIKAWA: That actually has happened with

5   a Madonna song, if I remember correctly. People went to

6   go download Madonna, and the next thing you know there

7   was a very personal message from Madonna saying, you

8   know, why are you doing this.

9   MR. WEISS: I'm Mike Weiss, I'm CEO of String

10   Cast Networks, we're developers and distributors of

11   Morpheus software. A question also for Mark.

12   You had a wonderful sound byte. You said

13   something, when we go to talk to the peer-to-peer

14   companies, they act like deer in the headlights.

15   So Mark, you've never talked to me, you've

16   never tried to contact me either by eMail or telephone.

17   So let's just set the record straight.

18   MR. ISHIKAWA: Okay. Actually, Mike, I was not

19   refer -- I don't recall saying that I was speaking to the

20   peer-to-peer companies. I was referring to the peer-to-

21   peer users.

22   Those are the people that -- if I misspoke, I

23   apologize, but it's more of when we communicate with the

24   users, the peer-to-peer users didn't realize what they're

25   doing is illegal.

1   A PARTICIPANT: Thanks so much for setting that

2   straight. I appreciate it.

3   A PARTICIPANT: I guess I'm just extremely

4   confused about the proceeding we're about to start on.

5   We just had a panel that's supposed to be addressing

6   defining the subject of this conference, and the

7   conference -- oh -- is this better? Okay.

8   Supposedly we're conducting a conference, and

9   the subject of it is something that is called peer-to-

10   peer file-sharing. And after listening to you, I just

11   don't have any idea of what we're talking about. I don't

12   know what distinguishes these applications from the basic

13   transport of the Internet itself.

14   Professor Ross, you would corroborate that the

15   copying is done by the transport. Anybody who gets two

16   IPs can do a direct peer-to-peer transfer in any form

17   they wish.

18   So the file-sharing, the copying, is not done

19   by these applications. They just use a protocol that

20   defines so that both ends understand it, is correct?

21   MR. ROSS: Sure, yes, it's correct, sir.

22   A PARTICIPANT: Okay. And you know, how do you

23   distinguish what you're calling peer-to-peer file-sharing

24   aps from many other applications; operating systems, I

25   can push a button in Windows and share my drive?

 1   Are we addressing peer-to-peer file-sharing; or

 2   are we addressing something else? Because as far as I

 3   can tell, there is no difference between these

 4   applications and, say, Google. The only difference is

 5   that Google has specifically left out some things on its

 6   search engine. Okay.

 7   I'd just be very curious how we intend to go

 8   forward in the next day and a half, because our next

 9   panel is like going to be identifying risks associated

10   with something called peer-to-peer file-sharing aps.

11   Are we talking about the risks that are

12   associated with an operating system, with the IP

13   protocol? Okay.

14   Are we trying to figure out why these risks

15   arise on the Internet? Okay.

16   Why are we attributing it to a specific set of

17   applications? If I must do it in no other way, I can

18   name them. Okay.

19   You named them, Professor Ross, Kaza, Rockster,

20   et cetera. But there really is no fundamental

21   distinction between them and anything else I can do.

22   And then we're going to go forward with

23   technical responses, and then we're going to talk about

24   government response. This afternoon James Miller is

25   going to try to explain why he's attributing these risks

1   to decentralized search applications, and not say Google.

2   Okay. Or FTP, or the operating system.

3   Anyway, I just want to say that I don't know

4   how productive this is going to be until we know exactly

5   what we're talking about. Thank you.

6   MS. ENGLE: Okay. I think that the questioner

7   is correct in that there are other ways of transferring

8   files and, for example, eMail, and there are a lot of

9   overlaps.

10   I also think that everybody does know what

11 we're here talking about, and some of the models that

12 have been described, everybody knows -- I mean it's sort

13 of like we're talking about the colors of the rainbow,

14 and someone says, well, what about black and white,

15 they're colors too.

16   And I think we know what we're talking about

17 here and the particular challenges that are posed by

18 technology. It's absolutely correct and it's something

19 that the Commission has said in letters to members of

20 Congress about some of the risks and the benefits that

21 are posed by this technology also exist with, for

22 example, search engines and things like that.

23   So we're not trying to single out this as the

24 only -- you know, risk of -- only way -- only technology

25 that can be used in a risky way.

1   But that having been said, I think we're out of

2   time for questions. We have our break, and we'll start

3   back up again at 10:30. Thank you.

4   (A brief recess was taken.)

5   MR. PAHL: We're about to turn to our second

6   panel of the day, and this panel will deal with risks to

7   consumers from peer-to-peer file-sharing software. The

8   moderator of this panel is Beth Delaney, who is an

9   attorney in our Division of Advertising Practices.

10   Before we get our panel, I want to remind the

11   members of the audience that we would like to have

12   questions held till the end, and then have people come to

13   the microphone in the center of the room.

14   I understand that you may very well have

15   questions that you really want to ask a panelist, but we

16   want to make sure that we get everybody's presentation

17   done, and then allow all members of the audience an

18   opportunity to follow-up with questions.

19   So we're going to do our best to make sure that

20   people have an opportunity to ask questions, but make

21   sure that you please hold them till the end. Thank you.

22   MS. DELANEY: Good morning, and welcome to

23   panel two. This panel will explore some of the risks

24   that consumers may face when downloading and using some

25   of the most popular file-sharing programs.

1   As highlighted by Adam Toll during the first

2   panel, several possible risks have been identified: data

3   security issues, the installation of spyware or ad ware,

4   viruses, unwanted exposure to pornography, as well as

5   liability for copyright infringement.

6   The speakers on this panel have significant

7   expertise in examining these risks, and in fact many of

8   them have testified at congressional hearings on peer-to-

9   peer file-sharing issues.

10   To my left is Dr. John Hale, who is an

11   associate professor of computer science, and the director

12   of the Center For Information Security, at the University

13   of Tulsa. He is a recognized expert in computer

14   security, and has published approximately 50 articles, as

15   well as a book, on these issues.

16   Next is Gnathion Good, who is a Ph.D. student

17   at the University of California's School of Information

18   Management and Systems. Gnathion's research interest is

19   in human computer interaction, with a special emphasis on

20   privacy, usability, and mobile devices.

21   With Gnathion is Aaron Krekelberg. As a

22   researcher, Aaron has been involved in studying peer-to-

23   peer network protocols, and information content. Aaron

24   is currently employed as a software architect to the

25   Office of Information Technology at the University of

 1   Minnesota.

 2   To Aaron's left is Linda Koontz, who is the

 3   Director of Information Management Issues at the United

 4   States Government Accountability Office. In this

 5   capacity she has directed studies on key technologies,

 6   including public key infrastructure, smart cards, and

 7   peer-to-peer networking.

 8   Next is Michelle Collins, who is the director

 9   of the Exploited Child Unit at the National Center For

10   Missing and Exploited Children. She directly oversees

11   the Cyber Tip Line, the congressionally mandated

12   recipient of reports on child sexual exploitation for the

13   public and all U.S. based Internet service providers.

14   To Michelle's left is Stanley Pierre-Louis,

15   Senior Vice President, Legal Affairs, at the Recording

16   Industry Association of America. At the RIAA, Stan

17   develops legal and strategic solutions to address the

18   challenges faced by the recording industry. In that

19   connection, he has played a leading role in the strategic

20   development and management of several landmark

21   litigations, including Napster, and Grockster.

22   And at the very end of the table is Marty

23   Lafferty. Marty is the chief executive officer of the

24   Distributed Computing Industry Association, one of the

25   trade associations that represents companies in the peer-

1   to-peer technology industry.

2   So let's begin with John, who, among other

3   things, will discuss risks, such as spyware, ad ware, and

4   viruses.

5   MR. HALE: Thank you. It is indeed an honor to

6   be here today. I'd like to thank Beth for inviting me to

7   attend.

8   Let me jump right into the heart of what I

9   wanted to talk about. I first ought to give credit to a

10   graduate student of mine, Alex Barkley, who is a member

11   of our cyber corps program at the University of Tulsa,

12   who helped me gather some of the information I'm

13   presenting today.

14   This first slide is probably the most

15   important, because it sets the stage for everything else

16   that I'm going to talk about, and makes it more relevant.

17   Which is to say establishing the environmental context

18   for peer-to-peer file-sharing risks.

19   When we talk about risks, we typically think in

20   terms of two dimensions; likelihood and impact. So I

21   guess I would ask you to think about a likelihood and

22   impact whenever I'm talking about spyware or viruses

23   today.

24   So the three factors that I think contribute to

25   the current prevailing environment of risk are the

1   massive user base that's enjoyed by popular file-sharing

2   applications, such as Kaza, EDonkey, and BitTorrent.

3   We've seen evidence in the previous panel of the

4   widespread use of those technologies.

5   The next factor is peer-to-peer file-sharing

6   business models. The two things that sort of jump out at

7   you here are the -- the desire for companies to promote a

8   large network of users and files. In particular, using

9   techniques such as port hopping and things like that to

10 create a larger network. To confuse monitoring

11 activities.

12   And then the use of spyware and ad ware to

13 monetize peer-to-peer file-sharing.

14   The final factor is that these clients are not

15 managed by system administrators, but in fact are managed

16 by users. Which means that remediation is often a

17 challenge for these people who are often not trained to

18 manage software.

19   The first thing I want to talk about is

20 spyware, ad ware pests. You can take your choice of

21 definitions. Most peer-to-peer clients include these

22 programs in their distributions, and the thing that makes

23 them annoying are the tricks of the trade that they use.

24 For instance, to create more click stream data and to

25 prevent themselves from being un-installed.

1   My graduate student took several peer-to-peer

2   clients for a test spin, so to speak, and used SpyBot and

3   Adaware programs to check them out in terms of seeing

4   what kind of spyware and ad ware was on them. And it's

5   sort of bad news, good news.

6   The bad news, the spyware, ad ware is still

7   there. The good news is that it seems increasingly the

8   companies that imbedding these types of applications are

9   providing some kind of notice.

10   Now, whether it's easy to decipher for the

11   average person, that's probably open for debate, but it's

12   -- that seems to be I guess an encouraging trend.

13   And when we talk about vulnerabilities, the

14   fact of the matter is that all software is vulnerable in

15   some way.

16   And so what I've done, is I've provided a list

17   of five vulnerabilities just to show you a range of

18   adversity and just to kind of provide evidence of the

19   fact that any of these things, any of these peer-to-peer

20   clients you download can potentially have a security hole

21   in it.

22   And in terms of the potential impact, it could

23   be quite devastating if exploited. Essentially someone

24   could come in and take control of a box to do whatever

25   they wanted to. They would then become the owner of that

1   box.

2   And again, Kaza and BitTorrent are not

3   different. They have security vulnerabilities, as well

4   as the spyware and ad ware packages sort of come along

5   for the ride. And namely here, Gator, Gain, or Claria.

6   I think they've changed their names a number of times.

7   The packages they introduce also have had vulnerabilities

8   discovered in them.

9   The last one here is maybe the most troubling

10   -- the bear share directory -- vulnerability is the most

11   troubling. Not necessarily due to the nature of the

12   vulnerability, but maybe because of the attitude that is

13   sort of reflected on the BearShare web site.

14   The citizen.HTML page there says that you don't

15   need to get rid of the file all completely, just drill a

16   hole in it so that you can use BearShare. It won't

17   decrease your security because BearShare doesn't contain

18   any security holes.

19   Now, anybody that would make a statement like

20   that is living in denial in my opinion. So this is the

21   kind of thing that users need to be aware of whenever

22   they download peer-to-peer clients, and understand

23   whenever it comes to the management of those types of

24   applications, you're effectively installing a server, a

25   miniature server on your box.

 1   Lastly, I wanted to say a few words about

 2   viruses and worms, and of course these are often cited in

 3   some sort of a dooms day scenario for peer-to-peer

 4   networking.

 5   But the fact is that they do exist, that they

 6   employ a number of techniques, such as copying themselves

 7   into shared folders under camouflage names to get users

 8   to download them.

 9   And of course they will copy themselves into

10   some of the most more popular types of media that a user,

11   average user, might want to get.

12   They might adjust your share folders on your

13   hard drive so that you are in fact sharing more than you

14   think you are. They might drop in, and have dropped in

15   back doors so that a hacker can come in later and re-

16   enter your system and take control of it.

17   Again, there are -- there has been a collection

18   of known viruses. Some are really blended attacks to

19   propagate the other means, but they seem to be on the

20   increase, and, of course, the most clients are the

21   popular targets for these kinds of things.

22   And this really kind of brings you back to the

23   first slide, because the potential here to me is what's

24   compelling.

25   If you look at the massive peer wise

1   connectivity offered by peer-to-peer clients like Kaza

2   and Morpheus and we'll include BitTorrent in there I

3   suppose; you see tremendous opportunity for wide ranging

4   impact of a virus, or some kind of an attack like that.

5   There's no question that software has

6   vulnerabilities in it. All software does. And then if

7   you add in the new features that are being integrated

8   into digital content, it just creates a greater

9   opportunity for a wider range of attacks.

10   And then, finally, when it comes back to the

11   environmental context, you have to remember that by and

12   large the millions of users that download these

13   applications are not really trained in the art of

14   software management or patch or anything like that. So

15   that when a major virus actually does hit, it's going to

16   be very difficult to eradicate, and the remediation could

17   truly be a nightmare.

18   And I think that's all I have to say right now.

19   MS. DELANEY: Can I ask you a quick question?

20   MR. HALE: Yes.

21   MS. DELANEY: I know with using the Microsoft

22   operating system that I use, that I frequently get eMails

23   about patches. Is there any peer-to-peer file-sharing

24   software programs that offer patches when a security

25   vulnerability is detected?

1   MR. HALE: You know, I honestly -- I don't know

2   the answer to that. I have -- it is my understanding

3   that most of the companies have been pretty quick about

4   patching their own software. I know that if you download

5   the latest version of Kaza, you'll get -- you have the

6   option of getting Bogard, and I don't know how much

7   about, quite honestly, that software, except that it

8   touts itself as anti-virus software. Which I regard, I

9   suppose, as an encouraging step.

10   But it's not so much a failure on the peer-to-

11   peer companies to patch their own software, it's a lack

12   of awareness, the user base, that, you know, they need to

13   take an active role in this kind of thing as well.

14   So a patch may exist, but you still -- you may

15   have people running, you know, two or three year old

16   versions of the peer-to-peer client that's unpatched, and

17   that's the real problem.

18   MS. DELANEY: Okay. So the best way to handle

19   it would be to download a new version?

20   MR. HALE: Yes, but the users have to be aware

21   of that.

22   MS. DELANEY: Yes. Okay. Great.

23   Next, we have Gnathion Good and Aaron

24   Krekelberg. They've done a lot of work on data security

25   and shared folder issues.

1   MR. KREKELBERG: Thank you, it's a privilege to

2   be here. We're going to go over an overview of our

3   previous findings, and then an overview of present

4   findings, and then talk about our recommendations.

5   In June, 2002, my colleague, Nathaniel Good,

6   and I discovered that a great number of users of the Kaza

7   file-sharing system were unintentionally sharing private

8   information. This included things such as eMail,

9   financial data, and various other documents.

10   The extent of the problem was that other users

11   of Kaza could find this information and down load it to

12   their own computers. Because of the seriousness of this

13   problem, we conducted a study to find out why this

14   problem existed.

15   The results of our study showed that there was

16   a lot of confusion, even among experienced users, as to

17   what files Kaza was sharing with a given configuration.

18   We also showed that the problem was extensive enough to

19   warrant a concern.

20   So we wanted three things to happen out of our

21   study. We basically saw it as an ethical concern. What

22   do you do if you find somebody's wallet, you have to do

23   something about it, and we felt that doing the study and

24   publishing our paper was a way to help do that.

25   The first thing we wanted to have happen was to

1 have Charmin Networks fix the immediate problem. Some of

2 the obvious usability issues, and then to educate users

3 about the dangers that that software in general can have,

4 and then to educate developers about the importance of

5 usability and building your software usability.

6   And we published these result in our academic

7 conference, and we also testified before the House

8 Committee on Government Reform and the Senate Judiciary

9 Committee.

10   Some of the key points I want to make

11 especially clear are the problem is a usability issue,

12 and it needs to be addressed as a usability issue. The

13 interface needs to make it clear to users what they're

14 sharing.

15   And that usability is an issue universal to all

16 types of software, not just specifically peer-to-peer.

17 This is just a great case study for us to really show the

18 dangers of avoiding usability. But any software that

19 allows users to share private resources needs to be

20 especially careful when addressing usability concerns,

21 and that's why it's important to address this with peer-

22 to-peer file-sharing systems.

23   We developed the following guidelines in our

24 study as well; in saying that peer-to-peer file-sharing

25 systems are safe and usable if users are made clearly

1   aware of what files others can download, are able to

2   determine how to share and stop sharing files, do not

3   make dangerous errors that lead to unintentional sharing

4   of private files, and are comfortable with what is being

5   shared, and confident the system is handling it

6   correctly.

7   MR. GOOD: Sorry for the switch there. I'm

8   going to talk briefly about what we found now, in current

9   interfaces, and as earlier panelists have said, there is

10   a lot of P-to-P file-sharing applications out there. So

11   I'll just talk about some of the more popular ones.

12   Kaza now is much improved. A lot of the issues

13   that we have found earlier where it would automatically

14   had information to be shared with other people, where it

15   had a sort of misleading interface and where things were

16   confusing, has all been corrected, and there is only one

17   location now where the files can be shared by default.

18   And so the defaults of this have been set up correctly.

19   And so we're really happy to see that.

20   EDonkey is also sort of over net, EMule, the

21   same sort of thing happening there. They're actually

22   doing a pretty good job, and I don' t have time to go

23   over all these examples in detail, but I do have a slide

24   that talks about EDonkey, and we'll be able to see some

25   of the things I think they're doing well.

1   BitTorrent is a little different than all the

2   other sort of peer-to-peer file-sharing programs, and

3   that is not necessarily something that's searchable in

4   the traditional sense, but from a privacy perspective, or

5   a sharing perspective, they do a very good job because

6   it's very easy to tell exactly what's being shared, and

7   you only share what you are downloading. And so there is

8   no possibility that you're inadvertently sharing stuff

9   that you're not aware of.

10   And then, there's dozens and dozens of other

11   peer-to-peer programs, and the quality of these varies

12   considerably. One that you might hear about in the

13   course of this workshop is Where is P-to-P, and that one

14   actually does unfortunately a very bad job.

15   It doesn't follow many of the guidelines that

16   suggested earlier, and it adds a lot of information to be

17   shared automatically that people may not be aware of, and

18   this may contain personal and private information.

19   So just to go over EDonkey really quickly.

20   What's really nice about what they did, is they made it

21   very obvious in several different locations on their

22   shared screen exactly what is being shared with people.

23   So if you look at the share locations, you know

24   automatically, okay, this folder in my documents is being

25   shared. By default it creates a folder, it doesn't use

1   an existing folder.

2   So there's no risk that something will be even

3   there already. And there is lots of different ways to

4   determine where those folders are, which is pretty

5   useful.

6   So our basic recommendation is that we really

7   need to think of security and piracy more in terms of

8   usability. I think a lot of us here have been very

9   frustrated with the way computers are today, and I have a

10   very difficult time actually figuring out what our

11   computers are doing for us, or to us, depending on what

12   the situation may be.

13   So I think that it's really important for

14   software developers to start paying attention to the

15   usability needs and concerns of normal, everyday people.

16   Especially as we have a more increasingly network world,

17   and we're required to share a lot of personal and private

18   information on systems that are connected 24/7.

19   And I think one of the other issues that is

20   starting to become more of a privacy concern and also has

21   usability implications, is this idea of bundling

22   software. Is that when we get a software product, it's

23   not entirely clear to us that users really understand

24   what bundled software means.

25   And by bundled software, I mean if I download

1   one application, and several others come along tagged

2   with it, I don't know what these programs are doing. I

3   don't really give them permission to do what they're

4   doing, and this happens through all spectrums of

5   software.

6   So I think it would be really interesting to

7   start looking into bundled software as well.

8   And that pretty much concludes what we have to

9   say. If there's any other questions people have, they

10   can catch us afterwards.

11   MS. DELANEY: I had a quick question.

12   MR. GOOD: Sure.

13   MS. DELANEY: In terms of consumer awareness of

14   inadvertently sharing personal information, has that

15   changed since you've begun doing your research? Do you

16   think consumers are more aware now of this is a problem?

17   MR. GOOD: Yes, that's kind of a difficult

18   question to answer. I mean, I think generally we've seen

19   people more in tune with the fact that they could

20   accidentally share information. We haven't really done a

21   rigorous study to really find that out.

22   I mean, I think that would be a really great

23   survey, is to determine what exactly people's

24   expectations and understanding of these systems is now.

25   MS. DELANEY: And then the other question I had

1   is, once somebody does inadvertently share a tax form or

2   something like that, what can they do to try to correct

3   that situation?

4   MR. GOOD: Pray.

5   (Laughter.)

6   MR. GOOD: I think --

7   MS. DELANEY: That should be on the record.

8   MR. GOOD: You know, once you're out there,

9   it's gone. If people have got it, you have no idea where

10   it's been. So --

11   MS. DELANEY: Okay. Great. Thank you very

12   much.

13   Next, we have Linda Koontz, who will tell us

14   about the work that the GAO has done with respect to

15   peer-to-peer networks, and the access that these networks

16   can provide to child pornography.

17   MS. KOONTZ: Good morning. It's a pleasure to

18   be here, and I would like to thank the FTC and Pat

19   Delaney for inviting me to participate in this

20   conference.

21   What I'm going to do this morning is give you a

22   very brief overview of the work that we did in 2002, and

23   that we reported in 2003, concerning the availability of

24   child pornography on peer-to-peer networks.

25   Essentially, what we found in -- this work was

1   originally requested by House Government Reform by both

2   Chairman Davis and ranking member Waxman.

3   What we did is that we used Kaza to search

4   using three keywords that we knew were associated with

5   child pornography. And as a result of that search, we

6   identified 341 image files.

7   We then worked with the Customs Cyber Center,

8   which is now in the Department of Homeland Security, so

9   that they could actually download the files, examine

10   their contents and classify the files for us.

11   We literally could not have done this work

12   without the assistance of Customs because they had the

13   authority and the expertise to deal with the images that

14   we were retrieving.

15   What we found, and this was one of two primary

16   findings in our report, was that child pornography was

17   readily available and accessible during our survey.

18   About 44 percent was child pornography, with another 29

19   percent being adult pornography.

20   The second part of what we did I think was

21   viewed as actually a little more disturbing, and that is,

22   is that we concluded juvenile users had a very high risk,

23   a significant risk, of being exposed to pornography

24   inadvertently through their use of the networks.

25   We did a search again of Kaza, using three key

1   search terms that were innocuous, and were the kind of

2   search terms that you could easily imagine juvenile

3   users loading into a search program; terms like Poke Man,

4   Brittany Spears, Olsen Twins, which you can easily

5   imagine those being used.

6   And we found that about 34 percent of the files

7   that we returned of the 177 images were adult

8   pornography, and we found a very small percentage of

9   child pornography as well.

10   The interest in peer-to-peer networks appears

11   to continue, and more recently we've been asked again to

12   update our work that we did in 2002. This work was

13   requested by Chairman Mark Souder of the Criminal Justice

14   Subcommittee of House Government Reform, as well as

15   Representatives Pitts, Pickering, and Shadegg have asked

16   us to update our study, and also expand it.

17   We will, again, look at the prevalence of

18   pornography on peer-to-peer networks. We hope to expand

19   our review to consider other applications, other than --

20   last time we just looked at Kaza. I think we'll try to

21   expand them this time.

22   They're interested also in availability of

23   peer-to-peer applications, and we're also -- there is a

24   high interest in filters in terms of both aol.com their

25   efficacy, both on peer-to-peer networks, and then try to

1   do some comparison with the filters that exist on the

2   Internet search programs.

3   We plan to start this in January. It is too

4   soon for us to tell exactly when we're going to be done

5   with this work, but I would guess it would be sometime in

6   the summer of 2005 that it will be completed.

7   This is just a reminder that we've done a

8   couple of reports. I've testified a number of times on

9   these issues, and we have related reports as well.

10   One I didn't talk about today was a request

11   from Senator Stevens and others. We surveyed

12   universities, four year universities and colleges

13   throughout the country, to find out how they were dealing

14   with the issues of students using university networks for

15   file-sharing purposes.

16   And these are all available on our web site, on

17   the www@gao.gov. So they would be available there.

18   Thank you.

19   MS. DELANEY: I had a quick question about

20   information regarding the age of people that use file-

21   sharing programs. Do you have any data on that, or is

22   that something you'll be looking at?

23   MS. KOONTZ: Actually, that was -- that is one

24   of the questions we had been asked. I am -- I was very

25   interested in what the first panel said, because they --

 1   some of the gentlemen there seemed to have some notion

 2   about how to identify juvenile users.

 3   But we do not have that data, and we would

 4   certainly like to explore ways to try to quantify that,

 5   as well.

 6   MS. DELANEY: Okay. Great. And as a side

 7   note, these Power Points will be up on the FTC web site

 8   on our file-sharing page. So if you want any of the

 9   resources that Linda just pointed out, they'll be

10   available tomorrow or Friday.

11   Okay. Next, Michelle, could you tell us about

12   the work that the National Center for Missing and

13   Exploited Children has done, and what you've learned

14   about some of the risks associated with file-sharing?

15   MS. COLLINS: Absolutely. Thank you for having

16   me. Thank you all for certainly involving us in this

17   event. What I'd like to talk to you really briefly about

18   is the role of the National Center for Missing and

19   Exploited Children here in Alexandria, Virginia. And try

20   to protect children on-line from harmful material, as

21   well as assisting law enforcement with trying to track

22   down the individuals who are trading illegal content;

23   specifically in our case child pornography on-line.

24   We certainly recognize that all mediums of the

25   Internet, the web, EMails, Instant Messengers and so

1   forth, are areas where children can be exposed to

2   material.

3   We are going to talk to you just briefly about

4   some of the ways that we work with law enforcement, and

5   ways that we've also worked with other Internet service

6   providers in other areas of the Internet to try to help

7   cut down on the number of images and movies being traded

8   on-line, as well as the exposure of children.

9   First off, a little brief history. The

10   National Center was in 1984, and it was created as a

11   mechanism to assist parents and law enforcement with

12   issues of missing and abducted children, as well as the

13   exploitation.

14   In 1997, we created the Exploited Child Unit,

15   and it was in direct response to the Internet becoming

16   more prevalent with the public that we had to have some

17   way to respond with the various issues that were going to

18   arrive.

19   In 1998, the Cyber Tip Line was congressionally

20   mandated as being a reporting mechanism for individuals

21   and for law enforcement and ISPs to report incidents of

22   child sexual exploitation.

23   And I'm going to tell you about a couple of the

24   different types of exploitation reports we receive.

25   Cyber Tip Line Two, we will also briefly touch on.

1   Cyber Tip Line Two, is federal law from 1999

2   mandating that electronic service providers report any

3   apparent child pornography to the National Center for

4   Missing and Exploited Children, so we can then forward it

5   on to the appropriate law enforcement agency.

6   I'll go through a few of the numbers. Since

7   1998, when the Cyber Tip Line was created, in 1998, we

8   received 4,500 reports of child sexual exploitation. A

9   couple of months ago, we received 4,500 reports in a

10 week. We're averaging about 2,000 reports a week of

11 child sexual exploitation. This year alone, we're over

12 106,000 arriving.

13   The type of exploitation we're taking reports

14 on is, for the most part, mostly on-line, and various

15 parts of the Internet.

16   And just a few of the risks that we have seen

17 facing children on-line, certainly the sexually abusive

18 images of children, child pornography that is being

19 distributed in large volumes in all areas of the Internet

20 involving and including peer-to-peer.

21   Enticement, certainly not an issue to be

22 discussed with the peer-to-peer, but individuals are

23 meeting children on-line and trying to meet them off-line

24 for sexual purposes.

25   Adult pornography is invasive certainly in all

1   mediums of the Internet, as well as harassment, which

2   would probably be better suited for another area of

3   discussion.

4   The Cyber Tip Line, two ways that members of

5   the public and Internet service providers can report

6   incidents to us is by going to CyberTipLine.com, which is

7   our web site, and clicking on the report button that

8   you'll see on the right there.

9   And the various types of reports that we accept

10   are right next to that report button that you'll see on

11   the left, along with the categories and the definitions

12   of what exactly is child pornography. What exactly is

13   child sex terrorism, molestation and so forth.

14   About 93 percent of our reports at this point

15   are being received directly at CyberTipLine.com. We also

16   offer the option that individuals who encounter any

17   illegal or potentially illegal child exploitation

18   material can call into our 24 hour hot line and speak

19   with an operator.

20   Here is a little information on that law from

21   1999, regarding the electronic service providers

22   reporting apparent child pornography to us.

23   At this point, there is certainly a lot of

24   discussion as to how many Internet service providers

25   there are out there. We have about 139 currently

1   registered with us who are making daily reports to the

2   Cyber Tip Line regarding their users who are trading

3   child pornography or parent child pornography.

4   As you'll see, the failure to report is a civil

5   liability, $50,000 per day per image. We work with all

6   of the ISPs and electronic service providers hand-in-hand

7   to try to help them with their service to, one, protect

8   children from being exposed to harmful material.

9   And two, certainly try to cut back on the

10   number of people who are using this as a way to trade

11   images and movies, sexual abuse images, and movies of

12   children with other like-minded individuals.

13   I can speak at least for the Internet service

14   provider companies that we work with, they all have

15   varying responses. Some choose to monitor their

16   software, and monitor what's being eMailed through their

17   system. While others will just wait for complaints from

18   the public, and then go ahead and forward it back to the

19   Cyber Tip Line.

20   And we work with all of them, and we certainly

21   look forward to continuing work for the DCIA and other

22   peer-to-peer companies to try to figure out ways that we

23   might be able to help you in your efforts to crack down

24   on exploitation on the programs.

25   To give you an idea of the Cyber Tip Line

1   reports we've received since 1998, the vast bulk, as

2   you'll see, we're at about 300,000 reports this week.

3   About 260 something thousand of them, are regarding child

4   pornography.

5   What we're seeing with the child pornography

6   being traded on-line, the images are -- certainly the

7   volume is increasing. The age of the children is

8   decreasing, and certainly the violence is increasing.

9   So one of the things certainly with the

10   peer-to-peer that probably would make it a little bit

11   more than the web for individuals, would be those

12   individuals who wish to download long movies, 10 minute

13   long movies, with audio and so forth that is much more

14   difficult to find those on the web, or find somebody to

15   eMail those files with.

16   That is something that we do get reports on.

17   The reports that we're receiving, we do work

18   hand-in-hand with most of the federal law enforcement

19   agencies involved in this issue. We have representatives

20   from the FBI, the U.S. Postal Inspection Service, Secret

21   Service, Immigration and Customs Enforcement in our

22   building, working with us on the Cyber Tip Line to try to

23   handle these 2,000 leads a week.

24   The types of leads, to give you an idea,

25   certainly to try to bring it back home for why we're here

1   today. We'll get reports certainly from the public

2   regarding web sites containing child pornography. A

3   parent who is reading their child's eMail, and sees that

4   it doesn't sound like a 12 year old boy that he's talking

5   to. And they'll report incidents like that.

6   One of the difficulties that we certainly see

7   with peer-to-peer reports coming into us, is the fact

8   that the average user does not know how to determine

9   where a file they just downloaded came from. So

10   therefore, they report the name of a file and a screen

11   name that doesn't mean a whole lot, and the time and date

12   that it happened.

13   And there is really nothing we can do, and

14   there is really nothing after the fact, once that

15   connection has been disabled, that we can do to try to

16   track back to the individual who was trading these files.

17   So it's certainly something that I know that

18   many of the federal law enforcement agencies, as well as

19   the Internet Crimes Against Children task forces are

20   trying to determine new ways that they would be able to

21   identify the individuals who are using this medium to

22   transfer terrible, terrible content.

23   And there is my contact information. Thank you

24   for having us.

25   MS. DELANEY: Now, you've mentioned that peer-

1   to-peer file-sharing might be particularly attractive to

2   a pedophile because they could, you know, get a movie as

3   opposed to using the Internet where they may not get that

4   content.

5   Is there anything specific to file-sharing

6   programs, vis a vie children, that make it more of a risk

7   than the Internet? Linda mentioned the mislabeled files.

8   MS. COLLINS: Certainly, with the harmful

9   content or the adult pornography content, certainly it's

10   very easy to find. It's very easy to find on the

11   Internet. Very easy to find on the web. Very easy to

12   find on peer-to-peer programs.

13   I think one of the problems that we at NACMAC

14   really encounter most on behalf of law enforcement is the

15   fact that it's very, very difficult for the average user

16   to know where they just got this file from, and to be

17   able to report it so something could be done.

18   MS. DELANEY: Okay. Great. And then, in terms

19   of awareness with parents, do you think that they're

20   aware of these types of risks on the file-sharing

21   networks, more or less than the Internet?

22   MS. COLLINS: Well, I certainly wouldn't have

23   any numbers to back that up, but I can tell you from some

24   of the antedoctal stories that we hear from law

25   enforcement who have had experience identifying targets

1   who are trading illegal content, child pornography

2   content, on peer-to-peer programs. And certainly in many

3   cases it is younger -- a youth in the house who might be

4   downloading, uploading, sharing, whether it's intentional

5   or not. But the parents don't always necessarily know.

6   MS. DELANEY: Okay. Great. Thank you very

7   much.

8   MS. COLLINS: Thank you.

9   MS. DELANEY: Another risk that we would like

10   to talk about today is liability for copyright

11   infringement when using file-sharing programs.

12   Stan, can you give us some background on this

13   issue, and tell us what the IRAA has been doing?

14   MR. PIERRE-LOUIS: Good morning. My name is

15   Stan Pierre-Louis. I am senior vice president for legal

16   affairs with the Recording Industry Association of

17   America.

18   We greatly appreciate the Federal Trade

19   Commission's interest in addressing the peer-to-peer

20   file-sharing issues and the associated risks to

21   consumers.

22   Today I would like to talk about the legal and

23   litigation risks posed by these services, and ways to

24   keep consumers properly protected and informed.

25   Since the advent of the original Napster

1   service in 1999, peer-to-peer systems have exploded in

2   size and popularity. In the months of November, 2004,

3   alone, approximately 2.4 million users were on the

4   FastTrack network, which includes Kaza and Grockster,

5   among others, trading 1.4 billion files.

6   In addition, 2 million users were on the

7   EDonkey system at any given time trading 233 million

8   files. Considering these are just two of the networks

9   currently available, these numbers are staggering. It

10   has been estimated that upwards of 97 percent of all

11   activities on these systems is illegal, and indeed

12   looking at audio files alone, copyrighted works accounted

13   for 99 percent of all requests made according to some

14   recent reports.

15   Copyright holders remain vigilant in the face

16   of this mass data. There has been particular attention

17   placed on the series of lawsuits that have been brought

18   against individuals who individually trade copyrighted

19   music on these networks.

20   Indeed, the recording industry, which began

21   filing lawsuits in September, 2003, has sued nearly 7,000

22   infringers. The motion picture industry recently began

23   its own lawsuits against those illegally distributing

24   copyrighted movies.

25   And just yesterday, the Motion Picture

1   Association announced enforcement actions against

2   individuals who operate servers on BitTorrent, EDonkey,

3   and direct connect networks.

4   There has been some discussion regarding the

5   relative unlikelihood of being sued by many, given the

6   millions of users who are on these networks at any given

7   time. However, few appreciate how great the consequences

8   can be.

9   The proper discussion, therefore, is whether it

10   is truly worth the risk. Many of those sued, have chosen

11   to settle in the thousands of dollars, but there is much

12   more at stake. If no settlement is reached, these kinds

13   of actions can lead to trial.

14   And as many of you know, infringement for

15   copyright liability can exact very severe penalties,

16   including up to $150,000 per work infringed, meaning each

17   file traded.

18   In addition, a judgement against an individual

19   is not a mere parking ticket. It can permanently effect

20   one's future and one's record. Moreover, copyright

21   infringement can lead in some cases to criminal

22   liability.

23   The legal action taken against individuals was

24   made necessary by acts of many of these peer-to-peer

25   services themselves unfortunately. After the Ninth

1   Circuit Court of Appeals ruled the original Napster

2   liable for copyright infringement, services interested in

3   facilitating and inducing the continued illegal trading

4   of copyrighted materials, began to exploit new means of

5   peer-to-peer technology.

6   The result was the sprouting of so called

7   decentralized peer-to-peer networks that relied on a

8   distributed architecture to avoid centralized functions

9   seen as the lynch pin in the Ninth Circuit's ruling in

10   the Napster case.

11   Simply put, these peer-to-peer have

12   intentionally architected their systems in an effort to

13   off-load liability for copyright infringement on to their

14   consumers. These companies rake in millions, watching

15   from the sidelines as consumers bear the costs.

16   In current litigation against these peer-to-

17   peer networks in Australia, for example, their experts

18   and senior technologists have now admitted that filtering

19   copyrighted content is technically feasible, and would to

20   some extent, quote, be a simple matter through the use of

21   meta data or hash codes. Nonetheless, these purveyors

22   have consciously done nothing to prevent rampant

23   infringement on their networks.

24   While there are services that claim to inform

25   users of the legal considerations of their file-sharing,

1   these notices often remain inaccessible, deliberately

2   vague, or out right misleading.

3   Frequently, any such notice is buried in the

4   users -- end user license agreement at installation.

5   These agreements, which can often be highly technical and

6   lengthy, are usually overlooked by many users.

7   I believe Senator Smith said this morning users

8   often just click next, next, next as they install these

9   systems.

10   These agreements, further, only get shown to

11   users at installation, and at no other time. Even if the

12   user has managed to wade through the fine print of the

13   license agreements, any warnings are tempered by

14   statements and claims of the services that they are

15   legal.

16   For example, Morpheus claims to be "the only

17   legally sanctioned peer-to-peer file-sharing application

18   based in the United States." Such a statement, which is

19   a twisted statement of the Grockster decision in the

20   Ninth Circuit, is intended to give users the impression

21   that any use of these systems is, quote, legally

22   sanctioned.

23   The true failing is not explaining to users

24   that every court that has looked at this issue, including

25   the Grockster, and others, has determined that the

1   actions of the users themselves is inherently illegal.

2   And there is no ambiguity on this matter at

3   all. Unfortunately, many peer-to-peer services have

4   seized upon the holding in these cases, including the

5   Grockster case, which is currently set to be reviewed by

6   the Supreme Court; to further confuse and mislead

7   consumers.

8   Examples of this confusing activity include

9   Limewire's frequently asked questions where a question

10   asked to whether service is legal or not, is simply

11   answered by saying, yes, it is legal to use Limewire

12   software. It is an Internet enabling technology.

13   There is no mention of violating federal law by

14   illegally trading copyrighted works. Similarly, EDonkey

15   prompts its users to download popular files, quote,

16   unquote, while the most popular files on these peer-to-

17   peer are commercial songs and movies, there is no

18   concurrent discussion about copyright compliance.

19   Morpheus tells users that they can receive,

20   quote, free downloads of non-infringing material. Such

21   unqualified statements fail to clarify that such, indeed,

22   most, materials on these systems is infringing.

23   Further illustrating their awareness of such

24   illegal risks and their refusal to guide users

25   appropriately, some providers have begun to develop new

1   software versions supposedly designed to circumvent

2   detection of the user's identities.

3   For example, BearShare claims to be "complete"

4   -- claims to have complete anonymity for its users. And

5   Limewire claims that "users can protect their identity."

6   Such claims of anonymity lead unsuspecting consumers to

7   mistakenly believing that they are safe from being sued

8   for infringement.

9   Such claims of anonymity area also misleading

10   in that peer-to-peer networks are often tracking and

11   logging the activities of their subscribers. Again,

12   referring to the litigation going on in Australia.

13   Charmin Networks has revealed that it maintains

14   a central server in Denmark, which collects user data,

15   including over 15 million addresses collected from their

16   users.

17   Some services offer information only from a

18   one-sided source, which also leads to confusion of

19   consumers. As an example, a frequently asked question on

20   the Limewire site, states its own view that many of the

21   contract laws today are simply overreaching.

22   But using these kinds of statements, those who

23   use peer-to-peer services in such fashion truly get a dis

24   -- they truly provide a disservice to their consumers,

25   since infringers of copyright law are subject to strict

1   liability. It is no defense for a user to simply claim

2   ignorance of the law when it comes to copyright

3   infringement.

4   To paraphrase Senator Smith from this morning,

5   it's not good enough to simply trust or verify, it's

6   important that users verify before they trust.

7   This is particularly alarming since, as, again,

8   Senator Smith mentioned this morning, several peer-to-

9   peer groups have announced, I think three times now, new

10   disclosure programs that are still wanting in terms of

11   success.

12   One important by-product of these legal actions

13   is a significant growth in awareness among consumers

14   about the risks on these networks. Before our first

15   round of lawsuits in September, 2003, only 33 percent of

16   those surveyed knew that illegally downloading music for

17   free was unlawful. That number has jumped to nearly 70

18   percent.

19   The message is being received, and it's no

20   longer an excuse for consumers to really risk legal

21   liability, not to mention spyware, viruses, identity

22   theft and unwanted or even illegal pornography.

23   There are a considerable number of sites on the

24   Internet where consumers can find legitimate music

25   safely, conveniently, and most importantly legally.

1   Legitimate on-line services, such as I-Tunes, and the new

2   Napster are showing considerable growth selling millions

3   of songs and albums while compensating those who work

4   hard to distribute them and to create them.

5   Those positive developments are welcome news,

6   and have come in spite of the often obstructive

7   activities of some peer-to-peer services. In addition to

8   maintaining a campaign of misinformation, these services

9   have regularly altered their systems in order to thwart

10 legitimate on-line services and copyright owners.

11   This course of conduct has but one design, to

12 perpetuate the illegal trading of copyrighted works

13 on-line to protect and profit. These companies preserve

14 their competitive edge by simply promoting and

15 facilitating illegal activity. This is unacceptable

16 behavior in any industry.

17   We do not take lightly the need for lawsuits

18 against individuals, and the decision does not come

19 lightly. Copyright holders would much rather hold

20 accountable the many services that shirk their duties as

21 responsible corporate citizens, but until courts properly

22 provide recourse illicit peer-to-peer services; and not

23 all peer-to-peer, but just those that are illicit.

24   And while society may want to turn a blind eye

25 to the ongoing harm being done to our industry, consumers

1   will continue to find themselves liable.

2   We hope that this workshop and the discussions

3   it encourages will shed even more light on the consumer

4   impact of illegal file-sharing and companies that enable

5   it. While the risks of these illicit services are truly

6   enormous, consumers have more opportunities than ever to

7   obtain legitimate music, movies, and other valuable

8   creative products.

9   Thank you, and we look forward to an emerging

10   marketplace and discussion about that today.

11   MS. DELANEY: Great. I just had a couple of

12   questions. One thing that I've heard anecdotally is that

13   some consumers get confused when they purchase the ad

14   ware, free version, or the spyware free version of a

15   file-sharing software program, and they think that means

16   that they can trade copyrighted files as part of that

17   purchase price.

18   Is that something that you have heard as a

19   defense in some of these actions?

20   MR. PIERRE-LOUIS: From time to time, people

21   have raised various defenses not only about having a paid

22   a one time fee of say 19.99 to get all the music you

23   want, but also of the disclosures that they had seen on

24   these sites as well.

25   And we try to make it clear in all of our

1 messages to them that they really need to look beyond the

2 simple adages within the click-ware that you're seeing.

3   So we hear that sometimes, but I think that's

4 why it's so much more important that the disclosures be

5 out there about the risks on these systems. And if

6 they're not there, consumers won't be aware of them.

7   MS. DELANEY: Okay. And then I just have one

8 other question, and you may not know the answer to this,

9 but you have mentioned that up to 99 percent of the

10 material that's being requested is copyrighted material.

11   Now, there is another statistic that I have

12 seen, I think in a white paper in fact, that talks about

13 pornographic material being 46 percent of the information

14 that's being requested.

15   Are those just different surveys, or --

16   MR. PIERRE-LOUIS: I think various groups have

17 put out various surveys, but one thing has become clear

18 in all these services, whether you're talking about 46

19 percent, 99 percent, 79 percent; what you're seeing is an

20 enormous growth in terms of the spyware that's on these

21 systems, the copyrighted works that are being made

22 available for free, and pornography.

23   So I think that different people look at

24 various data points, but the overwhelming result of all

25 those data points is that the amount of the legality is

1   enormous and staggering.

2   MS. DELANEY: Okay. Great. So we've just

3   heard about a variety of risks related to file-sharing

4   activities, and I've lined up Marty Lafferty to defend

5   the industry. Marty won't call me anymore after today.

6   After he's finished, if we have time, I'd like

7   some of the other panelists to weigh in on the

8   effectiveness and the adequacy of the disclosures that

9   he's going to walk us through.

10   MR. LAFFERTY: Thanks, Beth. I'm Marty

11   Lafferty, CEO of the DCIA. We're a non-profit trade

12   group that was formed a year-and-a-half ago to

13   commercially develop P-to-P.

14   Our members are organized into three groups:

15   We have content rights holders -- not too many RIAA

16   members at this point, but we do have a number of

17   independent music labels and games publishers -- we have

18   P-to-P software representatives, and we have service and

19   support companies that are involved in digital rights

20   management and payment services.

21   We have grown from two members, when we

22   started, to more than 30 today.

23   P-to-P software risks is a project developed by

24   the consumer disclosures working group that was formed in

25   the summer, and was led by Elaine Reese, who is a former

 1   general counsel for Ogilvie and Mather and has a wealth

 2   of self-regulatory best practices experience.

 3   For this group, Elaine recruited voluntarily

 4   members of it that went beyond our DCIA membership,

 5   inviting the top 12 P-to-P software providers around the

 6   world, from California, New York, Canada, Israel, Italy,

 7   Spain, and Australia; and thank god for stipe, or we

 8   wouldn't be able to afford the phone bills to talk them

 9   all. But we had active involvement from nearly all of

10   them.

11   The group's first work product is this

12   standardized consumer disclosure solution that will

13   universally applied by participating P-to-P software

14   firms, again, on a voluntary basis.

15   Part one, the following copyright warning will

16   be prominently displayed each time a user installs a new

17   version of P-to-P software developed and distributed by

18   one of the companies. The use of this software for

19   illegal activities, including upgrade, uploading, or

20   downloading games, movies, music, or software without

21   authorization is strictly forbidden and may be subject to

22   civil and, or, criminal penalties.

23   Here's how the copyright warning will be shown

24   on Blubster. Note that this shows more information than

25   before. Here's how it will look on Grockster. Note that

1   it's conspicuously placed on the product.

2   Here's how the copyright warning will be shown

3   on Kaza. Note that it's clearly displayed. Here's how

4   the copyright warning will be shown on IMesh.

5   Note that it's consistent across each of the

6   P-to-P applications. And finally, here is how the

7   copyright warning will be shown on TrustyFiles, and note

8   that it's prominent on the page.

9   Since the draft product was completed, we have

10   had feedback that this warning should focus on

11   eliminating consumer confusion between software and

12   content. As -- Stan.

13   Particularly in the case of ad-free versions

14   and file-sharing programs sold for a fee. Like, you

15   know, you buy a VCR, and you rent the movie separately;

16   same way here. You buy the P-to-P software, and you

17   separately license the content. And we've committed to

18   work with Abbott Wire Safety to improve on this

19   particular warning.

20   Part two, the following risk alert be

21   prominently displayed in a framed message box above the

22   fold on the home pages of web sites participating in this

23   project. Click here for important information about

24   P-to-P software risks.

25   So here's how the message could be displayed by

1   PabloSoto, here is how it might be displayed by

2   OverShopTime. Here's how it could be displayed by Henry

3   Wilson. Here's how it could be displayed by Marc

4   Freedman, and, then, finally, here's how it could look

5   displayed by Nicky Hemming.

6   Part three, by clicking on here, in those

7   message boxes, you've linked to the following page on

8   each web site, and the same message box would also appear

9   each time you open the P-to-P software. So it would be

10   consistently there.

11   On the following risk disclosures page, please

12   note that the risks are listed alphabetically so that any

13   future risk could also be added in that order.

14   Of the five P-to-P risks identified by Elaine

15   and the group were what we've been talking about all

16   morning; copyright infringement, data security,

17   pornography, spyware, and viruses. Disclosure language

18   for each of these is clear, concise and very consumer

19   centric.

20   But the DCIA also believes that each of these

21   issues really merits more work than just effective

22   disclosures. For example, the issue of copyright

23   infringement needs to be addressed by new business models

24   that will make it attractive RIAA members to license

25   their content for P-to-P distribution.

1   The P-to-P revenue engine, which involves 10

2   companies focusing totally on major music label and movie

3   studio concerns, and the Peer-to-Peer Distribution of

4   Copyrighted Works Development Act submitted to the

5   Copyright Office in September, exemplify additional pro-

6   active responses to this issue by this industry.

7   The issue of child pornography needs to be

8   addressed by initiatives like P-to-P Patrol, which stands

9   for Peer-to-Peer Parents and Teens React On-Line. That

10   provide enforcement, deterrents and education programs

11   designed for the unique requirements of P-to-P.

12   New, being launched this week in fact, the

13   P-to-P Patrol.com web site, for example, will provide

14   users with the tools they need to recognize, remove, and

15   report criminally obscene content that they inadvertently

16   encounter on-line.

17   By clicking on here, up at the top of this

18   page, you would go to the following link, which is

19   provided by the FTC, where you could obtain additional

20   important information about P-to-P software applications.

21   It looks like this, and there are hard copies outside.

22   In addition to this consumer alert, which FTC

23   staff were kind enough to allow us to link to, with its

24   guidance, it also provides guidance documents for how to

25   disclose information in an on-line context, and we're

1   very grateful for that, as well as for generously

2   investing our time in reviewing this work at various

3   stages, and we think it's going to be a very effective

4   disclosure regime.

5   Now, by clicking on here, on those disclosures

6   on the previous page, you would link to a place on each

7   particular P-to-P's web site, where they could talk about

8   how they uniquely help minimize each respective risk.

9   So for example, here's how Grockster would

10   compete to win your business as a consumer by the way it

11   protects your data security and ensures your privacy.

12   Or, for another example, here's how Kaza could

13   compete to win your business by the way it provides tools

14   like a password protected family filter, so that parents

15   can protect their children on-line.

16   So we welcome your comments as to the value and

17   usefulness of these disclosures, as well as any

18   recommended changes. We're in the process now of getting

19   that input from Congress as well.

20   Our original idea with this was to obtain

21   industry wide consensus on this very important issue, and

22   we would be glad to integrate this work product with

23   others that have been developed since then, and complete

24   this project in a way that's the best for consumers.

25   I would just it's a young industry, small

1   companies, good actors. These are very new technologies.

2   Give it time, give it encouragement, as well as, in

3   Ronald Reagan's words, trust and verification.

4   Thanks very much.

5   MS. DELANEY: Can I just ask you one quick

6   question; in terms of people that have already downloaded

7   the file-sharing software, would they get any of these

8   disclosures, or would they have to download a new

9   version?

10   MR. LAFFERTY: Well, the plan that is for this

11   to appear each time you download a new version. So they

12   would be consistently and persistently added as we go

13   forward.

14   So if I already have Kaza on my home computer,

15   and I went onto it with the old version, none of these

16   disclosures would be there?

17   MR. LAFFERTY: They wouldn't be there. You'd

18   have to download a new version, and from that point on,

19   each time you go to it.

20   MS. DELANEY: But they'll be on the web sites

21   of the --

22   MR. LAFFERTY: Yes. On the web sites where you

23   download them from, and then we'll find a way to make it

24   also from download.com so you can --

25   MS. DELANEY: Right. Is there any way to

1   apprise consumers with the older file-sharing programs of

2   these risks?

3   MR. LAFFERTY: I think, you know, P-to-P United

4   has thought about that as they came on later to talk

5   about an education program, which we very much support in

6   terms of awareness.

7   There are ways to use the products themselves

8   to talk to consumers. There is an enormous amount of

9   traffic as we've seen on these, and so that's a very good

10   medium for getting out the word, and the goal would be to

11   get this to be fully accepted by the entire user base in

12   a reasonable time frame.

13   MS. DELANEY: Great. Thank you very much.

14   Before we turn to questions from the audience,

15   I see there's a line forming. Do any of the panelists

16   have any comments on the CDWG proposal that they would

17   like to talk about?

18   MR. PIERRE-LOUIS: I just have a few comments.

19   I mean, first, I think we obviously welcome more

20   disclosures. The more disclosures -- we applaud any

21   efforts to provide consumers with more disclosures,

22   because the more information they get, the better.

23   I believe this may be the third set of

24   disclosure announcements we've heard from many of the

25   peer-to-peer groups this year, and hopefully those will

1   either take full effect, or have some effect, and we'll

2   see where those go.

3   I think one overriding concern has to be, and

4   remains, the mixed message consumers get by seeing

5   something on a site that says, gee, this might be

6   illegal, and, by the way, the overwhelming majority of

7   what you're seeing is either pornographic materials or

8   copyrighted works that are there without authorization.

9   I think that really needs to be addressed. We

10   don't have to get into a lot of the legal components of

11   all that, but I think as a broad overall picture, I think

12   all of that needs to be addressed, whether you're talking

13   about the kind of filtering they're doing on pornography,

14   and viruses, applying that a little bit more broadly to

15   the copyrighted content and the like.

16   But again, we applaud any and all efforts to

17   provide more consumer information about what's going on,

18   and particularly parents.

19   MS. DELANEY: Okay. What I would like to do is

20   go to the audience for questions.

21   MR. WINECOOP: Thank you. My name is Brent

22   Winecoop, and I'm president of Win Data, Ltd., a security

23   data network security firm.

24   And I'm a little concerned that the FTC has

25   sort of a rather unbalanced panel here, and might not be

1   getting the right information on some of these risks.

2   Panelists in the first panel, as well as Mr.

3   John Hale in this panel, identified a number of risks

4   that they said were related directly to peer-to-peer

5   software.

6   I'm going to, in particular, mention some of

7   the risks that Mr. Hale talked about -- vulnerabilities,

8   viruses, and worms.

9   And I'm going to ask the question, why not fix

10   the real underlying problem, which is the operating

11   system that the majority of the American public is using?

12   The Federal Trade Commission had a chance to do this a

13   number of years ago, and sort of backed down from it in

14   the Microsoft case. Microsoft's software is

15   fundamentally flawed in those respects.

16   There are other operating systems out there

17   available to the public that do not have these security

18   vulnerabilities. These security vulnerabilities that

19   have been mentioned by the panelists are all really

20   operating system vulnerabilities, not application

21   vulnerabilities.

22   I have personally been running various and

23   sundry peer-to-peer applications for more than 20 years

24   on the Internet with zero viruses, zero worms, you know,

25   no compromises at all. Why? Because the computers my

1   firm uses and the firms that we advise do not use a

2   flawed operating system as their basis.

3   So my question is, why aren't we asking the

4   right question? Why aren't we asking how to break up the

5   monopoly so that the American public knows that there is

6   something else out there that will allow them to have a

7   computer that they have their own control over, they can

8   verify what it's doing, and it's not technologically

9   possible to have viruses and worms.

10   MS. DELANEY: Right. Well, I appreciate your

11   comments, and I think --

12   MR. WINECOOP: And so, well, that's my question

13   to Mr. Hale.

14   MS. DELANEY: Okay. Well, let me just --

15   MR. WINECOOP: Why is that not being addressed?

16   Why is peer-to-peer, or so called peer-to-peer --

17   MS. DELANEY: Because the FTC put the panel

18   together. So -- but you can go ahead and --

19   MR. HALE: I think you've made one of my points

20   quite eloquently, that we're talking about really an

21   environment that creates these types of problems.

22   So yeah, there's nothing fundamentally wrong

23   with peer-to-peer technology that makes it inherently

24   more vulnerable than anything else, but the fact that

25   you've encountered no problems makes you in the distinct

1   minority in terms of what everybody else has experienced.

2   So and by the way, I would love to sit on that

3   panel if you want to put that together.

4   MR. WINECOOP: Okay.

5   MS. DELANEY: Great. And there's a couple of

6   other people in line. So if we could keep the questions

7   brief, and let everyone have a chance.

8   MR. FISK: Yes, my name is Adam Fisk, and I

9   also take issue with Professor Hale's presentation. I

10   think there's a general problem here where you have a

11   wide range of people at this conference. A lot of people

12   who know about the technology and understand the

13   technology, and a lot of people who don't. And I found

14   your presentation really irresponsible in that regard --

15   even shameless, I would argue.

16   MR. HALE: Thank you.

17   MR. FISK: You used the example --

18   (Laughter.)

19   MR. FISK: Any time. Yes, you used the example

20   of BearShare drilling holes in fire walls, and, you

21   know --

22   MR. HALE: That's their language, not mine.

23   MR. FISK: Sure, exactly. Exactly. But you

24   know -- just trying to write some good software, and in

25   fact is writing good software.

1   And the fact is that you have industry

2   standards, like universal plug and play, that are

3   designed to do the exact same thing, puncture holes

4   through your fire wall, because that's what software has

5   to do in certain situations.

6   And they're just -- these are Microsoft, Intel,

7   all the leaders of the industry designing universal plug

8   and play.

9   So to characterize BearShare as irresponsible

10   in that regard is just plain wrong, and if you want to

11   characterize BearShare as dangerous in that regard, you

12   should also similarly characterize your air conditioner,

13   your VCR. as just as dangerous.

14   MR. HALE: I don't try to maintain my own air

15   conditioner, though. I mean, I have an expert do that.

16   MR. FISK: And you also maintain the software

17   on your computer, you maintain BearShare, that's why

18   those protocols are designed.

19   So I'm here to say if you take your

20   presentation at face value, watch out for your air

21   conditioner. Watch out for your VCR.

22   So that's the first issue I have. Just that we

23   have to be really careful about --

24   MR. HALE: Can I respond to that?

25   MR. FISK: Okay. Sorry, go ahead. I have more

1   to say --

2   MR. HALE: I would agree with some of your

3   points, but the fact is that peer-to-peer software, by

4   and large, does some things to blatantly hide on

5   corporate networks. To create a larger network. That's

6   a key element --

7   MR. FISK: When you say hide --

8   MR. HALE: -- of the business model.

9   MR. FISK: -- so you have to get more

10   granulated than that. When you say, hide on corporate

11   networks.

12   MR. HALE: Well, changing port numbers, let's

13   say, so that --

14   MR. FISK: Changing port numbers isn't designed

15   to hide, it's designed to circumvent those ports from

16   being blocked.

17   MR. HALE: Okay.

18   (Laughter.)

19   MR. FISK: But that's what the user wants, the

20   user who is installing that software.

21   MR. HALE: Yes, okay.

22   MR. FISK: That's the design --

23   MR. HALE: I don't think I need to respond to

24   that.

25   MS. DELANEY: Okay. Let's go to the next

1   question.

2   MR. CORWIN: Good morning. My name is Philip

3   Corwin, I lobby on behalf of Charmin Networks, the

4   distributor for Kaza Media Desktop Software, which is a

5   spyware free software that would be in compliance with

6   any of the legislation being considered by Congress.

7   My question is this, for Mr. Pierre-Louis about

8   filtering, and we have a very different view of what's

9   happened in that courtroom in Australia.

10   But let me -- I have been following very

11 closely a filtering application, which your industry

12 seems to like, which is the Snowcap application developed

13 by Sean Fanning, which I believe Universal Music and

14 others have already licensed content to.

15   It hasn't been publicly demonstrated yet, but

16 it's clear from the news articles some very fundamental

17 things about that filtering.

18   One, it requires re-architecting the software

19 to require centralization because of the massive data

20 base to filter out, which creates knowledge of control

21 that could put one back in Napster I legal liability

22 territory.

23   Two, it's imperfect. For example, it would

24 filter out the official catalog of the Dixie Chicks, but

25 not a bootleg copy of a concern from the Dixie Chicks.

1   Mr. Fanning said that in print.

2   And three, it requires copyright owners to

3   provide the identifying meta data.

4   So my questions are, would the IRAA support

5   legislation to create a label safe harbor for peer-to-

6   peer software providers who take best efforts imperfect

7   filtering along these lines, and therefore gain

8   knowledge, control?

9   And second, what would your industry licensed

10   meta data, provide meta data to Snowcap, which is yet

11   unproven in public, but refuses to provide meta data to

12   an application like Altnet, which could push all the

13   authorized content to the front for any search for one of

14   your members' copyrighted works?

15   MR. PIERRE-LOUIS: I love those leading

16   questions, but at least you acknowledge that you

17   represent Charmin Networks, and that at least provides

18   the basis for the question.

19   First, I'll answer the questions. In terms of

20   legislation, if you've got language you want to show us,

21   we're happy to see it. And we'll --

22   MR. CORWIN: That's not the --

23   MR. PIERRE-LOUIS: I think that with respect to

24   safe harbors and the like, I think it's hard in the

25   abstract to talk about one thing might work versus

1   another.

2   But in terms of the general nature of the

3   question about filtering and the like, I think there are

4   various business models, Snowcap included, but others out

5   there that are looking at various ways applying these

6   technologies to the peer-to-peer networks and other

7   networks.

8   We encourage any and all technologies to

9   develop what they can on those, because, in the end, I

10   think there may be a legislative call, but there will

11   also be a business solution that happens, and I think

12   that's very important.

13   In terms of licensing meta data, those are

14   individual business discussions that anyone is free to

15   have with record companies, or whomever else provide meta

16   data.

17   So I don't think this forum is going to solve

18   that issue, but I do think it's important and very

19   relevant that you put on the table the issue of filtering

20   given that many networks, including the Charmin Networks,

21   do this already on various files, including viruses,

22   child pornography.

23   And again, in recent testimony, we don't have

24   to debate about what's going on in the trials, but

25   according to the transcripts that we take. Their

1   technologies are saying that it is possible, but I think

2   their chief technologist actually said something like,

3   but I've never asked to look at it, but, yes, it would

4   take just a few keystrokes to at least do a meta data or

5   hash code filtering possibility.

6   MR. CORWIN: I was at the trial, and I was

7   there for a number of expert witnesses -- unauthorized

8   material --

9   MS. DELANEY: Okay. I'm afraid -- I apologize

10   to the people that are still in line. We're going to

11   have to move to the next panel.

12   MR. PAHL: Thank you. If everyone could please

13   stay seated, we'll switch from the current panel to the

14   next panel.

15   We're ready to move on to our third panel

16   today, which is Technological Responses to Protect

17   Consumers Using P-to-P File-sharing Programs, and the

18   moderator of this panel is Beverly Thomas, who is an

19   attorney in our Division of Advertising Practices.

20   MS. THOMAS: Yes, I would like to welcome and

21   say thank you to the panelists for not only being here

22   today, but also taking the time to educate staff on this

23   subject. And they spent a total of many hours on the

24   phone with me.

25   This panel will be discussing technological

1   responses to the various risks associated with the use of

2   P-to-P file-sharing networks that were discussed by the

3   last panel.

4   But before we start, I'd like to introduce each

5   panelists. Next to me is Marc Freedman; he is founder

6   and CEO of RazorPop, which develops technology that

7   enables entertainment companies to market their products

8   directly through P-to-P file-sharing networks.

9   RazorPop is also the developer of TrustyFiles

10 software, which allows users to access and share files

11 simultaneously over multiple P-to-P networks.

12   Jules Polonetsky, next to him, is the vice

13 president for Integrity Assurance at AOL. As such, he is

14 responsible for a variety of consumer protection issues,

15 including advertising policy, parental controls, and

16 children's privacy.

17   Vance Ikezoye is next to him. He co-founded

18 Audible Magic in 1999. He brings to this discussion over

19 20 years of experience in high technology, sales,

20 marketing, and technical support, beginning with a 13-

21 year stint with Hewlett-Packard.

22   Bob Kessinger is the next person. He is

23 operations director for Cyber Patrol, a division of

24 SurfControl, which markets Cyber Patrol, parental control

25 software. As such, Bob speaks frequently to parent

1   groups on how to optimize safe and educational Internet

2   experiences for children while minimizing risks.

3   Dr. Jerald Block is the last panelist. He is

4   co-founder of SmartGuard software, and also maintains a

5   private practice as a psychiatrist.

6   His company has developed software programs

7   that allow parents to regulate their children's on-line

8   game playing, and their access and use of P-to-P file-

9   sharing networks. He created SmartGuard software after

10   treating numerous patients with computer-related

11   illnesses and finding a severe lack of technological

12   solutions.

13   So we have some interesting panelists. We'll

14   start with a risk that the last panel I think actually

15   pretty much took care of, and this is the risk of

16   inadvertently sharing sensitive files.

17   But just to make sure that we're clear on

18   things, Marc, would you explain the change that some of

19   the major P-to-P networks made to try and reduce this

20   risk?

21   MR. FREEDMAN: Well, thank you. And just as a

22   general preface, at the previous panel, Marty Lafferty of

23   the DCIA presented the work that the Consumers

24   Disclosures Working Group is developing. And so

25   certainly within six to twelve months you'll see the kind

1   of standardized disclosures that the group is developing.

2   What I'll be talking about is what's in our

3   software today, which is typical of P-to-P file-sharing

4   software.

5   In the area of personal security, in the early

6   days of the Internet, years ago, there was some software

7   developed where it was relatively easy for consumers to

8   inadvertently share files that they didn't intend to

9   share on their computer.

10   But today, for 99 percent of the commercial

11   software out there, that's just not possible. When you

12   install the software, it creates a new folder, which is

13   where your downloaded files are placed, and where -- that

14   are shared. And it is the consumer who actively selects

15   additional folders for sharing.

16   So it's really something that's done at the

17   consumer's initiative. It's not something that they have

18   no knowledge about.

19   MS. THOMAS: Are you saying that the default

20   folder is empty, and that to populate it, the user has to

21   manually drag their files and folders into it?

22   MR. FREEDMAN: That's correct. Either the user

23   manually copies or moves his folders into that empty

24   folder, or he could specify additional folders.

25   MS. THOMAS: I think Vance has something to

1   add?

2   MR. IKEZOYE: Yes. I was just going to say

3   that, yes, many of the P-to-P programs do do that, where

4   the user has to set a default, but I think there is also

5   an increasing number of P-to-P programs that actually

6   scan your drive and make automatic selections of what to

7   share out. What folders. And the users aren't even

8   aware of those things happening.

9   MS. THOMAS: Also, if I'm asking one person for

10   an answer, and somebody else has something they want to

11   add, could you turn your table tent up, because otherwise

12   I'll have a hard time seeing you.

13   Are sensitive files, such as tax returns,

14   credit card information, et cetera, still being shared,

15   and, if so, what do you think accounts for this, Mark?

16   MR. FREEDMAN: Well, there certainly is old

17   software that's out there where users may inadvertently

18   share their files. I think we need to recognize -- and

19   going back to the first panel, that this is a huge

20   audience. There is some 80 million file-sharing users

21   out there.

22   And just like on the Internet, where you can

23   run a Google search and find all kinds of personal

24   content, so you have the -- with such a large user base,

25   the opportunity for people to inadvertently share files

1   that they have forgotten about.

2   But with modern software that's being developed

3   by the major developers, you know, that's something that

4   the consumer is fully knowledgeable of.

5   There are also some interesting things that

6   happen. Some of the unsavory players out there, for

7   example, use some of these file names as lures. And so

8   there are tips and tricks that they use where you may

9   think it's a personal file. In fact, it may contain

10   advertising or a virus.

11   MS. THOMAS: Okay. Are there other tools or

12   technology that can provide P-to-P users with higher --

13   with more private methods of file-sharing?

14   Marc, would you please explain what TrustyFiles

15   is, and how your tools for personal and private P-to-P

16   file-sharing work?

17   MR. FREEDMAN: Thank you. TrustyFiles has a

18   few different ways to be used. The first way is what we

19   call a public file-sharing mode, and that's the file-

20   sharing that everyone is familiar with. We connect to

21   multiple networks, like Natella, Kaza, FastTrack and

22   BitTorrent where people can download files.

23   But we do have an opportunity for consumers to

24   use our software to select their level of privacy, and

25   let's go to the next slide.

1   On installation, we have this dialog here,

2   which lets the user select public, personal, or private

3   file-sharing. And that essentially changes -- underneath

4   the hood, it changes some of the settings in terms of how

5   the software works, and how it connects to the networks,

6   and how those files are shared. Next slide, please.

7   And just a diagram in terms of what that means.

8   The public sharing, the user is connected to the

9   Internet, and the public file-sharing networks and the

10   personal file-sharing mode, that allows me to search

11   directly with another user, and also the public network.

12   And in the private file-sharing mode where

13   someone may have sensitive files, in that case, I'm only

14   directly connected to another user. I'm not connected to

15   the files, the public file-sharing networks at all.

16   MS. THOMAS: And presumably, would know who the

17   other user is?

18   MR. FREEDMAN: Well, the mechanism that we use

19   for this, when you are sharing a file in a personal or

20   private file-sharing mode, there is a button that you

21   click where it says, share. And it's actually sending an

22   eMail that contains your Internet address and the

23   pertinent file information so that person can make a

24   direct connection to you and download that file.

25   MS. THOMAS: Okay. Did you want to say

1   anything on this?

2   A PARTICIPANT: Is it possible for parents to

3   set TrustyFiles to operate only in personal or private

4   mode?

5   MR. FREEDMAN: It's not a permanent change, but

6   it is a change that the user can make on an ongoing

7   basis.

8   MS. THOMAS: Okay.

9   MR. FREEDMAN: But let me just follow up on the

10   shared folders slide there. As we've indicated in the

11   previous panel, the folders -- there's two ways the

12   folders are specified to be shared today, and in most

13   software TrustyFiles is typical.

14   The first is to use your default downloads

15   folder, which is empty when you first began, and then you

16   see the area indicated there in the red, which are other

17   shared folders. And again, that's a user action.

18   So literally you're just clicking on and trying

19   to add this folder, which may contain video, photos, or

20   music, and then they can directly manage that folder.

21   We also have another screen, which isn't so --

22   which lists all of the files that you're currently

23   sharing and allowing others to upload from you. So it's

24   quite visible and obvious in terms of what files are

25   being shared.

1   MS. THOMAS: The previous panel also discussed

2   the extent to which spyware or software that displays

3   ads, or both, are installed on user's computers either

4   because they came bundled with the file-sharing program

5   itself, or from files made available for sharing over the

6   P-to-P network.

7   Are there any P-to-P related tools to prevent

8   spyware from being downloaded from the P-to-P network via

9   shared files?

10   And by P-to-P-related tools, I mean tools that

11   have been incorporated in the P-to-P program, or that are

12   designed expressly to work with P-to-P programs.

13   Are there any? Anybody know of any?

14   Okay. No one knows of any.

15   Okay. Do the regular anti-spyware programs,

16   e.g., programs that scan users' hard drives to detect

17   spyware and programs that block spyware from installing

18   in the first place, do these programs routinely operate

19   on the files being downloaded from the P-to-P network,

20   Jules?

21   MR. POLONETSKY: Well, I think it's important

22   to understand what practically many consumers are using

23   when it comes to anti-spyware tools. Some of the very

24   popular, for instance, and, you know, effective free

25   tools will scan.

1   It takes a couple of minutes to scan. They'll

2   scan on a perhaps regular basis, but what they're going

3   to do, is they're going to identify what is already on

4   your computer.

5   Many of the premium versions of those, or, for

6   instance, the version that we have built into the AOL

7   service, will either look at applications as they're

8   being downloaded, or in the case of the AOL service, will

9   scan every 15 minutes or so.

10   One of the challenges, if one takes the time to

11   read through the terms of service, or the ULAs on the

12   various adware that supports much of the P-to-P software,

13   those applications, if you use AdRemove for instance, or

14   you use an anti-spyware device, give themselves

15   permission to reinstall themselves.

16   And so a user running one of the popular free

17   scans on a, you know, weekly basis, it's very difficult

18   to run it on a -- you know, an every time you sign-on

19   basis when it can take a couple of minutes for some of

20   the full broad anti-spyware to scan.

21   A good number of those adware applications will

22   detect that they've been un-installed, that the anti-

23   spyware tool has worked on them, and reinstall.

24   So the typical consumer is using some of the

25   very popular free products that are out there, may be on

1 a weekly basis removing what's on their computer, but

2 immediately getting it again either because the

3 application reinstalls itself, or because they go back

4 and they download another version of a P-to-P

5 application. So it can be a never ending chase.

6   What we found when we went out into the homes

7 of hundreds of users and we said to them, do you know

8 you've got adware or spyware application on your

9 computer; do you know you download file-sharing software.

10   Many of them knew that they downloaded, but

11 swore that they had never given permission, despite the

12 disclosures and despite, you know, whatever level of

13 notice is given, swore that they didn't give permission,

14 and they didn't know it was on their computer.

15   And they didn't know how to get rid of it, and

16 begged us, or the technician that we had sent out, to

17 take it off for them.

18   So you know, the anti-spyware tools out there

19 are great and they're useful, but unless you're using

20 something that is built in that routinely scans every 15

21 minutes as we're doing, or you're paying for one of the

22 premium versions of anti-spyware, you're actually going

23 to be running a computer that's generating an awful lot

24 of pop-ups and slowing down your system and your ability

25 to browse or the number of times that you disconnect.

1   With most consumers not quite being sure who to

2   blame. They don't know that they got it at Kaza or

3   Morpheus, they just know that it's on their computer and

4   they're getting pop-ups and they're disconnecting and who

5   should they call.

6   They're going to call Dell, they're going to

7   call AOL, they're going to call somebody and they're

8   going to yell at us, and we're going to diagnose that

9   it's because their kid or their teen downloaded some

10   file-sharing software and they got this application, and

11   here's what they can do to get rid of it. And so it's an

12   awfully difficult and expensive way of going about it.

13   MS. THOMAS: We have up on the screen now your

14   slide about what anti-spyware AOL offers. Do you want to

15   explain anymore about that?

16   MR. FREEDMAN: Yes, and just to sort of

17   summarize what we're doing, briefly. We offer sort of a

18   full deep anti-spyware scan similar to some of the scans

19   that are out there today that you can get or that you can

20   buy.

21   It takes a bit of time to run, and it's a

22   separate download, but it will thoroughly examine all of

23   the programs on your computer and then list them so that

24   you can make a decision as to whether you want to keep it

25   or not, if you understand what it does.

 1   Certainly we find that, you know, 99 percent

 2   plus users are surprised to find that they've got the

 3   programs, and remove them. So that's one method, and

 4   that's I think what most users either have, if their ISP,

 5   like us, is giving to them, or of if they have gone to

 6   one of the pest controls or spybots or adware and

 7   downloaded.

 8   But I think where most users are not being

 9   protected, even if they have level one of protection, is

10   the fact that this stuff will reinstall itself again, or

11   that you'll get reinfected again.

12   It's one thing to do an anti-virus scan or take

13   some other sort of computer hygiene measure on a regular

14   basis, but it's very difficult when you're continuing to

15   engage the behavior that's causing the problem in the

16   first place, perhaps understanding that you're getting

17   the adware, perhaps not.

18   And so what we're doing now is with our

19   spy-zapper product, which is sort of built-in, is we'll

20   scan it every 15 minutes, and after you've said I don't

21   want this application. I don't want it. I don't care

22   how I got it, I don't want it. We'll just continue to

23   scan for it, and remove it.

24   And then there are other premium applications

25   that you can sort of buy, but, frankly, I think the

1   general user base isn't completely comfortable with using

2   ad removal.

3   My mom can't use ad remove. The general user

4   base thinks that if they have spyware protection, they've

5   done it all, and isn't aware that they're perhaps getting

6   the application over and over and that that's why their

7   computer is running into the problems that it is.

8   MS. THOMAS: Yes. We had a thorough discussion

9   of spyware in our workshop in April.

10   Another risk from using P-to-P file-sharing

11 programs, is that shared files may contain viruses.

12 Again, are there any P-to-P related tools to prevent

13 files containing viruses from being downloaded from the

14 P-to-P network?

15   An earlier panel mentioned that Kaza is

16 offering something called BallGuard, and that's an anti-

17 virus scanner.

18   Do any other P-to-P programs integrate an

19 anti-virus tool, or do any of you know of any?

20   A PARTICIPANT: Yes.

21   MS. THOMAS: Okay.

22   A PARTICIPANT: With Morpheus, a combination

23 specific of -- anti-virus program -- McAfee, or --

24 Morpheus that --

25   MS. THOMAS: Okay.

 1   A PARTICIPANT: I know of one.

 2   A PARTICIPANT: Can you repeat that for those

 3   of us in the deep seats?

 4   (Laughter.)

 5   MS. THOMAS: All right. Yes. He said that

 6   Morpheus, you can use your regular anti-virus. You can

 7   set up Morpheus to use like if you've got McAfee or

 8   Norton or whatever. You can use your regular anti-virus

 9   with the Morpheus network.

10   A PARTICIPANT: This is, I think, an important

11   point. You have -- infected system that involves three

12   users --

13   MS. THOMAS: Can you wait till --

14   A PARTICIPANT: Viruses, because --

15   MS. THOMAS: Can you wait till the question?

16   A PARTICIPANT: -- peer-to-peer application --

17   MS. THOMAS: Yes, but can you -- we're trying

18   to get through so we can have time for questions at the

19   end.

20   A PARTICIPANT: But this is an answer to the

21   question. We'll get rid of spyware -- we don't get this

22   stuff, and it' because our system is designed not to get

23   it, and designed more prominently.

24   This business of infecting --

25   MS. THOMAS: Excuse me. That is a topic for

1   another day. Okay? That is not the subject of this

2   workshop.

3   A PARTICIPANT: -- spyware run Microsoft. Ask

4   any expert in the panel --

5   MR. PAHL: Sir. Could you please wait until

6   the question period and ask an appropriate question at

7   the time?

8   A PARTICIPANT: Then tell the truth. They've

9   got spy -- they've got this stuff --

10   MR. PAHL: You will have a chance to ask

11   questions subsequently.

12   A PARTICIPANT: No question --

13   MS. THOMAS: All right. I'd like to ask, do

14   fire walls prevent users from downloading shared files

15   with viruses; and, if not, why not?

16   MR. FREEDMAN: Well, Beverly, I'd like to just

17   add one more thing on the anti-virus. Two thirds of

18   users, when we went out, again, and this is part of the

19   National Cyber Security Alliance software survey that we

20   did in October.

21   Two-thirds of the users' PCs that we examined

22   didn't have a current anti-virus software. It was on the

23   computer when they bought it. So they think they got it,

24   and they didn't upgrade it, or continue to maintain it.

25   One in seven had no AV software at all. Much

1   of the free AV software that's out there, or much of the

2   AV software that's built into ISPs, focuses on scanning

3   eMail attachments. And so users feel that they're

4   completely protected because they've got an anti-virus

5   that's scanning all the eMail.

6   And so when we talk about the peer-to-peer role

7   in particular, more other ways that people transmit and

8   get viruses other than using one specific eMail account

9   that's scanned; so many of the users aren't being

10   protected when it comes to viruses swapped through

11   P-to-P, unless they actually have a full either premium

12   or sort of the version for instance of McAfee that we're

13   giving away. Or they've paid and they've upgraded.

14   And so, people in large part think they're

15   protected because they've got something, or they had

16   something, but unless somebody is either giving it to

17   them in full for free, or they're paying for it, they're

18   actually not getting much protection, particularly from

19   the P-to-P exchanges.

20   MS. THOMAS: Okay. Well, my original question

21   was about fire walls.

22   MR. FREEDMAN: And to get back to the fire wall

23   question. Just a general fire wall that the average

24   users are likely to have primarily determine whether

25   appropriate ports are closed, or whether the traffic

1   that's coming in or out is from an authorized location.

2   You're opening up the door. You're permitting

3   the traffic to flow through your fire wall, or through

4   the various ports here.

5   So the fire -- the typical fire wall, unless

6   you're running something fairly sophisticated on a

7   network that's doing some of the more sophisticated work,

8   the typical fire wall that a user has isn't going to be

9   very relevant for P-to-P.

10   MS. THOMAS: Vance.

11   MR. IKEZOYE: Yes, and to add on to that, some

12   of the new evolving P-to-P programs are especially more

13   sophisticated in being able to go through fire walls as

14   some of the earlier panels talked about. And especially

15   going through the port -- which is the web browsing port.

16   It's much more difficult than the fire wall --

17   the anti-virus aren't necessarily used to seeing --

18   looking at those ports, as well as the fire walls aren't

19   -- can't block those communications.

20   A PARTICIPANT: I want to add it's important to

21   understand, in the context of a virus, why a fire wall is

22   an important -- a fire wall just enables connections to

23   outside programs or servers. It does not check the data

24   that's going through that specific port.

25   So all a fire wall can say is I will, or I

1   won't connect to this program, but it's not going to

2   check the files that are coming in, and that's not the

3   purpose of the fire wall. So that's why it's not

4   relevant for viruses.

5   MS. THOMAS: In other words, the fire wall is

6   not going to check the contents?

7   A PARTICIPANT: Correct.

8   MS. THOMAS: If anti-virus programs, some of

9   them do not routinely operate on files being downloaded

10   from P-to-P networks, can they be set to operate on these

11   files?

12   And Marc, I believe your FussyFiles network has

13   a means of handling the anti-virus issue?

14   MR. FREEDMAN: Well, I first want to preface

15   this by saying whether we're talking about spyware or

16   viruses, clearly they've been around for a few years.

17   They're very sophisticated, and it's obviously not the

18   domain of a P-to-P file-sharing software to be an expert

19   in all the viruses and all the spyware.

20   And so the method that we take is just to be

21   supportive of spy -- anti-spyware and anti-virus vendors,

22   and those products -- and will scan your hard drive, and

23   they'll work with file-sharing programs as well as other

24   programs or web sites which are -- become a conduit for

25   the viruses and the spyware.

1   Here's an example of how TrustyFiles works, and

2   I'm sure Morpheus and other products are very similar.

3   You know, in our options menu we quite simply have a box

4   where you can select your anti-virus program and turn

5   that on.

6   And the way it works, is every time a file is

7   downloaded over the network, your anti-virus program,

8   which is the expert on viruses, will scan that file for a

9   virus and then alert you if it's infected.

10   MS. THOMAS: Okay. Thank you, Marc. I believe

11   you also have a tool that attempts to reduce the risk

12   associated with bogus, corrupted, or otherwise

13   potentially harmful files.

14   Could you explain what that is, and how it

15   works?

16   MR. FREEDMAN: Okay. Harmful files includes a

17   whole class of files. They may be so called polluted

18   files, thanks to companies that -- their interdiction

19   programs insert fake or changed files into the network.

20   They may include viruses that carry viruses, or

21   that may install spyware. And we've determined a class

22   of users on the file-sharing networks, call them base

23   abusers, who are responsible for this activity. And they

24   can include people who have been directly evidenced to do

25   this harmful behavior, or to be supportive of it.

1   And what has happened, is the evolution of

2   block list that are created by volunteers, that contain

3   the Internet addresses of organizations or users who have

4   been known to inject fake, bogus, harmful and other files

5   into the network, which clearly the user does not want.

6   MS. THOMAS: The next slide.

7   MR. FREEDMAN: And here's an example of a block

8   list. It's a collection of IP addresses, which is the

9   Internet computer address. Sometimes they'll have

10   reasons or descriptions of why certain organizations or

11   users are being blocked, and this is a file that

12   TrustyFiles, again, like many other P-to-P programs,

13   reads into the program.

14   And the way it works, is it doesn't filter

15   these addresses, it literally blocks them. So that when

16   a user from that address is trying to connect to you, or

17   trying to run a search, or you to try to download from

18   them, it refuses to make a connection to that address.

19   MS. THOMAS: Can users choose to unblock a

20   particular IP number?

21   MR. FREEDMAN: Well, certainly. Our philosophy

22   is to be user driven. Users have the option to delete

23   this file, and not to run a block list. They can edit

24   the block list. They can use their own block list.

25   MS. THOMAS: Okay. A major risk discussed by

 1   the last panel, is the possibility of being sued for

 2   copyright infringement as a result of illegally

 3   downloading copyrighted materials.

 4   Vance, I believe your software is designed to

 5   prevent unauthorized downloading of copyrighted

 6   materials. Could you explain how your software works?

 7   MR. IKEZOYE: Yes. What Audible Magic does, is

 8   we provide, as one of the panels before discussed, some

 9   filtering technology. And this is the ability of the

10   technology to be selective on what goes through. Similar

11   to taking of an air filter and filtering out particles of

12   certain sizes.

13   We can -- you can develop filters to filter out

14   copyrighted materials, sexually explicit materials, even

15   potentially private materials like 1040s, or those kids

16   of forms.

17   Next slide. Where you might put one of these

18   filters, either copyright filter, or any filter, there is

19   a number of places on the cull kind of system.

20   And you see I represented the filter, that

21   brown kind of screen. You could put the filter in the

22   software, and I know that some of the file-sharing

23   programs have incorporated filters like virus scans, or

24   certain pornographic filters.

25   You can also potentially put it at the -- at

1   the computer level, or at the network level, meaning the

2   place that the consumer's home network connects to the

3   Internet, or even potentially at the ISP level.

4   How you might use a copyright filter, is you

5   think of a finger print similar to a human finger print

6   that each individual has this unique way of identifying

7   themselves, and similarly songs or movies or other kinds

8   of content can also have a unique filter -- a unique

9   finger print that can be used to identify them.

10   So what we provide is a platform that we sell

11   to universities and businesses to help them protect

12   themselves against things like copyright infringement and

13   getting suits.

14   And so, this platform then, you basically plug

15   in these various -- and you configure for various

16   filters, either copyrighted music, or copyrighted movies,

17   and you can use these finger prints, and, or, you could

18   use file names or meta data as a textural way of

19   filtering out those kinds of content.

20   And the way to think about file names or meta

21   data, is if you have a person, going back to that analogy

22   again, and a finger print identifies me, think of a file

23   name as a name tag.

24   And the issue with name tags are, you know,

25   they do a good job in general, but there are some cases

1   where people don't want to be identified, and they may

2   change their name tag.

3   Similar, you can do the same thing for software

4   and games and use file names, and this just gives you an

5   idea from our product in how a business or university may

6   be able to choose to not have copyrighted files go

7   through their networks.

8   As you see, on the very bottom, the consumer --

9   the network owner or operator can choose what they block.

10   Whether it be music, movies, software and games, or

11   sexually explicit materials.

12   And the appliance, which is a box, then sits on

13   their network and blocks those kinds of materials.

14   Really supplementing what a fire wall does.

15   MS. THOMAS: Vance?

16   MR. IKEZOYE: Yes.

17   MS. THOMAS: In general terms, like not too

18   technical, could you explain how the digital finger print

19   is created?

20   MR. IKEZOYE: The way the finger printing kind

21   of concept works, is that you develop a registry of this

22   information that identifies a particular title, like a

23   song.

24   And you take measurements, objective

25   measurements, of the file. For example, on music, it's

1   the way it sounds kind of to humans. You can take

2   measurements of that and enter them into a data base.

3   So the finger prints are basically just

4   measurements. The same way a box score may represent a

5   ball game. You'd do the similar thing for each piece of

6   content, copyrighted content.

7   MS. THOMAS: Okay. You said that your

8   customers now, primarily, are business or universities.

9   Could this software be extended to consumers, and how

10   difficult would this be, or what are the limitations?

11   MR. IKEZOYE: Well, the way I would -- I could

12   see extending it consumers in two ways. One, is you make

13   the box or piece of software small, and so a consumer

14   could install this in their own homes, on their own

15   computers, or on their networks.

16   And the other way it potentially have an ISP

17   provide some of this service at a network level, and then

18   offer the service to the consumer.

19   MS. THOMAS: Another significant risk from

20   using P-to-P file-sharing programs is inadvertent

21   exposure to adult material.

22   Are there technological responses to this risk?

23   Marc, I believe you have a tool directed at

24   child pornography?

25   MR. FREEDMAN: Well, we do. We're working with

 1   P-to-P Patrol, which is another DCIA program. There will

 2   be more sophisticated tools for reporting and education

 3   that we will have in the future.

 4   As of today, we do have one product, which is

 5   filter, and there's a screen shot if the user is running

 6   a search and enters a word associated with child

 7   pornography, we provide a little warning to him letting

 8   him know, first, that such content is illegal and,

 9   secondly, that his search and download materials is not

10   private.

11   MS. THOMAS: Are there filters that can block

12   adult content files from being downloaded, and, if so,

13   how do they work, downloaded, or opened? Vance?

14   MR. IKEZOYE: Yes, well, the way we block, we

15   have a configuration choice that a network owner can use,

16   and it uses more meta data, and it's a textural blocking

17   program.

18   And I think a lot of the blocking methods in

19   use today are meta data, or textural based. Meaning key

20   words that are indicative of sexual content.

21   And the way that file-sharing networks work,

22   the way you search is based on key words. So it actually

23   works relatively effectively.

24   MS. THOMAS: And I think you also told me you

25   were developing a filter based on registrations?

1   MR. IKEZOYE: Well, yes, we're exploring the

2   area. So the next step after using keywords is the

3   potential to use some kind of finger printing technology

4   for movies or images, and clearly you can do exactly the

5   same thing. You can register and develop finger prints

6   and develop a data base.

7   The issue obviously is that you need to have

8   access to some of the original content to put in the data

9   base with meta data, and, in fact, I think some of the

10   companies that -- porn companies that provide some of the

11   pornographic images and content, are actually interested

12   in protecting some of their content.

13   So that's one mechanism that you can do that.

14   MS. THOMAS: Okay. Are there programs on the

15   horizon that will be able to go beyond looking at file

16   names, or meta data or even finger prints, and evaluate

17   the actual images or videos?

18   Jules, do you want to talk about what AOL is

19   doing?

20   MR. POLONETSKY: Yes, I mean I don't think

21   there is anything out there that is perfect yet when it

22   comes to any of the filtering or parental controls, which

23   is why our general strategy is that the parent needs to

24   make a decision as to whether they want their kid or

25   their team being able to use file-sharing software.

1   So we're generally, for instance, for kids, or

2   young teens account, unless a parent has specifically

3   made the decision to allow access to that filing sharing

4   site, or to turn off sort of general web filtering where

5   blocking access with the use of those programs, number

6   one.

7   But number two, you know, the low hanging fruit

8   is easy to do. All right. Known child porn that hasn't

9   been changed, one could screen for those digital

10   signatures. But if it's been changed, or tweaked, or

11   there's an unknown number of users, you know, dealing

12   with various permutations of it, most of the filtering

13   that's out there, isn't going to be completely effective.

14   The things that can be done, again, you know,

15   to detect and report and attract the people who are doing

16   it in a way that identifies them, but generally I don't

17   think there's a perfect solution for making sure that a

18   problematic file doesn't get in front of a user, you

19   know, really efficiently.

20   MS. THOMAS: And I think you also mentioned

21   that AOL is filtering for child pornography in eMails.

22   Could you make this technology for files downloaded via

23   P-to-P?

24   MR. POLONETSKY: You know, again, there

25   probably are a number of ways that working both with

1   NICNIC and law enforcement, that users that are eMailing

2   or IMing or trading child porn, and that can work either

3   by, again, looking for known problem files that can work.

4   We've got, you know, various notify buttons on

5   IM or an eMail that allows a verified copy of what's

6   taking place; the user, the time, the date stamp,

7   something that can be if an appropriate legal process is

8   carried out, or if it's something we're obligated to pass

9   on, for instance in the child porn instance.

10   Not something that's happening now on the

11   P-to-P side. Traffic, not necessarily coming through our

12   servers where the scanning is being done because of the

13   nature of the connection. And again, it gives more of

14   the impression that it can solve a problem. It could

15   ideally go after the known images, but the child porn

16   problem is far beyond what may exist in a particular data

17   base.

18   So right now the most effective solution is the

19   parent being aware of the risks, and saying I do, or I

20   don't want my teen or kid to be able to use this type of

21   software, given all the issues that are involved.

22   MS. THOMAS: Okay. Bob Kessinger, I believe

23   your parent company, SurfControl, is using an image

24   filter. Could you describe it, and how it works?

25   MR. KESSINGER: Just to follow on Jules' point,

1   that the image filter is not 100 percent, but we do

2   utilize an image filter. We license the technology, and

3   we actually use that on network based eMail.

4   It's not to the consumer level at this point.

5   There is a lot of debate on processing speeds and what

6   that might take, but the technology is actually out

7   there. There are a couple of firms that are trying to

8   use that for web based images, as well as some eMail

9   based images.

10   So the technology is there, it's not 100

11   percent, but it is actually being used today in

12   corporations.

13   MS. THOMAS: And just to be clear. This

14   technology actually scans images and decide whether or

15   not they are likely to be pornographic?

16   MR. KESSINGER: Yes. It takes -- again, it's

17   almost like a digital finger print. We can use a digital

18   finger print technology for a particular file, but, even

19   beyond that, we can look at the image and apply, you

20   know, different algorithms to determine and make a

21   determination as to whether that particular image should

22   be quarantined, and then it can be sent somewhere where

23   it can be analyzed.

24   MS. THOMAS: Okay. You said this is being used

25   for eMail, but it's not being used on web pages yet

1   because of the lag time it would cause in viewing the web

2   page.

3   But couldn't -- what would be the problem with

4   using this technology to scan files that have been

5   downloaded as they're about to be opened from P-to-P?

6   MR. KESSINGER: Well, again, it depends on

7   whether there is any issue with latency, but I would

8   think that as this technology gets better, you'll see it

9   being used in more applications.

10   A PARTICIPANT: Yes, and I think what we find,

11 you know, if you're talking about it being used for

12 general web filtering, not just specifically for P-to-P;

13 you know, what we use in addition to the various

14 technical guesses that can be made by algorithms, by the

15 way the text is labeled, by the other clues, is if we

16 haven't seen it before, right.

17   With a fairly wide installed user base, and,

18 you know, millions of people banging on it or reporting

19 things, you can end up seeing a lot of what's out there.

20   And so, if we've seen it, then we've got it

21 labeled hopefully, and we can deal with it going forward.

22 If we haven't seen it, and we're making a decision about

23 rating it on the fly.

24   That's where you -- I think where we find need

25 a combination of both technology or human review if we're

1   going to make a decision about whether a web site is

2   going to be available, you know, for all of our users to

3   be able to see it.

4   MS. THOMAS: Well, if the use of P-to-P file-

5   sharing software has all of the risks we discussed this

6   morning, and that we've been discussing on this panel,

7   why not allow parents to simply block the downloading or

8   use of P-to-P file-sharing programs?

9   Jerold, Jules, and Bob, all three of your

10   companies offer P-to-P blocking tools. I'd like to ask

11   each of you in turn to explain how your blocking tool

12   works, starting with Jerald?

13   MR. BLOCK: Thank you. I'd like to start,

14   actually, by describing a little bit about the company,

15   SmartGuard, and then move on to describing our particular

16   solution.

17   The company was founded by myself, a

18   psychiatrist, and Dr. Goldstein, who is in the audience,

19   who is an internist, and was motivated with our working

20   families and seeing that families were struggling,

21   adults, particularly the parents, were struggling with

22   controlling their children's computer use.

23   And our interests at that time, when we formed

24   the company, was looking at gaming, computer gaming, and

25   trying to build a tool that could be used by parents to

1   help them know how many hours are spent gaming, what

2   games are being played, and to set limits on that. Only

3   age appropriate games, et cetera.

4   What we found was the -- it presents unique

5   problems in that you have an interested party, the child,

6   who wants to play the game, and you have the game

7   producers producing the game, And so these two -- you

8   know there's a lot of forces in play to make sure that

9   that game is played.

10   And what we ended up having to do was produce a

11   tool that could uniquely and specifically identify an

12   application as it's being double clicked and started up.

13   And that is really our core technology.

14   And that technology, we soon realized, could be

15   applied to other areas. It could be applied to detecting

16   an adware, detecting spyware, and, in this case,

17   detecting peer-to-peer programs as they're started up.

18   And the way we handled that -- let's go to the

19   next slide. The way we handled that, is the parent makes

20   a decision whether or not to use our particular software,

21   which is called Blockster.

22   And the parent can use in really three

23   different ways, or four different ways, depending on how

24   you look at it. One way, is they can decide not to use

25   it and decide peer-to-peer is fine. They're okay with

1   their child using peer-to-peer.

2   The other way they can use it, is they can --

3   when you install the software you get a password, and

4   I'll demonstrate all this to you.

5   The parent can give that password to their

6   children, and upon giving that password, the child can

7   use the peer-to-peer programs as much as they want. What

8   will happen is each time the peer-to-peer is launched, an

9   eMail will be sent from our central server indicating to

10   the parent that a peer-to-peer program was launched on

11   such and such a date, at such and such a time.

12   The next level of supervision a parent can

13   apply, is they want to have actual control over peer-to-

14   peer programs each time they're launched. So in that

15   case, they would hold the password to them self. The

16   child will call them over and say I want to use Kaza, and

17   the parent would type in the password, and Kaza would

18   launch.

19   And of course, the most severe sort of

20   restriction would be if the parent decided never to use

21   the password, and it would not permit Kaza to launch at

22   all.

23   Why don't we show the movie. Okay. So what

24   I'm going to show you is us launching Note Pad. And

25   you'll see it launches normally, no problem. And we're

1   going to close it down here and you'll get a little box

2   that says do you want to stop that.

3   Now we're going to launch a peer-to-peer

4   program called Shereza, and you'll see a dialog box comes

5   up asking for the password. The child doesn't know the

6   password, so he's going to make one up and try a quick

7   run, and the password is incorrect.

8   Now the child will click, don't run. He'll now

9   change the name of Shereza, to Not Shereza in an attempt

10   to get around this.

11   This is actually important because a lot of

12   problems have tried to do something like this won't

13   detect that, which is pretty straightforward.

14   And you'll see it still is able to identify the

15   program. So now, finally, the kid calls over their

16   mother, types in the correct password, and boom, Shereza

17   opens up.

18   We have right now somewhere on the order of

19   about a hundred peer-to-peer programs, and, you know,

20   it's important to realize when we're talking about this,

21   that there are literally a hundred peer-to-peer programs

22   out there, and probably about 500 variants on each --

23   total variance. So different versions.

24   So you're talking about a huge universe of

25   different programs that, you know, when we're talking

1   about Kaza or Morpheus, that's just one small segment of

2   the entire range of products that people are using. And

3   a lot of those are developed and made by hobbyists, and

4   not for profit, which is an important distinction.

5   Going back to the slides. Let's go to the next

6   slide show B. I'll go back one. Okay. There we go.

7   All right.

8   So as a result of all the Shereza aN things

9   that we showed in that movie, there will be two letters

10   generated. We printed one here for you. The first

11   letter would say it was blocked, because that's what

12   happened initially.

13   The second letter indicates we allowed it to

14   run because the override password was used at such and

15   such a date, such and such a time, and the program was

16   Shereza.

17   The parent -- notice the parent doesn't need to

18   know anything about what is a peer-to-peer program, what

19   are the peer-to-peer programs, what are the conversions,

20   all that. The program is smart enough to be able to

21   tackle all that at the time of the double click.

22   Okay. So just to summarize why we like our

23   solution. There are other alternatives. You know, you

24   can use port blocking for example, but the problem with

25   port blocking is the child is interested in doing the

1   downloading.

2   So port blocking, they can get around the port.

3   They can open a hole, as we've heard.

4   You can try to sniff packets or examine packets

5   of information as it comes by you on the web, and look to

6   find signatures of specific songs. However, encryption

7   destroys that ability. If the files are encrypted, you

8   don't -- you can't effectively sniff anymore at the time,

9   at least on the web.

10   You know, and there are a lot of other

11   solutions I could through this, but I think we decided

12   that the real -- really the issue is on an application

13   level; do you want the peer-to-peer program to run. If

14   you do, then let it run, but if you don't, then the

15   parent should be able to restrict that.

16   Okay. And this shows how the effectiveness of

17   the program. We're looking about mid graph is three

18   weeks out, and these are the number of launches of peer-

19   to-peer programs that are attempted, and you can see it's

20   effective.

21   MS. THOMAS: When you say three weeks out, you

22   mean three weeks after the parent has installed your

23   software and put the blocker on?

24   MR. BLOCK: That's right. It's an aggregate

25   piece of data, looking at everybody that's installed the

1   product, and a day out, two days out, three days out from

2   the point of installation how many attempts are made to

3   launch a peer-to-peer program.

4   And if you want to get into detail, the green

5   line there indicates that the launch was overridden and

6   permitted by the parent, and the red line indicates

7   blocked.

8   MS. THOMAS: So in other words, the kids

9   eventually figure out that they're being blocked and give

10   up trying?

11   MR. BLOCK: Yes. They get it two different

12   ways. They get it from the immediate message that pops

13   up, and they also get it from the eMail message that's

14   sent to the parent.

15   MS. THOMAS: Jules, would you like to briefly

16   describe what P-to-P blocking tools AOL is using?

17   MR. POLONETSKY: Sure. The brief overview of

18   the general product control structure follows the

19   philosophy that a parent should be able to make decisions

20   about how the kids in their house are using their PC.

21   Whether it's types of web site they can get to, or

22   whether they can IM, or whether they can use peer-to-peer

23   software.

24   In the broad band world, it's also important to

25   recognize that users are closing their ISP or their AOL

1   and perhaps using an external browser.

2   So what we do, is we provide a piece of

3   software that you can download that will require a kid or

4   a teen or anybody logging onto that computer to

5   authenticate, and if it's a parental controlled account,

6   they're forced to go through the tunnels that they've got

7   the same level of protection built in. As well as

8   timers, as well as reports to parents.

9   On the next slide, to focus specifically on the

10   file-sharing, we take a couple of different approaches.

11   One, is that our default settings for parental controls -

12   - and, again, the parent can allow access to a specific

13   site, or a parent can turn off the filtering function

14   generally so it's -- and a child can request, even

15   remotely.

16   A parent can be sitting at work, the kid can be

17   at home, I need to get to this site for school, for

18   homework, and send a message to the parent, please unlock

19   it. And so the parent can unlock it remotely.

20   The kid can be at a friend's house and want to

21   get on and get, or not get, access. If they're coming

22   in, again, through their protected account, the same

23   level of control since their host base are going to be in

24   effect.

25   So number one, we're blocking the known file-

1   sharing web sites for parental controlled accounts,

2   unless a parent is opening up.

3   And then, number two, given the nature of the

4   way many of the P-to-P applications work where a user is

5   making a connection with some unknown other user, some

6   unknown IP address, since we don't know that IP hasn't

7   been rated, it's not something that's going to be rated

8   on the fly. The user, even if he's gotten to some site

9   that we weren't aware of and downloaded, the application

10   isn't going to be able to effectively launch and use the

11   P-to-P application.

12   And as a result, even if your older teen who

13   perhaps isn't on the account, or somebody else in the

14   family downloaded it, the -- or you download it before

15   you learned and were aware that there is a set of

16   controls here so that the software is on your PC, the

17   user won't be able to launch and effectively use it to

18   swap files.

19   And again, the parent has a level of control

20   over that should he or she decide this is a responsible

21   kid who is going to use it the right way, or I'm going to

22   be involved in what the child is doing. And so can

23   therefore customize it.

24   MS. THOMAS: Okay. Bob, we've only heard from

25   you briefly so far today, but now is your chance to

1   elaborate on what Cyber Patrol does, and how it handles

2   the issue of P-to-P file-sharing.

3   MR. KESSINGER: This will be plenty. Well,

4   we've already heard about all the P-to-P threats. You

5   know, and certainly the parents and folks I have talked

6   to are certainly concerned about copyright issues and

7   spyware, viruses, adware; we've covered that.

8   But the thing that we focus on is really the

9   inappropriate and illegal content. And you know, we've

10   talked about this a lot today.

11   Notwithstanding any operating system issues,

12   we've created a great cottage industry here. We've got

13   anti-virus, fire walls, content and eMail filters. We've

14   got anti-spyware.

15   The reality is, is -- as Jules and AOL plays in

16   the consumer space, as do we. The reality is that the

17   vast majority of folks have Windows. They have all of

18   these issues. They have spyware, and, you know, what we

19   have to do as an industry is to educate and supervise.

20   Particularly when it comes to adults and children.

21   So basically if children are on-line, do

22   something. It doesn't matter if you use Blockster, or if

23   you're with AOL, what we want to do, is we want you to do

24   something.

25   Look at all of the different options, and bring

1   it into your home if you have children. Anybody else who

2   is on-line, if you're at college, well, that's a

3   different story. You can do quite a lot of different

4   things.

5   So how does Cyber Patrol address P-to-P issues

6   specifically. First, what we do, is we limit access to

7   those sites. We do have a data base. We have multiple

8   technologies.

9   I should step back a bit, and say that we have

10   been involved in these controversial Internet issues

11   since 1995. So we've been here, we can see both sides of

12   it.

13   As a for profit software company we can

14   certainly understand where the P-to-P folks are coming

15   from, but we can also see the other inherent dangers that

16   parents have when they're supervising their children.

17   The second thing that we can do, is we can

18   restrict access to programs. This is somewhat similar to

19   what Blockster does. We do that in a different way.

20   And the third thing that we do, is we filter by

21   file extension. All of this, again, to reiterate what

22   Jules has said, is that this is up to the parents in the

23   household. We make these tools available for them to

24   use, and they should use it.

25   The vast majority of folks that I speak to at

1   my age with kids, 10, 12 years old; is that they have not

2   installed these file-sharing programs, but the kids have.

3   I think I've got some ways in which this works.

4   So again, I mentioned that we have layered filtering. So

5   we use multiple techniques, reviewed site lists, smart

6   patterns, web page analysis.

7   This is a really interesting piece. If it's

8   not in our file, we actually analyze contextually the

9   content of a page. We categorize those sites.

10   The next is just a screen shot of how we would

11   do file extension filtering, and the third one is

12   managing those programs and applications. Basically, if

13   there is a program or application that you don't want the

14   child to use, you can determine that and set that to

15   disallow.

16   And some pretty pictures as to what the kids

17   might see when they try to access a site that they

18   shouldn't be on.

19   MS. THOMAS: Okay.

20   MR. KESSINGER: I think that's pretty much what

21   we do, and what we're looking to do. Primarily working

22   with parents to protect children on-line.

23   MS. THOMAS: Okay. I want to thank you all for

24   sharing with us information about the tools available to

25   reduce risks, and we're going to questions from the

1   audience now. But I don't see anybody lined up. So

2   okay.

3   A PARTICIPANT: Hi, there. Well, I really

4   don't have a question. I have an answer for you that

5   went to one of your questions that went unanswered.

6   Certainly it is possible for fire walls to

7   block these various so-called harmful files that people

8   might get. With the current state of technology, it's

9   eminently possible.

10   The main reason it doesn't happen is what I

11   call the whine factor: people start whining about, well,

12   why is this blocked? Why can't I do everything I want

13   without asking permission? And that's the main problem.

14   If you set up a fire wall with absolutely no

15   access through it either way, and then as the users on

16   the inside of the fire wall need this, that, or the other

17   thing, you selectively allow that.

18   You can even do it in such a way that, for

19   instance, any file downloads do not download to the

20   user's machine directly. They download to the fire wall,

21   which then examines them to see if they are malicious

22   files that will damage or destroy weak operating systems

23   such as Microsoft Windows.

24   You know, that's certainly all technologically

25   possible. Now, my company puts those solutions in place

1   for our customers that either choose to, or cannot move

2   away --choose Microsoft Windows, or for Legacy

3   applications cannot move away from it.

4   MS. THOMAS: Okay.

5   A PARTICIPANT: I just think it's useful to

6   know for the typical consumer, even some of us who are a

7   little bit technical, our fire wall is saying to us, you

8   know, program hhhmmmm wants to access the Internet, is it

9   okay. You know, like is this something connected to my

10   operating system. Is this an evil thing, and, you know,

11   we kind of end up all of a sudden having to do a little

12   research.

13   And then -- you know, so for the default user,

14   I don't know that it's a great solution for the

15   sophisticated or the people offering, you know, broad

16   enterprise I'll make the decision for you, and, you know,

17   allow all the good stuff. Then it certainly is.

18   A PARTICIPANT: I have about three points to

19   make. First of all, I'm a little confused now, as I

20   often am. At this point, between whether we're talking -

21   - we're mostly concerned about the risk to the users or

22   the owners of computers, or whether we're concerned about

23   certain specific applications.

24   Now, for the sake of this gathering, I'm going

25   to offer my terminology, because I think what we're

1   trying to talk about is an application as a decentralized

2   search application.

3   P-to-P file-sharing, they don't really have to

4   do with what you're talking about. Certainly not this

5   panel.

6   What I think that we should be talking about is

7   the risk that happen to be unique to those kinds of

8   applications. Okay.

9   Now, I think that another comment for the FTC.

10 The FTC should distinguish copyright from the interest of

11 computer owners there. They are very, very different,

12 and the FTC has no commission for setting copyright

13 policy.

14   When you talk about something like filters,

15 okay, what we get is a pattern where Congress is

16 abrogating its responsibility to establish proper

17 copyright policy that reflects the nature of the

18 technology.

19   The nature of the technology is a peer-to-peer

20 net, and what the pattern is, that we have these sub

21 agency that end up establishing precedent for policy for

22 filtering. They're basically guided by narrow private

23 interests. Okay. Instead of the purpose of copyright,

24 which is to promote the powers of science and the useful

25 arts. When we have that discussion in Congress, then we

1   can make progress. I mean we really -- it does not help

2   that to mix copyright with private interest concerns

3   here.

4   And my final comment is, I think that the FTC

5   should be reporting back in case you might think to

6   overlook it, it's been stated twice now, that among the

7   technical solutions, encouraging the use of operating

8   systems that provide users choice transparency and

9   control by enforcing anti-trust provisions against that

10   monopoly operating system.

11   In particular, a very simple solution to most

12   of these problems that we're talking about these two

13   days, will be just by the enforcement of the Microsoft

14   refund clause in their own ULA. Thank you.

15   MS. THOMAS: Again, I think that's off topic.

16   Could the next person -- do you have a question? You

17   have a question, not a statement, that's great.

18   A PARTICIPANT: I have a quick comment and a

19   question.

20   MS. THOMAS: Okay.

21   A PARTICIPANT: Not to harp on the fire wall

22   issue again, but, you know, we have to remember that when

23   people are poking holes in their fire wall after

24   installing P-to-P software, you know, they're doing this

25   because they want to use the software and they want the

1   software to actually work.

2   You know, that's not some insidious thing that,

3   you know, because the software is evil they're poking

4   these holes that, you know, the people don't know about.

5   The holes are there so that the software can work at all.

6   My question is actually for Jules. A couple of

7   your slides were about, you know, viruses and spyware and

8   adware, and, you know, how to P-to-P file-sharing relates

9   into. But it seemed like, you know, again, it's not a

10   specific problem to P-to-P.

11   You know, on one of your slides you had I think

12   80 -- your example slide of someone's computer, an

13   average of 80 adware or spyware or virus programs on one

14   without any file-sharing program installed. And I think

15   it was 120 with the file-sharing program installed.

16   And it seems like, you know, why would we -- it

17   seems like the P-to-P software is being made to look like

18   the primary cause of these applications being installed,

19   these actually insidious applications being installed.

20   But I don't -- I just don't see that, and I think --

21   MR. POLONETSKY: Yes, I would suggest that if

22   one talked to the leading adware companies and asked

23   them, given that they all have different models of how

24   they distribute their software; whether they're

25   partnerships with leading P-to-P applications are

1   responsible for a very significant part of their

2   downloads, you get the answer to that.

3   And I think the answer is that for some of the

4   leading applications, a huge number of their installed

5   base comes from P-to-P application as the distribution.

6   But certainly there are other ways that people

7   can get spyware; free screen saver, I mean, you know,

8   type -- going to, you know, search engine-type free

9   screen saver and you'll get --

10   A PARTICIPANT: You can install anti-spyware

11   technology. You can also install the software that gets

12   rid of the spyware. So it's not --

13   MR. POLONETSKY: There are some P-to-P

14   applications that distribute adware that un-install other

15   adwares that they consider sypware, but that --

16   A PARTICIPANT: Or not.

17   MR. POLONETSKY: Or not. Right. So I agree

18   that it is not unique to P-to-P, but I think it wouldn't

19   be appropriate to not point to some of the leading file-

20   sharing programs whose business model is primarily

21   supported by the very wide distribution they're able to

22   give to adware.

23   So and I think the statistics, you know, that

24   you pointed out, show that. Yes, there's a lot of it

25   being distributed in other ways, but there is a

 1   significant amount of it being distributed via peer-to-

 2   peer software.

 3   A PARTICIPANT: Right. I just want people to

 4   not be confused by that point. Like, you know, there are

 5   80 -- 80 is a significant number, and 120 is a higher

 6   number obviously, but, you know, I think that can -- it's

 7   hard to tell whether there is a causal relationship.

 8   MR. POLONETSKY: Right. Eighty may slow down

 9   your computer, 120 is going to probably lead you to junk

10   it.

11   A PARTICIPANT: Right. And you know, 120 might

12   come from, you know, well, these people just like

13   installing stuff.

14   You know, not like installing stuff, but they

15   click on things all the time. Or they don't totally --

16   you know, so I wouldn't -- I wouldn't go as far as to say

17   that there is a causal relationship between people having

18   P-to-P file-sharing software installed and having more

19   adware installed. That's all.

20   MR. POLONETSKY: Well, if I could say

21   something. In my experience testing a lot of these

22   applications, there are some that are completely

23   offensive in terms of crashing your system.

24   I mean there are a few, I would say, after --

25   in general, after running three or four peer-to-peer

1   programs, I would have to completely reboot and refashion

2   the system in order to get through it.

3   There are others that have no adware and no

4   spyware, and those people that are involved with

5   downloading are -- there's a very good web site -- very

6   good web sites that indicate which ones to avoid, which

7   to go to, and there is some self selection as to, you

8   know, avoiding some of the more offensive ones.

9   MR. PAHL: Let's have one last question before

10   we break for lunch.

11   A PARTICIPANT: Sure. It's hardly a question.

12   Does this work? Okay. It's hardly a question, but

13   really, I don't think it's off-topic. You profess to be

14   worried about malware getting on people's machines.

15   If you have a competent operating system,

16   whether it comes via running a "P-to-P" program, whether

17   it comes via eMail that you download and then run, et

18   cetera, we have much better defenses, and there is a

19   whole ecology of incompetence, hopelessness and general

20   pollution of people's machines. And it comes about

21   because accept that they can't control their own

22   machines.

23   And I speak for the FTC getting in there and

24   saying, look, you've got a right to own your machine, and

25   here are some other operating systems that might help

1   you.

2   MR. PAHL: Thank you for your views. Let's

3   break for lunch. We'll be back at a quarter to 2:00.

4   One thing I did want to mention to people, is

5   that in addition to your questions, if anyone wants to

6   submit written comments, our record is going to remain

7   open for another month. So feel free to put any of your

8   thoughts in writing as well.

9   (Whereupon, at 12:45 p.m., a lunch recess was

10   taken.)

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1   A F T E R N O O N   S E S S I O N

2   (1:45 p.m.)

3   MR. PAHL: Thank you, everyone. We're about to

4   start our fourth panel, which is Government Responses to

5   P-to-P File-sharing Risks.

6   My name is Thomas Pahl; I'm the Assistant

7   Director in the FTC's Division of Advertising Practices,

8   and I will be moderating this panel.

9   Welcome back. This afternoon, we would like to

10   pick up where we left off this morning. Our second panel

11   this morning discussed the risks for consumers related to

12   P-to-P file-sharing programs.

13   Our third panel this morning addressed to what

14   extent innovation, specifically improvements in blocking

15   and filter technologies may reduce these risks.

16   Now it's time for us to examine the issue of

17   the role that government should play, and ought to play,

18   in decreasing risks related to P-to-P file-sharing

19   programs.

20   Fortunately, the distinguished members of our

21   next panel have the perspective and experience to address

22   this difficult and oftentimes contentious issue.

23   Before we begin, I would like to briefly

24   introduce our panelists, proceeding from your left to

25   your right. Unfortunately, David Israelite, Chairman of

1   the DOJ's Intellectual Property Task Force, is not able

2   to join us here today.

3   Fortunately, we are joined by Laura Parsky, a

4   Deputy Assistant Attorney General in the Criminal

5   Division at the Department of Justice. Among other

6   things, Ms. Parsky supervises the Criminal Division's

7   computer crime and intellectual property section and its

8   child exploitation and obscenity section.

9   Directly to Ms. Parsky's left is Lydia Parnes.

10   Lydia is the acting director of the Bureau of Consumer

11   Protection, here, at the Federal Trade Commission. Ms.

12   Parnes has been a longstanding member of the senior

13   management within the Commission's Bureau of Consumer

14   Protection.

15   Attorney General Jerry Kilgore, from Virginia,

16   will be on our panel, although he is running late. Prior

17   to becoming Virginia's Attorney General, he served as

18   Virginia's Secretary of Public Safety, as well as on the

19   front lines of law enforcement as both a state and

20   federal prosecutor.

21   Attorney General Kilgore is one of the State

22   attorney generals who sent a letter to the P-to-P file-

23   sharing industry last summer raising concerns about risks

24   associated with P-to-P file-sharing programs.

25   Next on our panel is Adam Eisgrau, who is the

 1   executive director, principal lobbyist, and spokesperson

 2   for P-to-P United, a trade association of five leading

 3   P-to-P file-sharing software developers formed in July of

 4   2003.

 5   To Adam's left is Jim Miller. Mr. Miller is

 6   the Chairman of CapAnalysis Group, which is comprised of

 7   over 50 professional economists, accountants, and

 8   regulatory experts. Prior to his current position, Mr.

 9   Miller was Chairman of the Federal Trade Commission and

10   Director of the Office of Management and Budget.

11   And finally, at the far end of the panel, is

12   Parry Aftab, an Internet privacy and security lawyer.

13   She is the Executive Director of Wiredsafety.org, the

14   oldest and largest on-line safety and educational program

15   in cyberspace. Through her work with Wiredsafety, Ms.

16   Aftab helps prevent and assist law enforcement agencies

17   in investigating cyber crime.

18   Let's begin with some opening remarks. I think

19   it would be useful, first, to hear from the government

20   representatives on our panel as to what government

21   currently is doing to deal with the risks associated with

22   P-to-P file-sharing programs, and we'll start with Ms.

23   Parsky.

24   MS. PARSKY: Good afternoon. Sorry that I'm

25   not David Israelite. I was a member of the IP task

1   force, and my position at the Department of Justice is as

2   Deputy Assistant Attorney General, and two of the

3   sections of the criminal division that I supervise are

4   the computer crime and intellectual property sections and

5   the child exploitation and obscenity sections.

6   And with respect to both of those criminal

7   enforcement sections, clearly the Internet and P-to-P

8   networks have a great impact on the work we're doing, on

9   the criminal statutes that we enforce, and on the

10   community and the types of harms that we're trying to

11   protect.

12   With respect to copyright infringement, which

13   is handled through our -- the computer crime and

14   intellectual property section, and then the many -- I

15   think it's 94 U.S. Attorneys Offices across the country,

16   P-to-P networks have really brought an explosion of

17   copyright infringement, and we at the criminal level are

18   really focusing on large scale harm that come from this,

19   and this is an area that we're paying particular close

20   attention to.

21   As some of you may be aware, the Attorney

22   General set up the IP task force of the Department of

23   Justice in March, of this year, and he designated several

24   higher level officials in the department as members of

25   the task force, and directed them to examine all the ways

1   the Department of Justice deals with intellectual

2   property rights enforcement, and then to make

3   recommendations for improvements.

4   And we went through a very rigorous process

5   looking at the criminal aspects of IP enforcement, civil

6   aspects, legislative and regulatory aspects,

7   international aspects, and, also, public awareness.

8   And in October the Attorney General released a

9   public report that laid out many of the recommendations

10   that came out of that task force.

11   And this is part of an on-going initiative at

12   the Department to really focus and crack down on

13   intellectual property crime, and copyright infringement

14   being one of those crimes.

15   And recognizing that intellectual property

16   crime jeopardizes the creativity and innovation that are

17   a foundation of our economy, and also threatens public

18   health and safety in many areas.

19   And this is something that is a critical task

20   for the Department of Justice to be protecting

21   communities and finding ways to ensure economic safety,

22   and, also, our physical safety.

23   And as part of that endeavor, we have been

24   really looking at all aspects of intellectual property

25   crime, regardless of the medium on which these crimes may

1   be conducted.

2   Certainly we're looking at hard goods, but

3   we're also looking at digital goods. We've really

4   recently focused our efforts on on-line piracy. And

5   particularly we have focused on wares groups, which are

6   large organized distribution networks that really have

7   created a mass proliferation of infringement over the

8   Internet.

9   In April of this year, the Criminal Division

10   and the FBI conducted the largest international law

11   enforcement effort ever undertaken against on-line

12   piracy. It was called Operation FastLink, where law

13   enforcement simultaneously in a 24-hour period conducted

14   120 searches around the world. And this included the

15   seizure of over 200 computers.

16   In addition, we have focused our efforts on

17   looking at all the different players that contribute to

18   criminal IP infringement.

19   Most recently, and most relevant to this

20   workshop here, in August of this year, the Department

21   announced Operation Digital Gridlock, which was the first

22   Federal enforcement action taken against criminal

23   copyright piracy conducted over P-to-P networks.

24   This operation resulted in the seizure of more

25   than 40 tara bytes of pirated work from computers located

1   in Texas, New York, and Wisconsin.

2   In addition to the work that the Criminal

3   Division is doing through the Computer Crime and

4   Intellectual Property Section, the other relevant section

5   to your discussions here is the Child Exploitation and

6   Obscenity Section.

7   And P-to-P networks have become a hot bed of

8   child pornography, and this is a crime that, unlike other

9   crimes, really injures the victim every time the image is

10   shown. Not only because it may whet the appetite of

11   sexual predators, but because it exposes the child that

12   many more times.

13   In May of this year, the Attorney General

14   announced national law enforcement initiatives. That was

15   begun in the fall of last year. It's aimed at child

16   pornography over peer-to-peer networks. It's being

17   distributed over peer-to-peer networks.

18   This is something that federal law enforcement,

19   state and local law enforcement, the prosecutors at the

20   Department of Justice and in all the U.S. Attorneys

21   Offices, and non-profit organizations, such as NICMAC,

22   have joined together to really focus in on this form of

23   proliferation of child pornography, and cracked down on

24   abuse.

25   There were multiple agencies, multiple

1   jurisdictions involved in this initiative. It wasn't

2   just the Department of Justice, the Department of

3   Homeland Security, Immigration and Customs Enforcement

4   Office was also involved.

5   And to date, as part of this initiative, over a

6   thousand investigations have been initiated world wide --

7   nation wide. Hundreds of searches have been conducted.

8   There are already 17 defendants who have been convicted,

9   and six who have been sentenced.

10   And one of the critical things that has come

11   out of a lot of these investigations, is as we have

12   followed the distribution of child pornography over peer-

13   to-peer networks and started to trace it back to

14   individuals, we found many of these individuals are

15   registered sex offenders, have actually molested

16   children, and not just images. And it's proven to be a

17   critical tool in our efforts to protect children from

18   physical exploitation.

19   And I think that gives you sort of a general

20   sense of where we are at the Department of Justice in

21   terms of really looking hard at new technologies as they

22   develop, and trying to focus our efforts on ways to send

23   a clear message that these are crimes no mater what

24   medium is used, and that we all at the community have a

25   responsibility to protect our children. To protect the

1   core contributors to our economic well being, and to

2   protect the laws.

3   So that's our main message, and we look forward

4   to working with any of you that are able to assist us in

5   that endeavor. Thank you.

6   MS. PARNES: Well, I've been asked to give a

7   brief outline of what the Federal Trade Commission --

8   what the FTC's response is to the risks associated with

9   P-to-P file-sharing.

10   As many of you heard Chairman Majoras this

11   morning, and in her remarks she noted that new

12   technologies like P-to-P present new legal challenges.

13   That's exactly what we're dealing with here. How we can

14   protect property rights, privacy and the competitive

15   process, and still let creativity and innovation thrive.

16   Well, those of you who follow the FTC will

17   recognize a very familiar pattern to our approach to

18   P-to-P. What we plan to do, is what we're doing today,

19   hold workshops, engage in law enforcement, and also

20   engage in consumer education.

21   Many of you follow the technological issues

22   that the FTC deals with. And so you know that we often

23   hold hearings and workshops to study emerging issues.

24   Our goal is to learn from the experiences that consumers

25   have had, the experiences that industry representatives

1   have had to learn from academics, and from other

2   government agencies.

3   We've held workshops in a variety of areas,

4   including spam, spyware, on-line privacy, security, and

5   RFID.

6   And our goal for today's workshop is to develop

7   information that will help us in our law enforcement

8   efforts, and also assist us in educating consumers and

9   promoting private sector measures, as well as informing

10 ourselves and other policy makers about the issues

11 surrounding P-to-P file-sharing.

12   Workshops alone don't make up the program, and

13 the second part of it, as I mentioned, is law

14 enforcement. I think that you may be aware of the

15 parameters of the Commission's general consumer

16 protection law enforcement authority.

17   Under Section V, of the FTC Act, the Commission

18 is authorized to bring cases challenging unfair or

19 deceptive acts or practices. The Commission's law

20 enforcement activities against unfair or deceptive acts

21 and practices, are designed to promote informed consumer

22 choice.

23   Now, our authority is very broad, but it does

24 have limits. And most notably, for the purposes of our

25 discussion today, the Commission does not have the

1   authority to bring cases against those who violate

2   copyright or anti-pornography laws.

3   As you've heard from Laura, there are other

4   federal -- and, also, as you will hear, state officials

5   who enforce these laws.

6   So what can the FTC do in law enforcement;

7   well, first of all, we can challenge false or misleading

8   claims that are made for P-to-P file-sharing programs as

9   deceptive under Section V.

10   But our law enforcement authority is informed

11   by several concepts that are really important, and I just

12   want to kind of outline for you.

13   First of all, when we're pursuing a claim as

14   deceptive, we examine that claim from the perspective of

15   a reasonable consumer. How would that claim be

16   interpreted, and we examine the claim in the context of

17   the entire advertisement.

18   A second important point, is a claim that is

19   literally true can be deceptive if it's used in a way

20   that creates a misleading impression. And finally,

21   deception law does not require disclosures of all

22   information that a consumer might want.

23   I should note here, you know, that I know you

24   are all on-line looking at P-to-P file-sharing sites. If

25   you see claims that are potentially deceptive, you should

1   let us know about it.

2   Now, the FTC does not believe that file-sharing

3   distributors have a legal duty to affirmatively make

4   disclosures about the risks associated with P-to-P

5   software programs. But when we looked at this, we did

6   conclude that consumers would benefit from receiving more

7   information about these programs, and about the risks

8   associated with these programs.

9   To encourage more disclosures, our staff sent

10   letters to what were then the 10 largest distributors of

11   file-sharing programs, and we encouraged them to improve

12   their consumer risk disclosures.

13   You've already heard today that industry

14   members have developed two proposals to improve these

15   disclosures, and they will begin implementing these

16   programs shortly.

17   We want to hear what others, what you all and

18   others think about these proposals, and our goal will be

19   to monitor implementation, and to continue to monitor the

20   use of these disclosures.

21   We view this as an ongoing process, and we hope

22   to hear what you have to say about the programs, and to

23   improve the information that goes out to consumers.

24   Our final approach in dealing with P-to-P, is

25   consumer education. We have a comprehensive consumer

1   education program, and our materials are designed with

2   two main goals.

3   We want to give consumers information they need

4   to help them avoid becoming a victim, and we want to give

5   them the kind of information we need to assist them in

6   making better informed decisions.

7   We've issued -- I think you've heard earlier,

8   we've issued a consumer alert addressing the potential

9   risks of filing sharing. It's available on our web site

10   and I believe in the packages that you've received. And

11   we think it's quite good.

12   And finally, I would just note that we plan to

13   take all of the information that we learn at this

14   workshop, as well as the public comments that we've

15   received, and increase our efforts to educate consumers

16   about the risks associated with P-to-P file-sharing.

17   MR. PAHL: Thank you, Ms. Parnes, and welcome,

18   Attorney General Kilgore, and I'll ask him if he could

19   give us some thoughts about what the states are doing to

20   address the risks associated with P-to-P.

21   MR. KILGORE: Thank you so much. It's great to

22   be with you here to talk about what we're doing in the

23   Virginia Attorney General's Office to educate and protect

24   consumers in relation to the use of peer-to-peer file-

25   sharing programs.

1   When I first took office in 2002, I recognized

2   that the law enforcement community were several steps

3   behind the criminals in understanding the potential for

4   crime inherent in computers and the Internet, and

5   certainly combating such crime.

6   A proactive approach was needed in order to

7   close this gap and seize the initiative from the criminal

8   element. With this in mind, I appointed a Deputy

9   Attorney General for Technology, who is with us today,

10   Richard Campbell, and equipped him with a computer crime

11   unit staffed with investigators and prosecutors skilled

12   in computer communications and other Internet

13   technologies in order to vigorously investigate and

14   prosecute illegal activities conducted over the Internet.

15   My computer crimes unit is authorized by law

16   now to investigate and to prosecute child exploitation,

17   computer crimes, and other crimes committed with a

18   computer across the Commonwealth.

19   Peer-to-peer file-sharing is one of the biggest

20   frontiers for this new breed of criminals who roam the

21   Internet. While P-to-P offers some potentially good

22   uses, it also presents very new hazards.

23   As a leader with the National Association of

24   Attorneys Generals Internet Crime Committee, I have

25   recently sent a letter to the major peer-to-peer file-

1   sharing companies, joined by 48 of my fellow Attorney

2   Generals.

3   We question the P-to-P file-sharing companies

4   failure to provide consumers with the necessary

5   information to make informed decisions about file-sharing

6   technology, and, most importantly, it's potential

7   dangers.

8   We also joined the Amicus Brief, asking the

9   Supreme Court to hear the appeal from the Ninth Circuit's

10   ruling. We were pleased that last Friday the Court

11   granted the petition for cert.

12   Writing letters, filing briefs, and making

13   appeals to producers of software programs will not solve

14   this problem. Leadership and boldness are essential.

15   You'll probably note that Virginia is the

16   Internet capital of the world, with over half the world's

17   Internet traffic passing through our borders.

18   Because of this, we long believed that it is

19   important for Virginia to lead the way in legal issues

20   involving the Internet and technology. That's what led

21   us to pass the toughest anti-spam law in the nation, and

22   then to pursue the criminal prosecution of spammers.

23   Just a few miles from here, in Loudon County,

24   Virginia, a jury recently convicted a spammer and

25   recommended a nine year prison sentence for his crimes.

1   This is a first of the kind prosecution in the nation.

2   The same spirit, I have embarked on a campaign

3   to educate consumers about the pitfalls that go along

4   with using P-to-P programs. Identity theft is the

5   nation's fastest growing crime. As my unit prosecutes

6   identity theft related cases, I'm increasingly concerned

7   that many consumers who use this P-to-P software and

8   knowingly give other users access to private information

9   stored on their computers, and they expose them self to

10   identity thieves.

11   There is an even darker side to P-to-P. P-to-P

12   technology is quickly becoming the preferred means of

13   disseminating images of child pornography and

14   pornographic material in general.

15   The filtering systems that are currently in use

16   by many parents in an effort to protect their children

17   are simply inadequate. When searching and downloading

18   images on peer-to-peer networks juvenile users face a

19   significant risk of inadvertent exposure to pornography,

20   including child pornography. Worse yet, they increase

21   their chances to direct exposure to pedophiles.

22   One of the missions of my Computer Crimes Unit

23   is to study trends in computer crime. We have found that

24   these file-sharing programs are emerging as a conduit for

25   the sharing of child pornography images and videos.

1   Operation Peerless is an undercover sting operation

2   recently run by many Internet crimes against children

3   task forces across the country to target the growing

4   phenomenon of child pornography trading by P-to-P

5   programs. Over 7500 cases were generated nationwide; 148

6   of these were in Virginia.

7   Our office has been working with our Virginia

8   counterparts to investigate and prosecute many of these

9   cases throughout the Commonwealth.

10   It is quite disturbing that some P-to-P

11   services are now adding encryption features that will

12   make it more difficult for law enforcement to investigate

13   illegal activities that stem from the use of this

14   technology.

15   Finally, since peer-to-peer file-sharing

16   programs are largely used for the extensive sharing of

17   copper routed digital music and movies, a popular past

18   time for our young people today, I've created a Virginia

19   safety net program aimed at educating middle school

20   children and their parents about the safe and responsible

21   use of computers and the Internet.

22   I've traveled to schools all over the

23   Commonwealth speaking to hundreds of kids at a time about

24   this technological revolution that has occurred over the

25   past decade or so. I warned them about the risks that

1   they so annoyingly take on by opening their family

2   computer files for the entire world to see.

3   I've talked to them about the inappropriate

4   material that is often thrust upon them when they enter

5   such innocent terms as Brittany Spears or the Olsen

6   twins. I also try to get them to understand the piracy

7   problems with downloading movies and music that they have

8   not legitimately purchased.

9   The technology has not only changed the tools

10   that we use to perform the task, it's also changed the

11   ways in which we entertain ourselves.

12   Years ago, none of us would have imagined

13   listening to a song on the computer, much less watching a

14   full length feature film. But in this world that our

15   children growing up in, Nintendo, the X-Box, Final

16   Fantasy; they expect it.

17   And as parents, I know I would be horrified to

18   hear that one of my children had gone into a record store

19   or video store and taken a CD, video tape or DVD without

20   paying for it.

21   So we must continue to instill the same respect

22   for the property rights of others when it comes to

23   downloading music and movies.

24   Just yesterday, we learned that the U.S. film

25   industries are preparing to go after servers that allow

1   for the unauthorized distribution by P-to-P technology of

2   copyrighted material.

3   Just as the film industry is pursuing piracy on

4   the Internet with private actions, so too must law

5   enforcement lead the way by aggressively calling misuers

6   of P-to-P to justice with prosecution.

7   These are just some of the measures that I

8   found to be necessary to help ensure the safety of those

9   who travel the largely unrestricted frontier of the

10   Internet, and my office is going to continue to take bold

11   steps to protect the legitimate opportunities,

12   technology, and the web provide.

13   I want to thank the FTC for hosting this forum

14   for the decision makers in both the public and the

15   private sector. I believe it's through events like this

16   that we can make the Internet even safer for our children

17   and our future. Thank you.

18   MR. PAHL: Thank you. Now, let's hear from the

19   rest of the panel on what the government should be doing,

20   or should be doing better to confront P-to-P file-sharing

21   risk. Starting with Mr. Eisgrau.

22   MR. EISGRAU: Thank you, Tom, and let me extend

23   those thanks to all of the members of your staff and

24   staff of other bureaus involved in putting this together,

25   and, indeed, to the Federal Trade Commission itself.

1   Before going into some degree of detail, and

2   necessarily I feel compelled that I must and should,

3   candidly lots of information has been presented today.

4   It's all going to be on the record. There will be an

5   opportunity to file further comments.

6   You have heard a great deal, and policy-makers

7   continue to hear a great deal, of deliberately deceptive

8   and misleading information -- and I use those words

9   advisedly, having just been educated about their legal

10   meaning -- from parochial interests intending to put the

11   purveyors of a technology, and that is indeed the members

12   of my association, as we can talk about, and I hope we

13   will -- out of business. Because it is a business.

14   A PARTICIPANT: Hear, hear.

15   MR. EISGRAU: Let's respect the format. I

16   would concur with the FTC on that.

17   We are relying -- and I say this candidly, and

18   in the hope that this will be the nature of the record in

19   this proceeding and the way the record is used.

20   We are relying on the record of this proceeding

21   and the Federal Trade Commission to go to the first

22   bullet point about the purpose of this panel to do what

23   government should objectively do; hold people who should

24   be responsible, accountable for their actions; to take

25   all of the actions -- is in fact a much broader one that

1   relates to the Internet overall. That relates to all

2   electronic communications.

3   We'll come back to the bullets I hope for the

4   purpose of the panel, because that degree of oversight is

5   something that we very much welcome. And we hope that

6   other policy makers, as Ms. Parnes indicated, it is the

7   role of the FTC to help educate policy makers in others

8   arms of government.

9   And I don't mean to be oblique, I am talking

10   about Congress here. And I am talking about members of

11   the corp of Attorney Generals who quite properly are

12   concerned about these issues; will take the record of

13   these proceedings in its entirety into account.

14   If I may go to the slides, Tom. Thanks.

15   P-to-P United was formed in July, of 2003, by five

16   software companies. I'll put their logos up there, but

17   you know their names from earlier presentations today.

18   The web site as you see it, is not -- or will

19   see it momentarily. That's okay. It's about technology,

20   why shouldn't there be a glitch, right.

21   MR. PAHL: Excuse me. It'll be a moment.

22   MR. EISGRAU: That's quite all right. The

23   organization was formed for the reason that I somewhat

24   strenuously articulated a moment ago. Misinformation was

25   being presented to policy makers about the nature of

1   peer-to-peer technology and the people who purvey it.

2   Morpheus, or the makers of Morpheus, developers

3   of Morpheus, Grockster, Lovster, EDonkey, and BearShare

4   are the current members of the association. Limewire was

5   involved in P-to-P United's formation. It is not

6   presently a member. Kaza is not now, and has never been,

7   and no offense to the people who represent it, will never

8   be a member of P-to-P United.

9   Kaza, in the days when regulation was first

10   contemplated and at least initiated, was the poster child

11   for the Internet. There may in fact be information about

12   the FastTrack network and the way it is applied by Kaza

13   that comes out of other legal proceedings, which American

14   policy makers should take cognizance of.

15   The members of P-to-P United, with Grockster's

16   exception, and I believe it's a matter of architecture

17   that's changing; do not run FastTrack. They are true

18   decentralized peer-to-peer protocols like the 500

19   variations we heard testimony to earlier today.

20   Five hundred, going on 750, going on a

21   thousand, going on 5,000. I just saw a posting that

22   Professor Felton at Princeton University published a note

23   that a grad student of his in just the last day or two

24   wrote a -- was it a 50 line code to constitute P-to-P

25   Tiny, which may be for all I know the newest, or newest

1   reported on P-to-Peer application.

2   These proliferate. The members of P-to-P

3   United to begin to tell the real story, their own story,

4   about what this technology is capable of, what the people

5   who purvey it do and don't do, and therefore how in our

6   view it ought to be regulated or not regulated. Any

7   slides?

8   Suffice it to say that you've heard lots from a

9   technical perspective, and a broad perspective about the

10   nature of peer-to-peer technology, but it cannot be

11   emphasized too strongly. Thank you.

12   If we can go to the third slide, I believe. It

13   cannot be emphasized too strongly and too frequently that

14   decentralized means just that. There are no peer-to-peer

15   networks. There are people, who by using software

16   individually, by installing that software individually on

17   their own individual computers, create between and among

18   themselves communities.

19   Networks is a good, if ambiguous word, but

20   there are no peer-to-peer services in the way that there

21   are commercial services that provide a product with an

22   on-going relationship to consumers.

23   I emphasize this not because I'm wedded to

24   semanticism and like to hear myself talk, although those

25   are both true. I emphasize it because the words count in

1   policy making. They are loaded. There's a reason that

2   virtually every newspaper article you read talks about

3   networks and services. Those words are used almost as

4   frequently as the other hyphenated illegal peer-to-peer

5   services.

6   We're not illegal. We'll come to that in a

7   second. But it's very important, and I would urge the

8   government and any and all policy makers involved in this

9   process to bring the role of government, to bring some

10   rigor, to bring some precision, to bring some scientific

11   broad based study to all of the issues that we have heard

12   about, and should indeed continue to hear about. All of

13   the risks that are being profiled here today that we

14   indeed have dealt with since our inception, as I'll come

15   to in a second.

16   If I may have the next slide. On the point of

17   that legality, yes, this issue is before the Supreme

18   Court. The Supreme Court may or may not determine the

19   continued legality of the software itself and of the

20   activities of the people who produce and purvey the

21   software.

22   The members of P-to-P United and those other

23   495 -- 496, counting P-to-P Tiny, programs that are out

24   there.

25   The next slide, if I may. From our inception

1 we formulated a code of conduct. If you don't comply

2 with the code of conduct, you're not a member of P-to-P

3 United.

4   If anybody has any information about any member

5 of P-to-P United now who is not in compliance with our

6 code of conduct, a bar to which and a link to which is at

7 the top of our web site; pretty please, call me up at

8 home, midnight, or not, because I want to know about it.

9 Because if they don't fix it, they're gone.

10   MR. PAHL: We'll hand out Adam's home phone

11 number later.

12   MR. EISGRAU: Thank you. Cell phone is on the

13 business card, same thing. It's under the pillow.

14   We were serious then, we're even more serious

15 now. I've got to tell you, it's an interesting

16 experience to get a letter signed with your name on it

17 from 48 State attorney generals.

18   MR. KILGORE: You're welcome.

19   (Laughter.)

20   MR. EISGRAU: It's an interesting experience to

21 watch hearing after hearing in Congress -- at which your

22 industry is not represented -- talk about your industry.

23 I've had a lot of interesting experiences.

24   It's important to this industry, it was from

25 the outset, to begin to change the face of P-to-P, not

1   with propaganda, not with semantics, but with facts.

2   And as outrageous as the claims about peer-to-peer that

3   you continue to hear -- no offense to Stanley. He is an

4   articulate spokesman for RIAA, as I expect Mr. Miller

5   will be if I ever shut up. But they don't put it

6   straight, and that's why I'm, with the apologies,

7   somewhat monopolizing the microphone.

8   To try to begin to explain that that's what we

9   started out to do, if I may have the next slide, and we

10   will continue to do under the appropriately watchful gaze

11   of neutral regulators and advisors to other groups.

12   Nobody had to drag us to put a big C in the

13   circle on the our home page. Link to a copyright

14   advisory statement that said, P-to-P United and its

15   member companies remind all peer-to-peer software users,

16   et cetera, talking about the importance of observing

17   copyright. Bold face. Permission being required to use

18   copyrighted information, bold face.

19   This will often be the case with popular music

20   and other forms of entertainment, including game or other

21   software. It talks about Title 17, and stiff penalties.

22   This is a year and a half old, folks.

23   The slide you see behind you with regard to the

24   parent-to-parent resource center, as soon as the issues

25   pertaining child pornography started to surface, as a

1   lobbyist, I have to tell you, I said, oh, boy, Defcon 5.

2   Because the fact is, the people who make

3   software, that is in turn used by millions and millions

4   of other people, does have that dark side that Attorney

5   General Kilgore appropriately identified.

6   But the parents and the grandparents who run

7   the member companies of Peer-to-Peer United, are not

8   aligned with Darth Vader. We're the ones who call the

9   FBI, as reported last March in the Washington Post, to

10   try to get a milk carton type campaign going to use the

11   power of peer-to-peer to push information about suspects

12   wanted out to the public.

13   Sort of an America's Most Wanted kind of idea.

14   We hope that the Federal Trade Commission will ask the

15   FTC why we can't get our -- will ask the FBI why we can't

16   get our phone calls returned. We really want to do that.

17   Again, a year and a half old.

18   Current events, if I may have the next slide.

19   And thank you for your indulgence, Tom. Mr. Lafferty,

20   from DCIA did a good job outlining the new client

21   advisories that are consumer advisories that a group led

22   by that organization put together.

23   Some of the members of my organization served

24   in an advisory capacity to that, but we felt, because we

25   need to distinguish ourselves from Kaza, a principal

1   member of DCIA, that we needed to go our own road. We

2   also want comments on these advisories.

3   What you see behind you, in that box, "click

4   here for important information about using P-to-P

5   software safely," was language that we worked out. We do

6   not have a Good Housekeeping -- do not have a Good

7   Housekeeping seal of approval from the Federal Trade

8   Commission, but we enjoyed a very extended and

9   collaborative process with the staff. And that was the

10   basis for my complimenting them on their professionalism

11   and objectivity.

12   That's a process that's going to be ongoing.

13   Even if the FTC didn't want it to be ongoing, we would

14   want it to be ongoing.

15   Suffice it to say, as you see on the screen,

16   this is going to be a pretty prominent warning. People

17   are going to see it a lot. If I may have the next slide.

18   They're going to see other warnings,

19   particularly about copyrighted content. A lot. They're

20   going to have a new icon -- actually, it's not new.

21   We're just making sure people know that there's an icon

22   in their user tray.

23   Next slide, please. And nobody asked us, at

24   our own expense and initiate to mount what amounts to an

25   on-line advertising campaign. We're going to try to push

1 this out there within our frankly limited budgetary

2 means. I'm really expensive. There's no money left. To

3 try to get the word out.

4 We've also called, not incidentally, and not

5 just to be cute, on Hollywood and other folks who have

6 access to the media to take these advisories that the

7 CDWG and that we could work out, and to use their

8 considerable resources in their own interest to push

9 these advisories for us that we have to the public.

10 And we look forward to collaborating with them.

11 Just as we look forward and were happy to link to the

12 RIAA anti-piracy center on our copyright warning page,

13 the original one.

14 Just as we're happy, and we'll continue to

15 work, with NICMIC regarding child pornography issues.

16 Just as we continue to have a one click report through

17 NICMIC's site to report suspected child pornography.

18 Rather than go through the remaining slides --

19 and I'll be happy to talk about the text of much more

20 detailed advisories similar to the ones that CDWG worked

21 out -- let me just make an appeal once again, and

22 essentially in conclusion, for context, for some degree

23 of rational policy-making here. If there is any

24 suggestion that the software now is illegal, or anybody

25 has ruled it illegal, you're listening to propaganda.

    1   That statement was made in front of a court, in front of

    2   the Ninth Circuit, and it was rejected.

    3   The suggestion was made earlier today that this

    4   software has been deliberately redesigned to circumvent

    5   the law, that it became decentralized. Decentralization

    6   was the Holy Grail that resulted in the Internet. It's

    7   not a dirty word, and it shouldn't be.

    8   When the attorneys for the folks in that case,

    9   representing the entertainment industry, suggested that

   10   we had somehow designed our software to get around the

   11   law, issue was taken without opposition from the bench,

   12   and the judge said, "in oral argument, it appears that

   13   the plaintiffs designed their software to adhere to the

   14   law. Do you have a problem with that?," said the judge.

   15   I could spend a long time, and since you look

   16   like nice people, I won't, detailing -- and it would take

   17   a lot of detail -- all of the things wrong, all of the

   18   falsehoods that have been told about peer-to-peer

   19   technology and the people who purvey it. I'm hoping that

   20   in order to initiate the balance of this discussion with

   21   regulators, members of the press and, indeed, the

   22   industries that are significantly effected by this,

   23   there's no question about that. I'm hoping that we can

   24   get past -- I'll use a loaded word -- the propaganda so

   25   that we can actually make real policy.

1   The people, the real live people, parents and

2   grandparents who hate porn as much as anybody else, that

3   produce peer-to-peer software, who themselves are

4   intellectual property owners, have ever interest not in

5   putting a false face on this industry, but in putting the

6   real face on this industry.

7   That's what we continue to try to do, and we

8   look forward to working with anybody and everybody who

9   will tell the truth in pursuit of that.

10   One very quick last point. Not only have we

11   come up with the disclosures that you saw here, but when

12   a new issue was called to our attention 72 hours ago,

13   Parry? --

14   MS. AFTAB: About 72 hours ago.

15   MR. EISGRAU: -- regarding -- and you heard

16   about it earlier today -- the potential for people to

17   think somehow that if they were purchasing the adfree

18   version of software for the whopping sum of $20, that

19   that somehow constituted a license to download any and

20   all music, we will be putting the point of purchase

21   advisory right there to make sure that there is no such

22   confusion.

23   And to the extent that the legality of peer-to-

24   peer software is referred to by any of the members of

25   P-to-P United, we will similarly contextualize that. And

1   we're grateful to Pary Aftab for calling that attention

2   to 72 hours ago. For spending two hours yesterday

3   working out pretty much final language, not quite.

4   MS. AFTAB: It was pretty close.

5   MR. EISGRAU: And for agreeing with us that

6   it's an important issue, and for helping us to put the

7   word out there that peer-to-peer has to be used safely.

8   Lots of people have responsibilities for that,

9   the industries, Attorneys General, the Federal Trade

10   Commission, plus Internet service providers. The list

11   goes on.

12   We look forward to working with all of them,

13   and not, frankly, being made the scapegoat because

14   significant parochial interests have incredibly talented

15   propaganda machines. Thank you.

16   MR. PAHL: Thank you, Mr. Eisgrau.

17   (Applause.)

18   MR. PAHL: If we could turn next and have some

19   remarks by Mr. Miller.

20   MR. MILLER: Thank you, Mr. Chairman. Did I

21   push the right thing here? I'm on. Good. Okay.

22   Thank you, Mr. Chairman. I have an eight=page

23   statement I would proffer for the record, and a 56-page

24   attachment which I would proffer for the record, and

25   there are other materials which my client, RIAA, have

1   provided.

2   I'll try to talk fast, because I know Ms. Aftab

3   would like to have a few words, and I think we only have

4   about 10 minutes left.

5   So let me begin. My point is that in

6   following-up on what Director Parnes was talking about as

7   to the FTC's position on these issues, my point is that

8   the P-to-P providers, these major P-to-P providers, are

9   in fact violating FTC law. And the FTC is authorized, is

10   able, to take issue with them.

11   And the question is whether it should. Let me

12   just briefly -- I know that there has been a discussion

13   this morning, but there are deceptions that violate

14   Section VII under the standard that was enunciated in

15   1983, and some people on this panel help put that

16   deception standard together.

17   There are deceptions of commission. The

18   representation that the downloads are free of spyware are

19   simply deceptive. You cannot separate -- if you download

20   Kaza, and the free version of Kaza, you download spyware.

21   There's no way to get around -- and if you download the

22   free version and try to upgrade it by paying your $29.95,

23   you can't take the spyware off.

24   Secondly, what is, I think, just amazing, is

25   there are these claims that the software is a hundred

1   percent legal. Now, I do not take issue with what Mr.

2   Eisgrau -- with what Adam just said, and that is the

3   allegation that the software itself is illegal; but

4   that's not what's being communicated to a reasonable

5   person or person acting reasonable in the circumstance.

6   What's being communicated to them, in light of

7   prior litigation, is that it's okay to download files.

8   Download copyrighted materials. With this software, it's

9   a hundred percent legal. That's what's being

10   communicated, not that this software is legal, but the

11   use to which you are likely to put it is legal. That is

12   deceptive. That's just outright deception.

13   There are deceptions of omission. The fact

14   that you are almost certainly going to download a lot of

15   computer viruses, and despite the representations to the

16   contrary, the virus software in the software is not

17   sufficient to avoid that.

18   You are almost inevitably going to download

19   pornography, and you run a risk of distributing child

20   pornography, which is a felony.

21   And you're almost certainly going to download

22   copyrighted materials. I mean there have been surveys

23   out there that show the vast majority of the downloads

24   using this major P-to-P software are copyrighted music,

25   and, also, pornography.

1   Now, I know that there are some warnings in the

2   ULAs. Isn't that a good word, ULA. I learned about

3   that. In the ULAs, right. But have you ever looked at

4   the ULAs on there; I was looking this morning, and you

5   have to go after line, after line, after line; hundreds

6   of lines, thousands of words to figure out, in, say, the

7   case of Kaza, that you're downloading spyware.

8   I think it's quite plain, the FTC cannot. The

9   question is, whether you should act or not. And that's

10   really a sort of do you use the resources for that

11   purpose or something else.

12   I think for very simple use of resources,

13   meager, modest use of resources, the FTC can eliminate

14   most, if not all, the cost attendant with what's going

15   on.

16   What are these costs; well, the cost of all

17   this copyrighted material. Okay. There are incentives,

18   important incentives when you give people property rights

19   to material, to intellectual property, that promotes

20   people to produce more intellectual property; right?

21   And if you distribute it for free, you take

22   away from that. You don't get new things produced. I

23   mean, our founding fathers knew this 200 years -- over

24   two centuries ago. They made the right decision there.

25   You have extensive use of band width. Somebody

1   operating a computer and it slows down. They don't know

2   why. I mean they're not as likely -- not very likely to

3   say, well, it must be the new P-to-P software that I

4   downloaded that makes it run slower any more than you'd

5   think that if your car started slowing down, or being

6   having bad gas mileage that somebody was cyphoning the

7   gas out of your tank.

8   There are other costs associated. Viruses, and

9   other malware that's downloaded. Pornography is not in

10   the ambient of the FTC. It's not a rational reason for

11   -- as a legal matter, for bringing a case. But it's

12   something that you should consider in allocating

13   resources.

14   If you've already got a case to bring, you

15   could bring, it's something to consider. Pornography is

16   a very serious matter. Adults, their choice, okay. But

17   for children, children should not be exposed to this kind

18   of pornography.

19   And child pornography is unlawful I think to

20   have, understand, and it's a felony to distribute. And

21   you can distribute that without even knowing that you're

22   engaged in the distribution of child pornography and the

23   creation -- and engaging in a felony.

24   Okay. What should you do. Here are my

25   recommendations of what to do. One, continue the

1   consumer education and programs and alerts. I think

2   those are excellent, well done, as Ms. Parnes pointed

3   out.

4   Secondly, you ought to obtain voluntary

5   cooperation of a degree more than what has been proposed

6   here. You ought to require the P-to-P software companies

7   to end their deceptive practices, and their claims that

8   there are no spyware, and their claims that it's a

9   hundred percent legal -- which of course, it means a

10   hundred percent legal to download copyrighted materials,

11   et cetera.

12   You ought to require them to incorporate simple

13   filters, so that people can't download copyrighted music.

14   Those things are encoded, they can't download. I

15   understand that such filters exist today.

16   One simple thing is, on the filter for

17   pornography, make the default setting on. And that is

18   you can't download pornography. You have to overcome it

19   some way.

20   I mean, I got on Kaza, and all you've got to do

21   is click don't show me this box anymore. Right? And

22   then you download as much as you want. I mean, and you

23   know, business about suppose the parent downloads Kaza

24   and so forth. I mean, it's very easy for the kid to say,

25   okay, that's my dad's Kaza. I'm going to download my own

1   Kaza. You know, I mean whatever. It's very easy to do.

2   I think you ought to propose a TRR, initiate a

3   trade regulation rule that would accomplish those same

4   objectives. Now, both -- excuse me.

5   And then, fourthly, I think you ought to engage

6   in some litigation. Take issue with those that engage in

7   deception, advertising a hundred percent legal, et

8   cetera, et cetera.

9   Now, the purpose frankly of the litigation and

10 TRR is to promote voluntary acquiescence to the kinds of

11 things I'm talking about here.

12   Adam has outlined some proposals. I think

13 they're inadequate, and, quickly, for a couple of

14 reasons. One is the disclosure says that downloading

15 copyrighted files may be illegal. I mean, it is.

16   MR. PAHL: Hold on a second, after the panel is

17 over we'll have an opportunity to question.

18   MR. MILLER: And without authorization, whose

19 authorization? Anyway. Also, telling people there are

20 risks after telling them there are no risks. I'm not

21 sure whether that is the right kind of disclosure.

22   The fifth thing the Commission should do, I

23 think, is engage in internal vigilance. There has been a

24 history of problems in this industry. We wouldn't be

25 having this conference, workshop, the FTC wouldn't be

1 having this workshop if there weren't problems. Okay.

2 There are problems.

3   This is an industry that's prone -- I don't

4 mean to talk about any individuals, but just the nature

5 of the industry is prone to these kinds of problems. The

6 product is complicated. Defects are hard to detect.

7 Most consumers are teenagers and children; adults,

8 parents, guardians are usually not around. Consumers

9 knowingly download illegal --illegally are not likely to

10 complain. You know, it's like calling the IRS, have you

11 looked at my tax return. I think I made some mistakes.

12   Providers have strong incentives to encourage

13 cheating. It increases their revenue base. It's free

14 entry and exits, little reputational risk, and producers

15 have been very clever at avoiding legal liability.

16   I think P-to-P offers great promise, from what

17 I know about it. You know, it's a way of communicating

18 files and it can even lower costs, et cetera. But that

19 promise, that potential is not going to be realized

20 unless there are some significant changes in the

21 practices of this -- of the software providers in this

22 industry.

23   And I think only the FTC can guarantee that

24 result. Thank you.

25   MR. PAHL: Thank you, Mr. Miller. We would

1   like to have Ms. Aftab offer some thoughts, particularly

2   on ways of educating consumers about P-to-P file-sharing

3   risks, and, also, to sort of move things along a little

4   bit, right after Ms. Aftab's remarks we'll move directly

5   to a couple of questions from the audience before we all

6   have to move on.

7   MS. AFTAB: Thank you, Tom. I've got a Power

8   Point, if somebody would open my slides for me. While

9   we're trying to get that loaded, I'd like to thank the

10 Federal Trade Commission for getting everybody into one

11 room.

12   I'd like to thank Commissioner Harbour, who is

13 a caring mother in addition to a commissioner and

14 recognizes that we need to learn a lot more about these

15 things. And for Deborah Marone, who is always so

16 incredible, working with her and everyone on the staff of

17 the FTC.

18   I also wanted to thank the Department of

19 Justice and the Attorney General in Virginia for making

20 sure that our kids sleep more safely every night. And

21 thank you very much for all that you do.

22   Well, this is my Power Point slide. I run

23 Wiresafety, the world's largest Internet safety and help

24 group. We're an all volunteer organization. That

25 includes me. I went from charging $850 an hour as an

1   Internet privacy security lawyer, to donating my time and

2   paying for most things out of my pocket. Very bad

3   business judgement.

4   I did it because I saw a three and a half year

5   old being raped on the Internet, and it changed my life.

6   I have about 10,000 volunteers in 76 countries around the

7   world to work for me. We exist entirely in cyber space.

8   Now, the message so far has been largely about

9   piracy and porn. It's always been about piracy and porn.

10   I mean those are the issues, and the good thing is, we've

11   got Adam on one side, and we've got -- Jim or James? --

12   MS. COLLINS: Jim.

13   MS. AFTAB: -- Jim on the other side, and we've

14   got people all over the place who are arguing those

15   things.

16   And I won't get into the fact that our children

17   don't need peer-to-peer to find porn on the Internet, and

18   I won't get into really the issue, terribly much on this

19   slide, is it's about time we start teaching our children

20   to be responsible cyber citizens. Teaching them how not

21   to steal. Teaching them how to use the technology. Any

22   technology, whether it's peer-to-peer, or whatever the

23   new thing is, Tiny, anything else, responsibly and

24   respecting the rights of others. We're going to lose

25   this entire generation otherwise.

1   But for the FTC, the issues are pretty basic.

2   It's always been about safety and consumer protection,

3   compliance, deceptive practices. And I called both Marty

4   -- and I understand you made a comment this morning, I

5   wasn't here, so I didn't hear it, and I'm going to hold

6   him to the fact that he's going to make me happy on

7   disclosures -- I called Adam, and I said, I have a

8   problem. I receive about a thousand eMails a day. If I

9   ever started dating, children in the world would be in a

10   lot more precarious situation.

11   And I'm running about 60 eMails a day these

12   days from parents and kids and teachers asking me why is

13   it a problem if they paid for the premium service,

14   because that means they're buying a license to download

15   music.

16   I have spoken to -- I usually speak to about a

17   thousand kids a month. We have a program I'll talk to

18   you about in a minute, and I'm really intense talking to

19   kids. And I've talked to 6,000 children since the middle

20   of November. It just happens to be my speaking schedule.

21   And I am attacked every single time I've been

22   talking to the kids lately, saying I don't care what

23   you're telling me about piracy. I went to the site, and

24   they said it's legal. So you must be wrong.

25   What I hear from parents and kids that much, it

 1   concerns me. And when there's confusion, whether it's

 2   kids or parents, that's an FTC issue, a consumer

 3   protection issue, it's an Attorney General consumer

 4   protection issue.

 5   And it may be intentional, and it may not be,

 6   and the only way to find out is ask. And I picked up the

 7   phone and I called Adam first. And I said, this is who I

 8   am. I'm very concerned. It just so happens, I'm on a

 9   panel. So when I'm noisy about being concerned, there

10   are going to be a lot of people who are going to listen.

11   I think that there is consumer confusion. I

12   want you to help me fix it. He did. I'll read you what

13   we worked out, and he really does give out his home

14   telephone number. We were on the phone at like 11:30

15   last night, and I was yawning through it. I have no idea

16   what we finally agreed upon, but --

17   MR. EISGRAU: I was counting on that,

18   obviously.

19   MS. AFTAB: It worked. I will tell you that we

20   worked out one thing to my satisfaction. My guess is

21   everybody else will be satisfied about this one, too.

22   EDonkey is the only one that we actually worked on the

23   language on, although there's agreement in principle that

24   they're going to make me happy. Making me happy is not

25   an easy thing.

1   And on EDonkey, where you buy the premium

2   product, there was a paragraph of a whole bunch of words.

3   I used to write those words, Jim, and I used to make a

4   lot of money writing them for everybody, including

5   Universal Music Group. I mean --

6   MR. MILLER: Make the hours. Bill me the

7   hours.

8   MS. AFTAB: You put as many words in because

9   you get paid by the word as the lawyer, you know that.

10   So nobody reads them.

11   So I wanted something up front. I said the

12   more words you put, the less likely anyone is going to

13   read it. Long paragraph, take it out. A, no one is

14   going to buy our premium product if you've got this long

15   paragraph of what it is anyway.

16   What are your points; A, it's adfree. Fine.

17   Put it up. Three points, I think he ended up with.

18   Whatever it was, same type, except in our case, capital

19   letters right at the bottom. The three points -- bullet

20   points, and right there, wherever it's being sold in

21   exactly the same thing, is, important note, all capital

22   letters. Same place, not a drop down, not four pages in.

23   Important note: purchase of, the name of the

24   product, does not, all caps, constitute a license to

25   upload or download copyrighted material. That's pretty

1   clear.

2   But what I've also offered is my guide to

3   parents on talking to your kids about downloading music

4   on-line, which we did on the Today Show, and everything

5   else. Teen guide to what they're doing; I'll give you

6   all my stuff for free. Put it on your sites, we'll build

7   it. You guys can battle it out in court, I can make sure

8   people aren't confused in the mean time.

9   Your issue, Jim, as to the software being legal

10   and the confusion, I mean I face that all the time. I

11   don't want to face that anymore. So I said that was my

12   second issue. If you say the software is legal, no one

13   understands that that means that a misuse of it isn't

14   legal.

15   I'm tired of answering questions of the 11-

16   year-olds who grill me on these things. So I said, if

17   you're going to talk about legality, up front, same place

18   you put it, it's got to be just as much.

19   Although the software is legal, something that

20   we worked out is, the downloading of copyrighted

21   information, upload or download of copyrighted

22   information without requisite permission, or whatever

23   else we work out, is not. That's okay.

24   And if the guys are straight about their not

25   promoting piracy and they're really doing it right, no

 1   one is going to have problems with that language, and

 2   Adam stepped up to the plate.

 3   Now, Marty, I understand, this morning, before

 4   I got here, said that he's talking to me and he wants to

 5   make me happy. So I'm thrilled. So we're holding him to

 6   that, and I know that you were Chairman of the FTC, Jim.

 7   So I think that -- I think that we can rely on

 8   the statement of Marty from the table. We can fix that

 9   up, and then you guys can fight it out in court, and I

10   can protect kids today.

11   There are some other issues. Make it easier to

12   un-install. I get eMails everyday from parents who want

13   to un-install it, or turn off sharing and they don't know

14   how. Make it really easy so I don't have to answer those

15   eMails and maybe get a life.

16   We also need to recognize that the instant

17   messaging peer-to-peer stuff, the new stuff, fabulous

18   technology. Technology can do all kinds of wonderful

19   things if not misused. We need to clean it up, make sure

20   that it's not being misused.

21   That means parents, it means regulators -- it

22   means instructions on these things for idiots like me to

23   be able to turn things off and know what we're doing and

24   making sure there's none of that.

25   And not burying the stuff in the ULAs. So

1   that's the -- the FTC has an important role here. So

2   does the State Attorney Generals, but the coolest thing

3   is we don't have to use our resources if these guys are

4   going to step up to what we want on a phone call.

5   If I can do that on a phone call, god knows

6   what we're going to be able to do over the next few

7   weeks. And if they don't get there, then I'll be back

8   and knocking on the door of the FTC and the Attorney

9   General from Virginia.

10   Can we go to the next slide. Okay. We're

11   going to have some fun here. We're all unpaid

12   volunteers. I decided I was one of Brittany Spears'

13   lawyers years ago. In fact, actually started working

14   with peer-to-peer because there was a lot of child porn

15   that pretended to be Brittany.

16   And in those days, Brittany would have been a

17   very good role model for children on on-line safety,

18   although some people at the FTC who had concerns, early

19   concerns, and I will thank them sitting in the back of

20   the room, that they suggested perhaps she wasn't the best

21   role model. But she was going to come out as a

22   spokesperson in on-line safety for us, and then things

23   changed.

24   And then, so -- so we contacted Justin

25   Timberlake, and Justin Timberlake had agreed to do a --

1   A PARTICIPANT: Two down.

2   MS. AFTAB: Oh, please, I'm telling you, don't

3   sell Marble stock short, please.

4   So Justin Timberlake, we had a problem -- we

5   couldn't tape it, and then the Super Bowl got intervened,

6   and then somehow we never got to that PSA.

7   So they said forget that. You cannot trust,

8   you cannot trust pop figures. You need to go to trusted

9   sports figures. There's one that everyone probably --

10   (Laughter.)

11   MS. AFTAB: Kobe Bryant. He is the man. You

12   absolutely need to go there. I said, great, I'm working

13   on agents and everything and they said, oh, he's in the

14   media. I said, great, I'll find out how to reach him. I

15   found out how to reach him, and decided not to.

16   (Laughter.)

17   MS. AFTAB: Someone said, no, no, young kids

18   who have just grown up, really good kids, never get into

19   trouble, don't do drugs, no problems with them; the Olsen

20   twins.

21   (Laughter.)

22   MS. AFTAB: So I gave up. I'm standing on this

23   stage in Singapore -- Singapore. And the head of the

24   Media Development Authority, which is the equivalent of

25   sort of the FCC and the FTC put together, said "I've got

1   a surprise for you. Somebody else from New York." And

2   out pops Spiderman.

3   Spiderman, wasn't Tobey McGuire. Spiderman was

4   6'2", I knew right away he wasn't from Singapore. They

5   don't have a building in Singapore that's 6'2. And he

6   stood there, and I said, my goodness, this is great.

7   I've always wanted to figure out how I could get

8   Spiderman to help us on these things.

9   He said, "not a problem. Our character

10   appearance group is in Mawa, New Jersey." Six miles from

11   my house. So I went in and talked to them and I said and

12   we really need to get Marvel and the characters behind

13   responsible surfing.

14   It's not just safety. It's not just the porn

15   and predator issue. It's responsible surfing and we've

16   got to teach them to stop stealing stuff. I've got to

17   teach them how to use technology responsibly. Stop cyber

18   bullying each other, don't hack; all these kind of

19   things.

20   I had no idea that the man was in charge of

21   counterfeiting and piracy for Marvel. So he introduced

22   me to big Marvel, and the next thing I know they signed

23   an exclusive, unlimited world wide license for us to use

24   all 4,000 of their characters on everything we do;

25   Internet, wireless, piracy, interactive gaming, cell

1   phone; identity theft; you name it, I've got it for free.

2   We have to pay when the characters go out to

3   appearances, and Marvel will actually do custom comics

4   for us, building Jim into it, and the Attorney General

5   into it. All kinds of people into it on all of the

6   issues that we do, they write them for us, I can put a

7   can of Coke in Spiderman's hand if it'll help keep people

8   safe on the Internet. I cannot thank Marvel enough.

9   So these two characters, Ted Stevens heard

10   about what we did. He invited us up to Alaska, and this

11   is help from Spiderman. This is the program we're going

12   to do, and it's really focused on creating good cyber

13   citizens.

14   You cannot, as the FTC, and as, you know,

15   Commissioner Harbour, with kids you can't have a hearing

16   every time there is a new technology. We have to teach

17   kids the basics. You know, not to share information with

18   strangers. Don't meet people. Respect other people.

19   Don't share personal information. You know, pay for what

20   you take. All of these things are basic.

21   You could hit me with a new technology,

22   including Tiny from Princeton, and tomorrow the kids are

23   going to be able to handle it fine if we can teach them

24   how to use the filter between their ears.

25   You can talk about the image filtering, and you

1   can talk about all the stuff all you want. If I can

2   teach the kids to make the right decision, then you guys

3   can argue before the Supreme Court right and left. Next

4   one.

5   Okay. This is the concept that we're doing on

6   responsibility -- cyber bullying is. And we're all

7   unpaid volunteers. This was all done by my volunteers.

8   In cyber bullying we use Hulk, find the

9   superhero within you. Educational programs, everything

10   is free. We're putting on the web site Internet super

11   heros is the site that houses this.

12   You guys want to play, I'd love your help.

13   We've got guys on intellectual property and everything

14   else that we're doing. We're trying to teach kids to do

15   it right. Everything we do is free. You want us to do

16   it, fine.

17   Internet safety videos ready for release the

18   end of the month, you can have it. If you want to put

19   your name on it, I don't care.

20   You can have it at peer-to-peer, you can have

21   it at the MPA, you can have it at the IRA. You can do

22   anything you want, as long as you're not charging other

23   people for it. Next slide.

24   Okay. Teen Angels. There are fabulous

25   programs, and I know that safety -- it's Safety Net, I

1   guess is your new program in Virginia that you're doing.

2   We have a program called Teen Angels, and a

3   woman I cared very deeply about who knows a great deal

4   about consumer protection had younger children who didn't

5   qualify as Teen Angels. So we created Tween Angels.

6   So we now have 9-to-12-year olds, and 13-to-18-

7   year-olds. You can stay in the program when you're in

8   college. They are trained by the FBI. They are trained

9   by the leading everybody in the world. Bit Surf has

10   taught them, Ernie Allen has taught them, Jules

11   Polonetsky has taught them. We're going to have all of

12   you guys teach them everything they need to know.

13   Once they're taught, they go out and run their

14   own programs. They become mini-mes. They get to intern

15   -- a kid from North Bergen, New Jersey gets to intern at

16   Parliament, and I get a phone call from the Prime

17   Minister's office to fly over and do a briefing.

18   I've got 2,000 volunteers in the UK. Somehow

19   they figured out we existed for the first time because a

20   19-year-old who goes to Notre Dame who spent five years

21   learning how to do this stuff, and has trained law

22   enforcement officers, when I had to do the Today Show,

23   walks over and blows them out of the water.

24   I'll help you set up Teen Angel chapters,

25   because the kids listen to each other more than they

1   listen to me. And the great thing about Teen Angels is

2   you got a built in focus group all the time, and if they

3   understand the issues, they'll understand the risks.

4   Interactive gaming, Internet phone when you're

5   playing XBox Live, or Sony Play Station II; all of these

6   issues, I'll make sure that the 48 Attorney Generals who

7   signed those letters, and the two who didn't, know about

8   these things too.

9   So Teen Angels, Tween Angels, get involved.

10   Just don't go to Teen Angels.com, it's a porn site.

11   Okay. Next.

12   Peers-to-Peers is our program that we set up to

13   teach about intellectual property. Respecting

14   intellectual property rights. It's a non-profit program,

15   we're 501(c)(3), it's free.

16   I want to get a whole bunch of IP lawyers in to

17   help me write this stuff. Bennett Lincoff is in the

18   back. He's going to be talking tomorrow, Bennett, raise

19   your hand. Okay.

20   Bennett helped me write the guide -- Bennett

21   and I were both briefly at Darby and Darby together, and

22   he helped me write the guide for parents on what you can

23   and cannot do with these things.

24   And it just provides educational programs.

25   Part of what we're doing with peer-to-peer, is that we

1   have learned that when it comes to piracy, that, A, the

2   kids don't know what piracy is.

3   I remember I sat in the Teen Angel group, and I

4   said we have to teach kids not to pirate music. And they

5   said, great, terrific, what's pirate mean.

6   So we need to recognize that when you're

7   talking to kids, you've got to tell them what you're

8   talking about. And they are very confused about music.

9   They don't -- aside from these two things that we can

10 fix, they don't understand why no one is going to try to

11 sue them for -- for recording off of the radio, but they

12 will for downloading off the Internet.

13   I understand the difference, but it took a lot

14 of intellectual property lawyers to teach me, and I used

15 to be -- I used to be a hostile takeover lawyer on Wall

16 Street. So we are a little dense. But it's important

17 that we teach them why intellectual property exists, how

18 it works, who is hurt by all of this stuff. Get them

19 behind it.

20   And we found that every kid has a different

21 message to listen to. One is, it's wrong. Another is,

22 I'm going to get caught and yelled at by my parents. The

23 third is, somebody is going to get sued, and their

24 parents are going to really kill me and it's going to

25 take all my college money.

1   Or, I think Madonna has enough money already.

2   I think they charge too much for CDs. I don't like the

3   fact that I can't buy a single track. Whatever. I'm at

4   a slumber party, it's 2:00 in the morning, why should I

5   have to go anywhere.

6   Every reason for different kids is going to

7   apply. No one has enough money for all of those ads

8   campaigns. So I figured, why bother.

9   What we do, is we have a competition and we say

10   to the kids -- I actually have a proposal before the

11   MPAA. We say to the kids, okay. Motion picture piracy

12   issue. We'll tell them what piracy means. We teach them

13   about intellectual property law at a web site.

14   We get the ad council to teach them how to

15   deliver an awareness campaign, and then the kids write,

16   act in, produce, edit their own short videos teaching

17   others why they shouldn't be pirating motion pictures.

18   Then, those are judged by the big PR council

19   and the MPAA, and the winning videos, maybe they get a

20   hundred bucks or something, and they go in the back of

21   DVDs, and they go into trailers in movie theaters.

22   And I've got the 50 different messages that the

23   kids think are going to work, and some kid is going to

24   listen to each one of them.

25   We can do that with posters. We can use the

1   Marvel characters. For companies like Disney, who would

2   prefer not to use the Marvel characters, it's okay, we

3   can use Mickey Mouse.

4   I'm happy to use anything that will work to get

5   the kids on the right side of this issue to understand

6   why intellectual property is important. To understand

7   how to use the filter between their ears and be good

8   people.

9   It's not a matter of not getting caught. It's

10   a matter of doing what's right. And if you guys can help

11   me do that, and you guys fight out what you're going to

12   do in court, I'm happy.

13   So Peers-to-Peers is that program. If you guys

14   want to help, if you've got a skill, you know if you talk

15   to me, I'm going to recruit you. So I'd love to do that.

16   And I'm offering it out to any of the Attorneys General

17   that you know, and we'll see what we can do on that one.

18   Next. I don't know if there is another one.

19   Okay. That's it.

20   I wrote the guide, The Parent's Guide To

21   Talking To Your Children About Downloading Music On-Line.

22   Look at it; if you think I'm wrong about anything, I'm

23   happy to take comments.

24   If you want to use it at your sites, anybody

25   who is doing on-line safety, if you want to do it, cool,

1   just link back to us. Talk to me, I'll let you use it.

2   Anything you've got, I'll give you my Parents

3   Guide to Protecting Children in Cyber Space. It's a

4   leading book in its space.

5   I just reacquired the rights from McGraw-Hill.

6   You can have it for free. Put it up on-line, do whatever

7   you want to do. We're doing posters now with Westchester

8   County in New York. We're going to be doing a whole

9   bunch of things, all play.

10   And just an interesting fact. My book came out

11   in China a few weeks ago on Internet safety. And I knew

12   that if I didn't -- Pat Schroeder is on our advisory

13   board, and she's the executive director of the American

14   Publishing Association.

15   And she was explaining that it was unlikely

16   that I was going to see any royalty money from China. So

17   I said, okay, I gave them rights. I figured if somebody

18   actually signed a contract with me, it would give me some

19   control.

20   And so when I got the version in English for me

21   to go over, it said, the Internet is a wonderful place to

22   download all the software and all the movies you want and

23   all the music you want. It's a really, really great

24   thing.

25   So I had to fight for two weeks to have them

1   say, "however, you should know that some of these

2   materials may be covered by international copyright

3   laws."

4   So after we finished protecting kids and

5   protecting media suppliers in the United States, we need

6   to work on this everyplace else. Thank you.

7   (Applause.)

8   MR. PAHL: I'd like to thank all of our

9   panelists. We're running overtime. I'd like to try at

10   least to have a couple of questions from the audience if

11   we can.

12   MR. CORWIN: Yes, hi. Phil Corwin, and my

13   question is for Mr. Miller, who unfortunately I have to

14   say I found much of your presentation unfair and

15   deceptive, but I did want to note that the FTC looked at

16   that -- and in response to several Senators, they

17   concluded earlier this year that the 10 leading

18   applications were noe engaged in unfair and deceptive

19   trade practices. And if anything, the industry has

20   improved its disclosure and provided greater protection.

21   Since then, on the spyware issue, you

22   particularly said that Kaza has spyware. Kaza is one of

23   the two applications which is separately disclosed and

24   separately consented to. One serves authorized

25   copyrighted content, and the other one serves contextual

1   ads from some of the fortune 500 companies that use that

2   ad serving software.

3   But on the porn issue --

4   MR. MILLER: Could I respond to those two?

5   MR. CORWIN: Excuse me?

6   MR. MILLER: One is, I did not allege that the

7   FTC had found these deceptive --

8   MR. CORWIN: No. You said that --

9   MR. MILLER: I said that I, in my judgement;

10   people have different judgements. Okay?

11   Secondly, on this other point, I think -- my

12   understanding, and correct me if I'm wrong, that if you

13   download the free version of Kaza, you have to download

14   the Net Gain system and the other piece, too.

15   MR. CORWIN: That is true. Just like if you

16   watch free TV, you have to watch the advertisements.

17   MR. MILLER: QED.

18   MR. CORWIN: But on the porn issue --

19   MS. AFTAB: Excuse me. Can I interrupt just

20   for a second? I've got a 4 o'clock flight. I've got to

21   be back in New York. I put some business cards here,

22   forgive me. And if anybody has questions, happy to

23   address them by eMail.

24   Tom, forgive me, and forgive me, everyone else

25   on the panel.

1   MR. PAHL: That would be great. Thank you.

2   Thanks, Parry.

3   MR. CORWIN: Yes. On the porn issue, you and

4   other RIAA representatives continue to throw out that

5   charge. We've heard from other panelists about what the

6   industry, the peer-to-peer industry has done, and is

7   continuing to do, the rest.

8   But I want to talk about the record industry

9   porn. I'm not going to read these lyrics out loud, but

10 right now, this week, the number one song in the United

11 States on the Billboard 100 chart, is Drop It Like It's

12 Hot, by Snoop Dog.

13   Anyone using a wireless connection here can

14 type that in, Drop It Like It's Hot lyrics into Google

15 right now, and you will find the most vile, filthy lyrics

16 that promote a degenerate criminal life style, but is the

17 number one song in the nation.

18   And the FTC's update of their marketing by

19 entertainment companies, violent and objectionable

20 content released in July, of this year, found that the

21 record industry of all the entertainment industries, is

22 doing the worst job. That their labeling was the least

23 meaningful. That they were continuing to promote this

24 type of content in context which appeal to minors, and

25 that they were resisting all efforts to keep this type of

1   content out of the hands of minors.

2   So I would like to know --

3   MR. MILLER: What does that have to do with me?

4   MR. CORWIN: Well, you're here with the record

5   -- representing the record industry, throwing around porn

6   charges like everyone else. I would like to know when

7   the industry is going to do something a little more

8   difficult, which is to clean up its act in terms of

9   promoting this type of vile content to minors?

10   MR. MILLER: I don't speak for the RIAA on that

11   issue. I haven't been asked to address that issue, and I

12   -- all I've been asked to address is what I've talked

13   about here today.

14   MR. CORWIN: Mr. Miller, you're an expert on

15   disclosure law, correct?

16   MR. MILLER: Somewhat, sure.

17   MR. CORWIN: May I impose on you for a future

18   panel to familiarize yourself with disclosure by the

19   industries of potentially dangerous materials to minors

20   so parents have an ability to not buy those records?

21   MR. MILLER: Well, my organization is not a

22   regulating institution.

23   MR. PAHL: You know, you're entirely right.

24   May I call upon the representatives of the recording

25   industry here who control the checkbook that hires Mr.

1   Miller to commission him to do so.

2   A PARTICIPANT: Or any other client.

3   MR. PAHL: Let's move on and have one last

4   question, and then we'll take a 15-minute break before

5   our next panel.

6   A PARTICIPANT: Well, okay, I'm not a lawyer,

7   nor do I play one on TV, but I heard some things out of

8   people on this panel that somewhat confused me.

9   There was a lot of talk about some nebulous

10   thing called intellectual property. Now, in my slight

11   study of this sphere, I don't know of anything in U.S.

12   statute law, or common law, going all the way back to the

13   act of Queen Ann, in England, which of course we know we

14   trace our common law back to English common law. That

15   discusses anything called intellectual property.

16   There are copyrights. There are trademarks,

17   there are patents. They are all three different beasts.

18   They have different laws pertaining to them, and it's

19   very confusing to everybody when you throw out a broad,

20   imprecise term that has no legal meaning like that.

21   So I would just like to ask all the lawyers

22   there on the panel that threw around so blithely

23   intellectual property, what are you talking about?

24   Are you talking about copyright? Are you

25   talking about patent?

1   Are you talking about trademark? And I would

2   ask you to speak precisely as you were trained to do in

3   law school so that everybody can understand what you're

4   talking about? Thank you.

5   MR. PAHL: Anyone want to quickly answer as to

6   what type of intellectual property was in discussion?

7   MR. EISGRAU: Well, it may be surprising. I'll

8   very quickly, I promise, take a stab at this. I mean, I

9   agree with the caller's broadest premise, which is that

10   precision is important. I said that earlier.

11   However, I don't think, in fairness to the

12   panel and to the -- let's call them the copyright

13   industries in a neutral, broad way. I do think, speaking

14   as a representative of peer-to-peer companies, we know

15   what they're talking about in terms of saying correctly

16   that they are entitled under Title XVII of the U.S. Code

17   to certain rights contained I believe in Section 106.

18   Pardon me, 101 and 106.

19   However, not everything that is copyrighted

20   needs the permission of the copyright owner to use in

21   advance of that use.

22   Now, I'm not suggesting that some court has

23   found that downloading or uploading songs constitutes

24   fair use, because I know that's the next claim that's

25   coming. I'm not saying that.

1   But what I am saying, is that in reference to

2   Mr. Miller's point earlier, there is a lot of copyrighted

3   content that's out there, and an increasing amount, under

4   something called the Creative Commons License, and other

5   more creative means other than the what's called

6   traditional copyright protection.

7   A lot of legal copyrighted content out there

8   that nobody needs the advance permission to use. So I

9   agree with your broad premise that precision is required,

10   broadly speaking, certainly with respect to intellectual

11   property, which is a colloquial term of recent vintage.

12   But in fairness to --

13   A PARTICIPANT: It's certainly not a term of

14   legal art, and so I'm just asking if the panel could

15   please be precise so that it's not confusing, because all

16   those different things that people lump together in that

17   manner have totally different rules that apply to them.

18   MR. PAHL: Thank you. Your point is well

19   taken. Let's say thank you to the panelists. Let's take

20   a 15-minute break and reconvene at 3:25.

21   (A brief recess was taken.)

22   MR. PAHL: We're now to our fifth panel, which

23   is the Future of P-to-P Technology and Effects on

24   Efficiency and Competition. This panel will be moderated

25   by Aldon Abbott, who is Associate Director for Policy and

1   Coordination in the FTC's Bureau of Competition.

2   MR. ABBOTT: Thank you. We are about to change

3   focus. Up to now, the earlier sessions today focused on

4   the nature of P-to-P and the risks consumers face and the

5   problems consumers face using it, and public policy

6   concern raised by pornography uses of that sort.

7   Our panel, now, will assess future P-to-P

8   developments from a competition policy perspective, writ

9   large.

10   Now, our six distinguished participants come

11   from a variety of disciplines that will provide diverse

12   perspectives on the topic.

13   I should mention that unfortunately one of our

14   planned participants, the seventh participant, Clay

15   Shirky, for personal reasons, was unable to make it. But

16   I believe some of his presentation will be touched upon

17   by one of our presenters.

18   So after the initial presentations we will

19   engage in an extended round table discussion among each

20   other. And I know we just had an internal discussion

21   that we had some very spirited points of view that will

22   be put forth, and I'm looking forward to that. And then

23   we will take questions depending upon the amount of time

24   we have left at the end.

25   In the interest of time, of course, I won't

1   summarize the distinguished backgrounds of our panelists.

2   Their biographies are available. Let's go in order of

3   presentations.

4   To set the policy stage from a broad

5   perspective, we will begin with two economic analyses of

6   P-to-P related benefits, on costs and economic policy

7   prescriptions. We'll start out with Eli Noam, who is a

8   professor at Columbia University and Business School and

9   Director of the Columbia Institute for Tele-Information.

10   And Eli will explore the external benefits that

11   flow from the creation and growth of P-to-P networks. In

12   light of those benefits, he will discuss the case for

13   public subsidization of these networks -- no?

14   Well, he will discuss a number of additional

15   interesting topics.

16   (Laughter.)

17   MR. ABBOTT: I've got to update the script. Be

18   up-to-date. Okay.

19   All right. Second, Dr. Michael Einhorn, an

20   economist and consultant with Consor Intellectual Asset

21   Management, will focus his economic lens on P-to-P

22   networking and digital rights management.

23   DRM refers, as you all are aware, I'm sure, to

24   the techniques used by copyright holders to encrypt

25   content, or otherwise restrict access to content. And

1   Dr. Einhorn's research suggests the basic functionalities

2   of P-to-P and DRN can complement each other, and that new

3   innovative market mechanisms are currently developing

4   that can alleviate many copyright owners' concerns.

5   Next, and third, we will turn to a somewhat

6   more detailed discussion of particular P-to-P

7   applications. Michael Smith, Assistant Professor of

8   Information Technology and Marketing at Carnegie-Mellon,

9   will present an economic perspective on new consumer

10   benefits from P-to-P networks. And specifically he will

11   discuss his ongoing research related to improved

12   information variety, and information promotion possible

13   in P-to-P networks. And he will relate his research to

14   some applications.

15   Next, we will scrutinize a specific new P-to-P

16   file-sharing technology, which will be described for us

17   by Gary Augustson, who is Vice Provost for Information

18   Technology at Penn State; and he will describe Lionshare,

19   as in the Penn State -- Lions, I would assume -- an

20   innovative P-to-P file-sharing technology being developed

21   by Penn State for broader higher education community, and

22   he'll comment on the benefits and potential cost or risks

23   of the new technology, which will be beta tested by Penn

24   State and eight partner institutions.

25   Next, we will hear from Andrew Chin, who is

1   Associate Professor at North Carolina University School

2   of Law, and he will lend an anti-trust professor's

3   perspective to our deliberations, and he will discuss the

4   transformation of software product markets as a result of

5   P-to-P and -- computing technology, and discuss related

6   anti-trust implications.

7   And finally, and as Chairman Majoras noted

8   earlier today, we have a visitor from abroad. Lending an

9   international flare for our panel, we will hear from Dr.

10   Johan Pouwelse, of the Computer Science Department, Delft

11   University of Technology in the Netherlands. He will

12   address the positive role of P-to-P file-sharing in

13   reducing the cost both of communication and information

14   storage, distribution and modification, giving particular

15   examples.

16   At the same time, he'll comment on a continuing

17   dark side of the innovative P-to-P force for information

18   content owners. And Dr. Pouwelse will discuss some of

19   his empirical work on P-to-P network utilization.

20   And just recently, for example, he conducted a

21   measurement that obtained the electronic identity of a

22   quarter of a million people who downloaded copyrighted

23   content from the BitTorrent file-sharing network.

24   And he will also address some of the points

25   that Clay Shirky had planned to make.

1   So let me turn the podium over now to Professor

2   Noam.

3   MR. NOAM: Thank you very much. All right.

4   Well, first, let me thank the FTC for sponsoring this

5   holiness workshop. Very good initiative, and in return,

6   I'd like to offer them our data from the Columbia

7   Institute for Tele-Information, which I direct, on media

8   ownership and concentration trends for 95 U.S. media

9   industries for the last 20 or so years. This is the best

10 data base that I think exists. It's certainly better

11 than the FTC's.

12   And I also would like to invite all of you to

13 go to our web site eventually when you see it, and find

14 out when our next P-to-P conference is going to be. We

15 had one a few months ago.

16   MR. ABBOTT: Could we maybe go to Michael

17 Einhorn's presentation?

18   MR. EINHORN: To clarify one thing, I am not

19 with Consor. I am only an advisor to Consor. The views

20 that I am about to express are not necessarily those of

21 Consor, nor of my wife, nor of my children, who -- the

22 last two -- explicitly disavow everything I'm going to

23 say next.

24   What can P-to-P do? I am very surprised that

25 nobody has brought up the fact that P-to-P is now the

1   center of many legitimate businesses that have nothing to

2   do with copyright, or the use of copyrighted works.

3   They are used within corporations and academics

4   for string video, for distributed computing, for document

5   collaboration among peers across the nation, across the

6   world; for back-up storage of documents, for anonymous

7   publication, and let's not forget VOIP, Voice Over The

8   Internet Protocol.

9   In each of these cases it's very important to

10   understand a compelling fact about it; it's useful. It's

11   efficient. It has a place. It does something that

12   nobody else can do; best of all, it preserves -- is a way

13   of configuring a network that is entirely sensible for

14   the things that it is trying to do.

15   Next. Whose network is it, anyway? Okay. The

16   distinction here is between the way things are put on

17   these networks. Whenever you talk about a P-to-P

18   network, or any kind of network, you have to talk about

19   who has the right to seed, how they have the right to

20   distribute, what the editing rights are, who has the

21   rights to exclude, and I don't mean -- I must put that in

22   after hearing everything this morning. And of course,

23   who comes with the software suite where you get the

24   software from.

25   When you talk about corporations and academic

1   networks, and of course we're going to hear from Penn

2   State later; you're going to see that in each of these

3   cases things are resolved fairly easily. They are

4   exclusive rights.

5   The rights of seeding, distribution, editing

6   and exclusion are all determined by the users, either

7   individually, or through the rules of their community.

8   So therefore, property rights are very clearly

9   defined. Furthermore, the same thing with software

10 suites. You can buy the software either yourself, or you

11 can buy it through your university. Once again,

12 everything is very clearly defined.

13   This is to be distinguished very carefully from

14 the public networks. Next.

15   Where is the beef? What's the difference

16 between the public networks and the private networks?

17 And by the public networks, I, of course, mean peer-to-

18 peer as we've been using it this morning; a subset of the

19 problem. Or subset of the market.

20   The question is whose property rights are they.

21 All of a sudden the line is entirely hazed. We're not

22 sure who owns and controls what, but we do know that the

23 rights are segmented from the original owner.

24   Therefore, what an economist would say is we

25 must define property rights. This is the first thing

1   that every, every, economist in the world would say is a

2   reasonable way to move forward.

3   He disagrees.

4   (Laughter.)

5   MR. EINHORN: All right. We'll see. Okay.

6   We'll see what he says at the end. We have a discussion

7   later.

8   We have to define very carefully the nature of

9   the property rights for each one, and then when property

10   rights are defined, we can talk about three less.

11   We can let the markets set prices; we can let

12   the agents license content, and, most of all, we can let

13   technologies compete with one another.

14   I also would suggest that we have to regulate

15   third party arms, such as to children, but I am not going

16   to be able to talk about this in this talk.

17   So I'm going to assume that all of these things

18   you've heard this morning are not part of the world right

19   now. This is just an issue between P-to-P and the

20   copyright industries.

21   Next. Deliver that music. You've got to

22   understand, this is a highly competitive market. The

23   market for delivering music. Let's consider the various

24   players in the market; store and clubs. Walmart, Best

25   Buy, and Target now sell over 50 percent of all the CDs

1   in the United States.

2   They came out of nowhere through an aggressive

3   business model to be implemented over the past 10 or 15

4   years. So much for there being a cartel in music

5   delivery.

6   Downloads, ITunes now sells tracks for 99 cents

7   a track, subscriptions -- and many other providers do the

8   same. Subscriptions streaming, Rhapsody will sell you

9   all the music you care to listen to in a month for $9.95

10   a month by streaming. You can't download it.

11   Super distribution, WeShare will allow you to

12   send music play lists to your friend, and if they buy,

13   you get to keep 35 percent of the sale as a commission,

14   or you can split that commission with other people who

15   are part of your selling group.

16   And of course, finally, we have peer-to-peer;

17   but here I want to talk about a different peer-to-peer

18   network. One that you've never heard of. One that's

19   entirely legitimate. One that has a license from the

20   RIAA and everybody else. It's called Warner Band.

21   They have a license with 5,000 artists, and

22   they distribute only the works of 5,000 artists on peer-

23   to-peer networks, and no one complains about them, but I

24   think it's important to understand they are also a peer-

25   to-peer network.

1   So once again, we're talking here about the

2   very important issue of defining the property rights and

3   not going after per se.

4   Next, please. Are peer-to-peer systems

5   harmful? Could they possibly be harmful, these many

6   systems that we've heard this morning; and the answer I'm

7   afraid is yes. Okay.

8   Of course there's a big discussion, well, I'm

9   not sure they suppress music sales. After all, people

10   might sample the music, and then they go out and buy.

11   Well, I'd have a real problem with that. How

12   about movie sales. Do people first sample their movie

13   and then go out and rent it? I don't think so. Okay.

14   Forget this music thing.

15   Number two, even if that were true, what about

16   licensing fees. What about the idea of paying the

17   content owners, whether they're music or movies, for

18   their content. That's the way things normally were done

19   in the past, regardless of whether you suppress sales, or

20   whether you stimulated sales.

21   How about the harm to competitive services?

22   How about all the other legitimate music services out

23   there, and I'm going to argue they have some fascinating

24   ideas, and right now what you've done, is you've dropped

25   a megaton of lightening on them because you've grabbed so

1   munch of the market space right now with services that to

2   some degree or another are compromising our enforcement

3   of property rights. You can't ignore that as market

4   harm.

5   And finally, I am going to suggest to you that

6   we have depressed investments. Of course, what this all

7   means -- going to invest in new services and new

8   providers. Next.

9   Playing our song. Let's consider some of the

10   reasonable ways in which music services right now compete

11   with one another, and not ignore these important

12   capabilities.

13   Will the market evolve toward downloading or

14   streaming, 99 cents a track, or $9.95 a month. Price

15   models, we can price the service based on a per track

16   basis, or on a subscription basis.

17   Product bundles, ITunes, the famous Apple

18   service obviously gets you to buy the music for the main

19   reason that they don't want to sell you the music, they

20   want to sell you the IPod. That's an intriguing business

21   model.

22   Joint ventures. Coke, Starbucks, and many of

23   the airlines and McDonalds all have used the sale of

24   music to sell some of their other products. These are

25   very reasonable ways of moving out in the market. We

1   have some real competition here.

2   Play list sharing. A service MusicMatch on

3   demand, and on demand allows you to send a play list to a

4   friend. The friend gets three listens for free before

5   they get to buy. A fascinating business model.

6   Tracking and recommendation. A wonderful

7   service out of England, headed by Peter Gabriel, called

8   OD2, was able to send customers 40 new songs a month of

9   world music based on how they responded to the songs they

10   sent from the previous month.

11   In this way, Peter Gabriel is able to expose

12   audiences from all over the world to the joys of music

13   from countries that we never have known to listen to

14   before.

15   These are all fascinating ways of behaving in

16   the market. They should fight with each other. They

17   should knock each others brains out, and I hope a few of

18   them survive.

19   Which ones are going to survive; don't ask me,

20   I'm an Economist. Okay.

21   Playing by the rules. I'm going to skip over

22   this slide. I don't know how much more time I have. Let

23   me skip that slide, playing by the rules -- I'm going to

24   get it.

25   Playing by the rules. There are some services

1   right now that are entirely legitimate and very

2   intriguing ways -- I do want to skip that slide.

3   Filtering. I have other things to say that I

4   want to say in three to four minutes. Can filtering

5   work. One of the key issues, then, is if P-to-P is going

6   to play in a level space, and fight with all these other

7   providers, and I hope they all do well. The question is,

8   can filtering work.

9   Well, I've got three sources here that sort of

10   say it can. Now, I'm not a software engineer myself, but

11   I'm going to tell you who they are, and you can make your

12   distinctions.

13   First of all, the Recording Industry

14   Association of America has always said that. Second of

15   all, as I read, and we'll hear from Les Ottolenghi

16   tomorrow; distributed computing industry association is

17   going to go along with is. They're inclined to advance

18   the position that relatable acoustic finger printing can

19   be used to filter the network, and we've also heard this

20   morning from Audible Magic suggesting they can do the

21   same.

22   So I now have two parties on the opposite ends

23   of the debate agreeing that filtering can work. And just

24   to show how objective I am, my co-author, Bill

25   Rosenblatt, who really doesn't have any horse in this

1   fight at all; says the same thing, in fact, filtering can

2   work. You can keep stuff of peer-to-peer networks, and,

3   therefore, there's your dividing line.

4   That's the rule you lay down. You filter. You

5   say if you want to put your stuff up, you can, and if you

6   don't want to put your stuff up, you don't have to.

7   That's the line we draw. That's the distinction we have

8   to make rather than choosing either, or, and moving to

9   the extreme. My position is we advance to a filtering.

10   But now I enter in -- remember, I said Hamlet,

11   if Hamlet is the hero of the play, now I'm going to

12   present what many people have to probably say is the

13   villain. Next, please.

14   What goes into a record. I will never be

15   forgiven for this by many people. If you're going to get

16   -- let me tell you a famous George Bernard Shaw story.

17   It's a famous joke that you all heard when you were

18   freshmen. I'm not going to tell you the whole joke. The

19   punch line is, madam, we all know what you are. The

20   question is, we have to work out the threats.

21   The same thing is true now. If you're going to

22   talk about a peer-to-peer network, you're going to talk

23   about people with content licensing the people who have

24   networks, you've got to work out the licensing

25   arrangements.

1   And here, there is a huge disconnect, because

2   there is a myth here. Apparently the RIAA and the record

3   labels are apparently going to be assailed and told don't

4   license your music for what you license it to the

5   download services, or to anybody else.

6   We'll tell you what the prices should be,

7   because your contracts are unconscionable, because you're

8   guilty of anti-trust violations, because we just think

9   there's better ways of doing this; forget about it.

10   If you want to talk seriously about markets,

11   you've got to work out the price, and I will suggest the

12   price be worked out as follows. Everything in gold down

13   the right side are people retailers, distributors,

14   manufacturers and publishers whom you have to pay off

15   under any kind of licensing scheme.

16   Let's just push them to the side, and look down

17   the left side. You have cost of the RIAA -- and, I'm

18   sorry. The record labels and the artists have to

19   recover.

20   Right now, you have to make -- if you're going

21   to license seriously, you have to make sure whatever you

22   license down the right side is commensurate regardless of

23   the way you sell the music.

24   Here's my intuition. If I have to pay off the

25   artist for 22 cents under one contract, I should also pay

 1   him under 22 cents under another. There basically should

 2   be a parity between the artist gets under either case.

 3   But the same thing is true, god forbid, for the

 4   label. I understand that labels are told they have to

 5   sell the stuff at much reduced prices. But they do --

 6   well, we'll talk about that during discussion. We'll

 7   talk about that during discussion.

 8   They have to recover their overhead. They have

 9   A&R. They have artists and repertoire. They have to

10   cover the X, and how they develop their X. They have to

11   recover their marketing. These things don't go away

12   simply because you've distributed the music over the

13   ITunes. It doesn't go away when you distribute the music

14   over Rhapsody.

15   There still is a business to run, and if I take

16   all of my music and you move it over from, let's say,

17   Walmart, or ITunes and put it on peer-to-peer, I have no

18   incentive to do so if I'm going to erode my profit

19   margin.

20   I'm not inclined to do so if you say, yeah,

21   move it over, and forget about your overhead. You don't

22   need to do that anymore. The truth of the matter is, if

23   you want to get serious about licensing, you've got to

24   get rates that are commensurate with the market, and

25   you've got to make sure those things are recovered.

1   I would say by and large what we're seeing

2   right now, 65 cents a track in ITunes is pretty much what

3   the deal is. And the numbers that I've seen, I think

4   it's a reasonable rate for record labels to get

5   compensated for royalties for their contents.

6   Finally, next -- last slide. Can P-to-P

7   survive; I think P-to-P services have a tremendous chance

8   of surviving if we filter and if we give them content,

9   and if things can be licensed correctly.

10   I think they have a fantastic way of getting

11   new non-protected works out into the audience. That

12   means you will see new local scene musicians.

13   You will see the labels themselves, Adam Toll -

14   - this is public information, that Big Champagne sells

15   data to the labels which use P-to-P networks to develop

16   new acts. You'll see P-to-P used for that purpose.

17   You may see P-to-P used for Legacy acts. Acts

18   that have already been developed. Acts that don't have

19   to go on the radio anymore. Don't need A&R. You may see

20   hypothetically 10 years from now the Rolling Stones

21   catalog being considered a legacy act on peer-to-peer.

22   I don't know about that, but it could get a

23   reduced license because many of the costs are no longer

24   necessarily recovered. That's the important thing.

25   A tremendous of peer-to-peer -- don't forget

1   this is video youths. Major corporations use peer-to-

2   peer right now for video distribution. The same thing is

3   possible for on-line bands.

4   An on-line band in Chicago can put itself on

5   the Internet, and say, look, pass us around. Watch us

6   perform. Watch us perform for an hour.

7   And only peer-to-peer networking -- a peer-to-

8   peer network is a very efficient way of distributing

9   video out there, and therefore can be used to let

10   everybody know about the talent of a band. What a

11   fantastic use for distributive computing technology.

12   Next thing. Specialized search. There's a

13   fabulous service called -- I'm drawing a blank here.

14   I'll tell you the name of it during question and answer.

15   You go on the service here, and you type in let's say

16   Black Sabbath, and you type in Chicago, and they will

17   tell you the name of -- give you the web site of every

18   band in Chicago that sounds like Black Sabbath.

19   This is a peer-to-peer, and they will let you

20   hear them, but putting you into a peer-to-peer club.

21   This is fabulous development of technology.

22   Super distribution, I discussed it before. You

23   give your sellers 35 percent of everything they sell by

24   selling onto other people. And finally, I finally make

25   the point, is if you develop this fabulous computer

1   network or fabulous delivery network for content, you've

2   got shared computing and archiving.

3   You build out your network and you've got a

4   bunch of people jumping on, and now you're able to, with

5   their consent, to sell out their space to other providers

6   in the network. To other business, who want distributive

7   computing and other people who want distributed

8   archiving, and other people who may want anonymous

9   publication.

10   So you build out the network and use it

11   appropriately. I won't -- go to next. I will make one

12   final point. Go to next. I will make one final point,

13   and the final point is this, the time has come, I hope,

14   for them to do it now. Each side is in a position now

15   where to continue this will be very, very harmful.

16   One of the best things about coming to a deal

17   with a legitimate peer-to-peer service, is I think a

18   legitimate peer-to-peer provider that really provides

19   good content will stop the forking of people moving off

20   to college students who are putting up the latest peer-

21   to-peer network.

22   The easiest way to stop the forking to other

23   networks down the road, is to make sure that a particular

24   peer-to-peer network is attractive enough and large

25   enough and endowed with enough good capabilities to keep

1   people on it.

2   And if you can do that, it's entirely

3   conceivable to any one network that has the base will

4   maintain its base, rather than see people migrate to

5   students elsewhere.

6   As for the RIAA, and the record labels, we

7   understand what a tough past three years it's been.

8   Hopefully we're going to stop that piracy, and we're

9   going to bring things back up and we're going to see a

10 growth in the music business again.

11   Thank you. Oh, I just wanted to -- there's a

12 -- in my slide where you can get the paper.

13   MR. ABBOTT: Yes. You have -- you made a copy

14 of that?

15   MR. EINHORN: No, I had another one I was going

16 to give out.

17   MR. ABBOTT: Okay. Well, we can arrange to

18 have that distributed later. As you know --

19   MR. EINHORN: No, no, it's on your -- it's on

20 the web site.

21   MR. ABBOTT: Okay. Eli Noam is now ready to

22 come up.

23   MR. EINHORN: HTTP:\\www. -- if you want my

24 URL, MAE@MediaTechCopy.com. Send me an eMail.

25 MAE@MediaTechCopy, just as it sounds, .com. I send you

1   my URLs.

2   MR. NOAM: Okay. And here's mine. For any

3   information that you might have about our next P-to-P

4   event, plus we have a call for papers. All right. But

5   we don't have a date.

6   Now, I'm going to try to make here the free

7   market case for piracy. And I know that kind of puts me

8   squarely between the firing lines here, but I do think

9   that in some ways the music industry -- and there's no

10   sense in kind of denying the problem that they're having.

11   That's kind of whether it's quite as large as they claim

12   it is, or whether it's only smaller, if they are being

13   economically harmed by piracy.

14   And then there's the position of Jay, over

15   there, who probably will argue that it's actually a good

16   thing. And in a way, they're both right. And the reason

17   is not because I want to be friends with everybody, but

18   because they are in kind of different stages of an

19   industry's development, and there's a real legitimate

20   role for the pirates, and in some ways they're helping

21   the industry emerge.

22   And so whether he likes it or not, Jay is

23   really working for the RIAA.

24   MR. AUGUSTSON: Wait. This is not my position,

25   but it's okay to use my name.

1   MR. NOAM: All right. Fine. Okay. Good.

2   So now, we all know the music industry is in

3   decline and under pressure and lots of downloads and all

4   that. And it's possible then to see this as the pirates

5   as a bunch of thieves, and that's the glass half empty

6   perspective.

7   But there's also the positive view, which is

8   that it is an enabler of commercial markets. I would

9   argue that when asked to look at this and put it in a

10   historic perspective. And so I'm going to give you a bit

11   perspective from 20,000 feet up.

12   And that is that there are lots of similar

13   types of arrangements that emerge from the grass roots.

14   And if you look at it historically, there were HAM radio

15   operators, and they existed before commercial radio.

16   David Sarnoff, of NBC RCA is kind of credited

17   as being the father of radio, and he really wasn't. He

18   was the commercial father maybe of American commercial

19   radio.

20   And so it goes. In the '70s, a citizens band

21   radio was a precursor of car radios, and there were

22   millions of people in their rigs and trucks and vans and

23   whatever talking to each other, and that led eventually

24   to the emergence also of cellular mobile telephony.

25   And microcomputers, also, in the late '70s, a

1   bunch of garage-type people who did challenge

2   successfully IBM in the way that giant companies such as

3   RCA or General Electric or the subsidized companies of

4   Europe and Japan really couldn't do.

5   And the Internet, of course, although started

6   by government, became very rapidly a community, non-

7   profit-type community.

8   And now, the open source software movement,

9   and, of course, MP3 file-sharing that we all know and

10   love. Okay.

11   Now, why -- in some ways I would argue that --

12   let me find my page. That it cannot truly be said that

13   these arrangements are economically more efficient than a

14   market based systems. In theory at least, most of the

15   arrangements that I mentioned could be better created by

16   companies with professional management, access to

17   financing, experience, know of marketing channels; all

18   the good stuff that we learn in business school.

19   And yet, the frequency with which these grass

20   root movements emerge suggest to me that they must have

21   some solid economic reason. What all these activities

22   have in common, is that they are network activity. The

23   more participants to the activity, the lower is its

24   average cost.

25   And so I'll show you just a little model, and

1   you'll -- Metcalf's Law that shows the benefits rise to

2   each member of the community with a number of members.

3   And if you cannot, bear with me -- horizontal

4   access is the number of people in a network, and the

5   vertical access is kind of the dollar cost, or dollar

6   benefits.

7   And the smaller the network is, the higher is

8   the average cost, and that falls to the price for that

9   activity because it is a high fixed cost, low marginal

10   cost economies of scale. So as you kind of move, become

11   larger, costs come down.

12   On the other, benefits go up as you -- as your

13   network increases. And at some point the two intersect,

14   but if you're -- and that is kind of the critical mass

15   point. The take-off point.

16   If you're to the left of that point, P1, the

17   costs are higher than the benefit, and the activity

18   doesn't take place. And if you're to the right of that

19   point, then the activity does take place in a self-

20   sustained way, just like a nuclear reaction. If it's to

21   the left, it fizzles.

22   And now, if one thinks that this is a

23   worthwhile activity, but one is still in the early stages

24   of the network, way to the left; how does one get to the

25   right to self-sustaining growth.

1   There are basically four ways to do that. One,

2   is through government subsidies, and in a way the

3   Internet did that and, in France, the Mini-tel did that,

4   and other countries have done it. So several ways.

5   A second way is to force a price to be low, and

6   in telecommunications, universal servers and kind of

7   regulation of prices downwards have in fact kind of

8   extended and expanded the network over a century.

9   Now, the third possibility -- these are two

10   government solutions. The third possibility is for a

11   government -- for a business firm to underwrite the early

12   deficit.

13   But here's the problem. They would lose in the

14   front part, but hopefully they would make up in the later

15   part, but they would do if they don't have a patent. If

16   they do have a patent, it's a different story.

17   But if they don't have a patent, once the

18   activity takes place, once the activity takes place and

19   there are no restrictions, no barriers to entry,

20   competitors will enter and will share in the benefits,

21   whereas they did not share in the cost, the early cost,

22   of subsidizing the network to its take of face.

23   And so there will be an under supply, an under

24   investment in such activity.

25   Now, but there is also a fourth possibility,

1   and that is community. What community does is two

2   things, both on the cost side and on the benefit side.

3   On the benefit side, the community creates

4   certain kind of extra benefits to people that belong

5   somewhere to a community that has a certain kind of

6   leading edge technologically, culturally, politically

7   they can unite in a certain kind of also negative

8   attitude towards their enemies whether it's Bill Gates or

9   the telephone company, or Hollywood, or whatever it is.

10   And so these communities tend to come with

11   fairly strong attitudes towards their adversaries. So

12   the communities spirit is strong.

13   And then, on the cost side, that kind of leads

14   to a steeper, higher benefit curve. And on the cost

15   side, they reduce cost by a lot of volunteer labor. High

16   priced -- that is high skilled people spending a lot of

17   volunteer hours doing this things and they generate

18   value. And yes, they also reduce cost by taking stuff

19   for which they should be paying, such as files of

20   content.

21   Now, I'm going to skip a bunch of alternatives

22   simply because we don't have time there to other

23   scenarios that I have, but I don't have the time to do

24   it.

25   So okay, but the larger -- but the important

1   thing is what the community does, is create a take off

2   point, it's P3 over there, which is much lower than the

3   P1 that would happen otherwise.

4   And because that is happening, an activity

5   takes place that would not take place otherwise, and once

6   it starts to take place, it grows, and it grows to a

7   sufficient size that commercial entry becomes interesting

8   and possible and profitable because they are enough

9   customers, enough people in the network, to have large

10   benefits and to have lower costs.

11   Okay. So now, when such commercial entry

12   starts to take place, private almost inevitably, and

13   quite unsentimentally, will push aside, do push aside,

14   much of the community that made it possible.

15   They have certain advantages, such as the ones

16   that I described. They have a branch that reassured

17   those users who are not as savvy as the early ones. The

18   persistence of commercial companies to provide a service.

19   Their reliability is longer lived than a volunteer system

20   whose flame burns brighter for greater routines.

21   There are good economic reasons after all why

22   commercial firms rather than communes supply most of our

23   needs on a daily basis.

24   Now, we can decry such an evolution as a

25   business take over. Or, we can also celebrate it as part

1   of a constant process of innovation in which community

2   and entrepreneurship plays an important role.

3   As a society, we tend to lionize the business

4   based disrupters of the status quo, as a creative

5   entrepreneurs, but ignore or even vilify the community

6   based disrupters as pirates, thieves, taking the cue from

7   established companies who want to protect themselves from

8   challenge.

9   Thus the established media should, in an ideal

10   world, value community efforts because they create the

11   user base for their own subsequent entry.

12   Twenty years ago, before the same Supreme

13   Court, against these -- much of the same companies,

14   argued against the video cassette recorder, if you

15   remember, for the same privacy potential.

16   They narrowly lost, but they were lucky that

17   they lost because the VCR enabled widespread home video

18   use, which has proven immensely profitable to these same

19   media firms.

20   Now, lastly, understand -- okay. So there are

21   some media leaders middle of Burdlesman who kind of

22   understood that, and actually wanted to play along with

23   Napster.

24   It kind of didn't work in the end for various

25   reasons, including that he was deposed in some palace

1   coup in Burdlesman but basically the concept was a clear,

2   forward looking concept.

3   Now, lastly, understand that this not only an

4   issue of music, or even only of video and a bunch of

5   other stuff. Today, with broad band Internet emerging

6   around the world, there are enormous secondary benefits

7   to the economy and to innovation from a rapid deployment

8   of high speed networks.

9   Today, entertainment users are the killer ap

10   for broad band that will make it attractive to many more

11   million of people, thereby creating many beneficial

12   network effects that will enable many other applications.

13   Thus, suppressing P-to-P activity that prime

14   the pump for subsequent commercial activity will only

15   harm users, will also harm media firms, and will harm the

16   digital economy as a whole.

17   Last point. Where does this leave the

18   community effort; there is always the next frontier to

19   conquer. Yesterday, it was music. Today, it is video

20   and game, and tomorrow maybe entirely new types of

21   interactive arts and entertainment.

22   And this, too, will begin with -- and to this

23   effort, the community can bring its strong assets and

24   abilities. Community, creativity, energy inter-activity

25   and peership.

 1   But this, too, will kind of inevitably lead,

 2   again, to a system which becomes then interesting enough

 3   for commercial providers.

 4   They will enter, they will enter successfully

 5   and they will probably marginalize the community efforts.

 6   The has to seek for another frontier, another cycle

 7   begins. Thank you.

 8   (Applause.)

 9   MR. ABBOTT: Thank you, Eli. Now, we'll turn

10   to Michael Smith, who I think will have a specific

11   consumer welfare benefit measure flowing from P-to-P that

12   he will discuss.

13   MR. SMITH: Thank you, Alden. First of all,

14   let me say how very pleased I am to have the opportunity

15   to speak to you today on what I think is an

16   extraordinarily important issue that the FTC is facing.

17   Let me give you a little bit of insight into my

18   background to help you understand where I'm coming from.

19   My training at the Bachelors and Masters level is in

20   engineering, electrical and telecommunications, and at

21   the Ph.D. level, was in information technology from the

22   Sloan School at MIT, but most of my course work was from

23   the economics department.

24   So in my research I try to use economic tools

25   to think about how structure and competition will play

1   out in electronic markets. Then use telecommunication

2   technology tools to think about how we can change the

3   design of those markets to yield better economic outcomes

4   both for -- both for consumers, producers and for society

5   as a whole.

6   So normally in my research I find myself

7   sitting in between technologists and economists and I

8   think that's actually the role that I'm designed to play

9   here.

10   What I would like to do, is just talk a little

11   bit about some of the research that we're doing at

12   Carnegie Mellon on peer-to-peer networks, and how I think

13   this plays into the design of these markets.

14   I would like to apply this to thinking about

15   music, but I think the comments I'm going to make could

16   apply equally well to any other creative activity.

17   Let me, first of all, make the somewhat

18   uninteresting comment that music is a game of

19   extraordinary hits and misses. About 1 percent of

20   promoted artists actually make it big. The remainder

21   sort of barely cover their costs, or in those cases

22   actually lose money.

23   Now, you might wonder why this is. It's

24   certainly possible that it could be the case of the

25   concentration. It's success is because of the

1   concentration and talent. That is, that very few people

2   are actually talented enough to be interesting.

3   All right. Now, I'll argue that if you look at

4   the success of artists, though I don't know if Brittany

5   Spears and Christina Aguilerra, the variation and talent

6   alone can't explain the success or failure of artists.

7   We need another maybe more compelling explanation.

8   Let me argue the two candidate explanations are

9   the concentration of the distribution channels that these

10   artists face, and the concentration in the promotional

11   channels that these artists face.

12   On the distribution side, we're told that at

13   Walmart has to sell around a hundred thousand copies of a

14   CD before it becomes profitable for it to put that CD on

15   its shelves. That is, that only around 1 percent of all

16   artist have access to Walmart's distribution channel, and

17   similarly for even large record stores you have a great

18   deal of concentration, and who has access to that

19   distribution channel.

20   If you can't get in that top 1 percent, you're

21   simply not going to be on the shelves at Walmart.

22   B, in terms of promotion, where it's a little

23   bit about a thousand new songs are released a week, and

24   only around three or four of those songs are ever going

25   to make a play list on a major radio station. Again, if

1   you can't get into that play list, you don't have access

2   to that distribution channel.

3   All right. So the question we face then is can

4   peer-to-peer networks change the nature of concentration

5   and either distribution or promotion, and we think the

6   answer is strongly yes. Let me try to put some numbers

7   against that.

8   We did a study with some colleagues at MIT on

9   the book industry. What we were thinking about is what

10   is the consumer's surplus gain from access to increased

11   product variety on-line.

12   That is, if you go to your local Barnes &

13   Noble, or if you go to your local book store, you'll find

14   about 40,000 unique copies, unique titles on the shelves.

15   You go to your local Barnes & Noble super

16   store, you might be lucky enough to find a hundred

17   thousand copies on the shelves. All right.

18   You go to Amazon.com, you're going to find 2.3

19   million titles, all the books in print, in addition to a

20   great number of books that are out of print.

21   And the question is, do consumers gain from

22   having access to those remaining 2.2 million titles.

23   It's entirely possible that consumers really only care

24   about the top 40,000, in which case they're not going to

25   face much gain at all.

1   We found that exactly the opposite is true. So

2   we developed what we think is sort of an innovative way

3   of measuring the sales for each individual title sold at

4   Amazon.com.

5   And when you look at that, what you find is

6   that about half of all titles sold at Amazon.com are

7   titles that wouldn't be stocked at a local Barnes &

8   Noble. That is, there are titles that fall outside of

9   the top 100,000 ranked books.

10   All right. And so this is what Wired Magazine

11   picked up this idea called the long tale. The shaded

12   area of this curve, this is the curve of sales, is a

13   function of rank. And the shaded area are titles that

14   wouldn't have otherwise been stocked at a local brick and

15   mortar Borders super store.

16   All right. Now, when you run some standard

17   econometric techniques to think about what's the consumer

18   surplus gain, you find that consumers gain about a

19   billion dollars a year from having access to these books

20   that they wouldn't have otherwise been able to easily

21   find and transact in a brick and mortar environment.

22   And to put that in perspective, that's about 10

23   times as large as a consumer surplus gain from access to

24   lower prices on-line. Okay.

25   So while the press has been talking about the

1   Internet is a great channel because consumers can find

2   lower prices, what we find is that the order of magnitude

3   larger effect is that the Internet is a great channel

4   because consumers can find access to all manner of books,

5   content, intellectual creation that they wouldn't have

6   otherwise been able to find through our narrow bandwidth

7   physical world channel.

8   All right. Now, could it be possible that

9   peer-to-peer networks could lead to a less concentrated

10   distribution channel, allow consumers to find artists

11   they wouldn't have otherwise found on their local Walmart

12   shelves, or even on their local Tower Records shelves.

13   Maybe even artists that aren't signed by major labels,

14   local bands. Things like that.

15   I think the answer is unquestionably yes, and

16   maybe in the question/answer time we can have time to

17   talk a little bit about that.

18   The second question then is could peer-to-peer

19   networks be used as a promotional channel, to actually

20   allow people to find these content. I tell my MBA

21   classrooms that managers today, the problem that -- the

22   scarce resource is not information, the scarce resource

23   is the attention.

24   So how do we get the attention of these

25   customers to help them find these songs they wouldn't

1   otherwise find. And we've done three projects that we

2   think relate to this, and let me explain briefly what

3   they are.

4   The first project looked at the network

5   extranalities that an added user brings to the network.

6   And what we found is that in peer-to-peer networks, in

7   open networks, we went out and measured the value an

8   additional user brings and the cost they impose on the

9   network as a function of network size.

10   And what we found is that the added user brings

11   a diminishing amount of value. That is the value network

12   extranalities are concave, but they impose an increasing

13   amount of cost. The cost curve is convex.

14   So at some point you want to limit the size or

15   the reach of the local peer-to-peer network, and I can

16   talk about how we feel that that's incorporated into Kaza

17   and Newtella and networks like that.

18   Now, once you know that the optimal reach of my

19   local network is bounded, the next important question is

20   how do I make sure that I get the people who share my

21   interest. The people who are going to provide me the

22   most value into my local community.

23   And we just finished up a piece of work where

24   we showed that if you put a fairly reasonable economic

25   overlay on the Newtella networks or Kaza networks, that

1   that sort of takes into account how much value does a

2   user provide the local community, and how much value does

3   that local community provide to the user that you can

4   achieve self-forming communities of interest.

5   That is, people who share the same common

6   interest who will cluster together in these peer-to-peer

7   networks.

8   Once we have this cluster, the thing we're

9   working on right now is to think about whether you could

10 use digital rights management systems, commerce systems,

11 recommender systems, collaborative filtering systems and

12 agents to allow my agent to go out on the network and

13 find content that I would be interested in, and bring it

14 back to me in a way that I can sample it, and then

15 purchase it easily.

16   Okay. So again, we think that not only can

17 peer-to-peer networks increase the diversity of content

18 on-line, they can also increase the ability to promote

19 new content in these settings.

20   Okay. Lastly, what are the implications of

21 this; to the extent that record labels face a very

22 concentrated distribution channel, a very concentrated

23 promotional channel, you're going to see a particular

24 type of industry structure.

25   And in particular I think you'll see a very

1   concentrated industry structure where you have a big

2   five, or a big four, or a big three; whatever it is this

3   week.

4   All right. To the extent that you relax those

5   bounds, you might see a relaxing in the concentration of

6   the industry. You might see the ability of new entrants

7   to come in.

8   And I think the unique challenge that the FTC

9   faces is when you look at profits go down in the music

10   industry, asking the question of whether this decline in

11   profits is because of piracy, or whether it's because of

12   just a natural change in the structure of the industry

13   that's going to make it hard for existing companies to

14   compete.

15   That, you know, sort of the old ways of

16   competing aren't going to work anymore, and maybe that's

17   why we're seeing at least part of the decline in the

18   profits of the industry.

19   And that's the challenge I think the FTC faces,

20   disentangling these two effects; the piracy effect versus

21   a simple change in the structure and dynamics of the

22   industry.

23   I'd also point out I have applied all of this

24   to music, the most commonly discussed industry when you

25   think of peer-to-peer networks.

1   But I think there are a wide variety of other

2   applications of peer-to-peer, some of which we're

3   thinking about; streaming programming. Thinking about

4   rich media blogging. If you think about the impact that

5   blogging has had on the dissemination of information. If

6   you could disseminate rich media, video and audio text

7   over blogs, I think that might have a unique impact on

8   society.

9   And then, lastly, we're working currently with

10   some other people in the computer science department on

11   thinking about using peer-to-peer technology to enable

12   rich media interaction in communities of interest or for

13   political or community discourse.

14   All right. And I'll be happy to expand on any

15   of these things in the question/answer time.

16   MR. ABBOTT: Michael, thanks very much. Now,

17   for discussion of a newly being developed P-to-P network

18   of interest in the academic community, Gary Augustson

19   will discuss LionShare.

20   MR. AUGUSTSON: Okay. That is me. Thank you.

21   I have been asked to talk about a product that we're

22   developing at Penn State, which is a peer-to-peer-based

23   software product, and I would like to point out that Mike

24   Hall, who is the developer of this is actually in the

25   audience. So if you give me some really tough technical

1   questions I'll turn to Mike.

2   But having been in this business and serving at

3   Penn State as a CIO for more than 20 years, where we have

4   some 83,000 students, 18,000 of whom sit in the second

5   largest congregation of resident hall students in the

6   country, we have faced the peer-to-peer music thing in

7   the cross hairs since the early days.

8   And there's a couple of comments that have been

9   made that I just got to respond to. At least you'll know

10   my position on it.

11   Filtering does not work.

12   (Applause.)

13   MR. AUGUSTSON: You know, encryption will

14   destroy it. If that doesn't, something else will. The

15   only way you can get into packets and actually filter is

16   to be very intrusive of content.

17   Parroting pricing is good rhetoric, but it

18   isn't 65 cents a copy. You need to do some testing from

19   the consumer side. We have done some of our students and

20   you would be surprised how low the cost goes in terms of

21   what they think a good price is. And really, the

22   business model has to be rethought.

23   Government subsidy the Internet, the government

24   subsidy of the Internet in the initial development was

25   somewhat minimal. The real value of what launched the

1   Internet was the partnership of industry, government and

2   higher education. And that's what we have to return in

3   all of our technology development and infrastructure

4   development.

5   And it's kind of fascinating that we use word

6   broad band in a city that's proud to define broad band as

7   200 kilobytes. But that's a whole other story.

8   Can peer-to-peer survive; I think the answer is

9   that's kind of a specious question. It is surviving.

10   It's thriving. It is not a question in my mind of public

11   versus private. It's a question between responsible use

12   of peer-to-peer technology, and irresponsible use of

13   peer-to-peer technology. And that's really where

14   LionShare project comes in.

15   What we've done is to develop an environment

16   that depends upon what we would call -- a responsible

17   environment for the use of the peer-to-peer network.

18   I should point out that LionShare was not

19   developed to show an application of peer-to-peer.

20   LionShare was developed to solve an academic problem, and

21   peer-to-peer technology happened to be the best solution

22   for it.

23   Key to our development of it is an underlying -

24   - it's not like the early uses of peer-to-peer technology

25   where there is anonymous access to it. Everyone who has

 1   access to the LionShare environment has a digital

 2   identity.

 3   It's based upon what some people like to call

 4   the three A's. Authentication, all users must be

 5   authenticated to use the network. Shared resources are

 6   associated with the individual who shares the resource.

 7   Authorization, you must be granted and you have the right

 8   to grant authorization for those that you want to use

 9   your resources. And accountability, you're accountable

10   for the resources that you use, and trackable.

11   Another major distinction between a

12   characteristic of LionShare is it also gives you the

13   ability to search repositories, the standard based

14   repositories that are outside the peer-to-peer network.

15   And in fact, therefore you can with one single query do

16   some substantial querying across integrated data bases.

17   There's a persistence angle to it here, too,

18   that's actually not highlighted on these slides. Is that

19   the technology that stands behind the LionShare

20   technology allows the data that you want shared, to be

21   shared even if you, yourself, as a user, aren't actively

22   in the environment at the time.

23   And then there is the advertising that I wanted

24   to make sure everyone knew that the Andrew W. Mellon

25   Foundation is a primary sponsor of this product. It's

1   always a good idea to thank your sponsors.

2   Some of the specifics, I was asked what were

3   some of the goals of LionShare in development. It's

4   always after you developed a product that you try and

5   remember what it was you were trying to do, and it's

6   pretty consistent with the things we talked about before.

7   Our goal was to find an environment to support

8   the security environment that we were talking about, can

9   it work. To enable collaboration. I think one of the

10   things -- and this gets into a lot of issues, it'll take

11   a lot of time to discuss. The creating communities of

12   scholars that can collaborate with one another in a

13   federation environment -- a security environment, a

14   federated group of users.

15   The whole issue of having the ability to search

16   from a single query to discover and retrieve materials

17   across multiple environments increases the -- I don't

18   even know where I am in my slides.

19   Discovery process, and -- well, that's all

20   right. Anyway. So some of the LionShare capabilities

21   include -- well, these are the capabilities, aren't they?

22   You can publish your work. You can search for

23   works that helps the faculty, organizer works better,

24   collect grades in an environment for collaboration. You

25   have control of the security of the environment, and the

 1   persistence of peer users.

 2   Some of the benefits, no anonymous users.

 3   Multi-institutional participation. I think it was

 4   ClickKey, as we talked about, this is not a Penn State

 5   enterprise. There are eight universities working

 6   together to develop this. It has a release date. I'll

 7   show you some of the release times we're talking about.

 8   And there is a lot of interest in the community

 9   about it. We're actually finding a lot of international

10   interest in this, which is somewhat surprising just to

11   start with.

12   It's an open source development project. The

13   code that's developed will be available, and will be

14   returned to the open source environment and is extensible

15   in general.

16   I was asked to think about what some of the

17   risks of the environment were, and I really don't --

18   hadn't thought a lot about that, and I guess one of the

19   risks that we discovered is some folks may not -- some

20   environments may not want to put the trust fabric that's

21   required to truly support a secure and authenticatable

22   environment like this. It's kind of frightening to think

23   that people aren't building those trust environments

24   within their institutions, whether they're education,

25   government, or business. That they aren't building trust

1   environments independent of whether or not they're trying

2   to use technologies of this type.

3   LionShare will not solve the copyright issue.

4   If you want to steal material and put it on LionShare and

5   then authenticate other users to use it, you could do it.

6   And it's, again, talk about responsible use. We put

7   tools in place that if you're a responsible user, you can

8   make sure that people don't misuse it.

9   And there's the concern on the part of some

10   that since they know their behavior is being monitored,

11   maybe some people won't want to use it. But again, any

12   secure environment in any institution today that has

13   reasonable security environment, monitoring is probably

14   the wrong word to use there. It's just accountability

15   again.

16   Will those users who choose not to create an

17   environment that is this restrictive tend to use less

18   restrictive environments; they might. Users may not want

19   to -- it's been suggested to us that there may be many in

20   the academic community that won't use the capability

21   because they won't want to make the investments necessary

22   to create an environment in which it will work.

23   And will some of the protection that people are

24   putting in place to in fact inhibit peer-to-peer

25   technology actually inhibit LionShare from getting

1   through fire walls that have all the ports blocked, the

2   appropriate ports blocked that are necessary to make it

3   happen.

4   These are some of the release dates for the

5   product. We actually will have a public release this

6   coming September. There is a web page with information

7   on it. I guess, to me, it's the whole issue of -- peer-

8   to-peer technology is important because it's enabling us

9   to develop products that are critical to what we think

10   are critical to extending the research environment that

11   our research needs, researchers need to have advance the,

12   quote, intellectual economy of the country.

13   This not an issue about can you share music.

14   Or only an issue of can you share music, or can you share

15   movies. This is an issue about whether or not we have

16   the ability to -- whether we'll take advantage of the

17   tools that are there to in fact extend the ability of our

18   researchers over the coming years.

19   Thank you.

20   MR. ABBOTT: Thanks very much. The FTC is an

21   anti-trust agency, as well as a consumer protection

22   agency. So now we are going to hear something about

23   anti-trust, specifically in the context of software

24   product markets, and their transformation by P-to-P.

25   And Professor Andrew Chin, who teaches

1   anti-trust and has an interesting article on software

2   markets coming out soon, will do the presentation.

3   MR. CHIN: Well, actually, it's out now. Well,

4   like Michael, I came to my present academic discipline in

5   a securest way. Ten years ago I was a computer

6   scientist, and one of the more rewarding stops along the

7   way to becoming a law professor was here at the FTC where

8   I was a summer intern in the mergers three shop. So

9   here's a shout out to anyone from mergers three.

10   And in addition to the shout out, this really

11   isn't -- this talk is really in service of anti-trust

12   enforcement analysis, and the task I've set for myself

13   today is to try to map some of the very appealing visions

14   of competition and well functioning markets for P-to-P

15   software products that we've heard from the other

16   speakers today into the space of tools that are available

17   to anti-trust attorneys.

18   There is also material of interest to

19   non-anti-trust attorneys as well. One of which is sort

20   the conclusion of my second article on the Microsoft

21   case.

22   But here is my eMail address, and easy to

23   remember URL. So there are two forthcoming articles.

24   One is out already in the Harvard Journal of Law and

25   Technology, and is available by link from my web site.

1   And the other is going to appear next year in

2   Wake Forest, and, you know, one of the inclusions of the

3   decoding Microsoft piece is that the government could

4   have prevailed on remand before Judge Kitelli on the time

5   claim.

6   So that may be of interest to those of you who

7   have followed the case.

8   So my talk today is really descriptive, not

9   normative, and the aim is really to identify conditions

10   under which full and free competition to deliver highly

11   usable in the sense that Nathan Good and Aaron

12   Kreckleberg were talking about usability.

13   Usable, efficient P-to-P software products to

14   consumers for legal, socially beneficial uses. And

15   conditions under which that can flourish, and conditions

16   under which anti-trust agencies may want to recognize the

17   dangers of the exercise of market power that might lead

18   to failures of such markets.

19   And all of this, hopefully, will get us to a

20   vision of competition, probably closer to that espoused

21   by Martin Lafferty than by Michael Einhorn.

22   So the first, and probably most important point

23   from the Microsoft stand point, is that we need to

24   understand what a software product is if we're going to

25   define the market in which software products compete.

1   And Microsoft's position throughout the case was that a

2   software product consists of code and nothing else.

3   And this conflagration between software

4   products and software itself is pervasive in the record

5   of the Microsoft proceedings and commentary, subsequent

6   commentary. But it's quickly answered by noting that

7   Microsoft would not have taken the same litigation

8   position against a copyright infringement defendant who

9   claimed to own the code once they had purchased a copy of

10 Windows 98.

11   So a software product has got to be something

12 else, and I unpacked what I think a software product is

13 in the anti-trust analysis piece. It's a combination of

14 legal rights and, or, immunities derived from the

15 vendor's copyright and the accompanying software.

16   This can include terms and rights that are

17 enumerated in the ULA, but also for those who are deemed

18 owners of copy under Section 117 of the Copyright Act.

19 It could also include exercises of the statutory adaption

20 exemption in order to perform linking and loading of the

21 software into RAM.

22   And all of this is cabined by contemplated end

23 uses. That is, the copyright act does not act to -- does

24 not operate to bundle these uses together.

25   A software product also includes technological

1 capabilities that are supported by the accompanying

2 software.

3   So it's the technological ability to install

4 and run the accompanying software. We're distinguishing

5 software from the software product by saying the software

6 accompanies the software product.

7   So it's the ability to install and run the

8 accompanying software for contemplated end uses according

9 to the accompanying documentation.

10   Okay. So the software continues to belong to

11 the software vendor, but the software product that

12 changes hands is a set of legal rights and technological

13 capabilities.

14   Okay. Well, if everything is cabined around

15 end use, and copyright law does not operate to bundle the

16 end uses together, does not operate to immunize time,

17 then we had better have a fairly precise definition of

18 what an end use is.

19   And what the other tool that I add to the

20 standard frame work for market definition, is I formulate

21 a way of expressing end use for software at what I think

22 is the right level of abstraction.

23   So to understand what the right level of

24 abstraction is, let's look at what is the wrong level of

25 abstraction.

1   This is two concrete. So if you think of the

2   end use of this software is to enable someone to get cash

3   from an ATM, and you can tell the story in terms of this

4   interaction between the user and the system where the

5   user inserts a card, the system reads the magnetic

6   stripe, asks for the pin, the user puts in a pin, the

7   system verifies the pin, displays a menu of how much you

8   want. You press a key, it goes on and on.

9   All of this presupposes certain design choices

10   that are used to implement a system that supports that

11   user purpose of getting cash from an ATM. Instead of

12   inserting the card and entering a pin, you could verify

13   your identity by retinal scan, or other biometric

14   methods.

15   You could, instead of having a key pad where

16   you select the amount of money, you could do it by voice

17   recognition or, you know, all sorts of ways.

18   So instead of presupposing those design

19   choices, you can abstract from that use case the

20   essential end use where you're focusing not on user

21   actions and system responses, but user intentions and

22   system responsibilities.

23   And so you, at a higher level of abstraction,

24   described the same interaction between user and system as

25   identifying yourself, verifying your identity, offering

1   choices, choosing how much money, dispensing the cash,

2   taking cash.

3   This is a minimal set, and necessary set of

4   interaction steps that are necessary to support the user

5   purpose.

6   So this sets up the competition. The framework

7   for competition. This defines -- this maps onto

8   functional interchange ability of use, and it sets up a

9   competition whereby vendors of software are trying to

10   make more usable software where the system and the

11   system's actions match the user's intentions.

12   And the more closely that happens -- you know,

13   Michael Durtusis wrote whole books about this. Donald

14   Norman writes about the gulf of execution, the gulf of

15   evaluation. These are measures of usability. The more

16   usable a software, this market set up is a way of driving

17   the competition towards more usable software.

18   So a well functioning software product is set

19   up whereby the market is defined doctrinally in terms of

20   these essential use cases, and the software developers

21   then go to the work of implementation.

22   And this includes the freedom to choose the

23   code that is to be executed when a user chooses its

24   software product for a particular essential end use.

25   And this is worded rather carefully. It

1   includes choosing a code that has been written by other

2   software developers. So it can include platform code,

3   making use of Windows, ATIs and the like.

4   So a software developer needs that freedom on

5   the back end to be able to come up with their design and

6   to choose the code. If that design choice is overridden

7   by the exercise of market power, by a monopolist say,

8   overriding the user's choice of a default browser

9   software that the vendor for that default browser chose

10   to run when the user wanted to form a web transaction,

11   then that's a distortion of what not to be a well

12   functioning software product market.

13   Similarly, the distinction between Napster and

14   Grockster turning on a design decision to have a

15   centralized indexing server also seems to me to distort

16   what would otherwise be a well functioning software

17   product market that would be directed towards the most

18   usable P-to-P software for legitimate uses.

19   So these are things that ought to raise a red

20   flag in terms of anti-trust enforcement and the problems

21   that may be created by these distortions of the

22   well functioning software product market paradigm.

23   How can we say that there are -- that the same

24   piece of copyrighted software participates in multiple

25   markets; well, simply, we extend the concept of price

 1   discrimination markets. So we recognize that a single

 2   product might still participate in different product

 3   markets by the fact that there are captive end use

 4   segments around which a relevant product market can be

 5   defined.

 6   As former FTC Chairman Robert Potofky pointed

 7   out, of course, the Sulfane case, probably the dissent in

 8   Sulfane case suggesting that cigarette manufacturers

 9   could be a captive end use segment was probably not well

10   founded, because, say meat packers might conduct

11   arbitrage since they could choose among all kinds of

12   flexible wrapping materials. They could buy extra

13   cellophane and sell it to the cigarette manufacturers.

14   Software, probably not, digital rights

15   management powerfully reinforces the ability of software

16   vendors to restrict use of their software products to

17   certain end use segments.

18   Also, implicit in I think Chairman Potofksy's

19   view that the cellophane market could not be the subject

20   of price discrimination, is the idea that any diminution

21   in the quality of cellophane for wrapping cigarettes

22   would probably result in -- also in the diminution and

23   quality for the purpose of wrapping meat.

24   Okay. But it's possible on the other hand to

25   discriminate in terms of quality. By reducing quality

1   with respect to a certain end use of a software product

2   alone.

3   In fact, the Felton Program did just that. It

4   reduced the quality of web browsing Windows '98 to zero.

5   And so, this demonstrated the potential for the end use

6   of Windows 98 for the purpose of conducting web

7   transactions to be the subject of a captive end use

8   segment.

9   Okay. So what are the unique consequences or

10   the unique attributes of P-to-P software markets; well,

11   in terms of the end use segment analysis, if we think of

12   -- distinguish use as downloading and uploading files,

13   certainly the value of the network for downloaders would

14   go down if the quality of the network for uploaders goes

15   down. If you have people who upload, the value of the

16   network will go down, and vice a versa.

17   So neither of these end use segments can be

18   captive. And so we look at these as one market.

19   Anti-trust concerns that are specific to the

20   P-to-P framework, overriding of user choice. Keith Ross

21   suggested briefly -- I don't know if he retracted, but he

22   suggested that Microsoft could do a very good job of

23   implementing P-to-P in their next version of Windows.

24   One could see an integration in terms of the

25   sharing of code, the sharing of user interfaces. You

1   know, very easy to put a little check box on the Windows

2   Explorer folder and turn into sharing.

3   So but as with web browsers, you know,

4   Microsoft made the claim throughout the trial that it had

5   produced the best of breed web browser that rendered

6   further competition in the web browser space unnecessary.

7   I think that claim is just as specious as -- or the claim

8   that P-to-P file-sharing networks could have the best of

9   breed implementation by Microsoft is just as specious.

10   So you know, what a thousand P-to-P networks

11   bloom, and this is an anti-trust framework for ensuring

12   that that happens.

13   MR. ABBOTT: Thanks, Professor Chin. Finally,

14   I'm looking very much forward to a provocative

15   presentation by Johan Pouwelse, our international

16   representative. And I think he'll discuss more briefly

17   some social forces that may shape the utilization of

18   P-to-P, and perhaps address the question can elicit

19   downloads really be controlled, or not, among other

20   topics.

21   MR. POUWELSE: Thank you. So thanks for having

22   me here. I first would like to define peer-to-peer a bit

23   more precisely. So as you may have seen in the previous

24   slides, when things grow, or diminish their value

25   increases or decreases.

1   So unfortunately our panel decreased and we

2   lost Clay Shirky. So I hope to keep the value of the

3   panel up and try to replace and talk a bit about two or

4   three of his slides.

5   So defining peer-to-peer a bit more precisely.

6   So what is peer-to-peer in general most about; it's about

7   a pooling resources together. So precisely the resources

8   at the edge of the Internet. Usually they are not used

9   efficiently before the arrival of peer-to-peer.

10   So when you put all these resources together,

11   you got a very cost efficient and very valuable resource,

12   which is disruptive to a lot of business models.

13   And as is mentioned this morning, so we only

14   scraped the possibilities of peer-to-peer, and there are

15   quite a lot of novel ways that are out there to do more

16   with peer-to-peer paradigm.

17   So if you look at the very deep level, you have

18   all these resources which are exploited by peer-to-peer.

19   So we only talked about file-sharing and illegal MP3s and

20   Brittany Spears. We touched here, in this panel, a bit

21   wider.

22   So to put things next to each other, so it's

23   about disk space, processing cycles, internal memory,

24   Internet band width, and, finally, my personal favorite,

25   is human attention. So volunteers.

1   So the NASA click worker's project is a very

2   interesting one. What is the social phenomenon that

3   people go to the Internet. They take actually a course

4   in meteorite impact recognition, and they look at -- they

5   look at images of other planets, and they identify cost

6   free, for NASA, what is a meteorite. A meteorite impact

7   site.

8   So what's the social phenomenon behind that.

9   That's a resource on the edge of the Internet which is

10   normally not used that efficiently.

11   So there is something going on in general in

12   peer-to-peer here. So if you look at a bit different

13   level, so instead of extracting the resources, so we now

14   have the term file-sharing here, storage space, more

15   efficient use of scratch space, and that you have

16   redundancy, and there are more examples which we haven't

17   yet discovered in computer science.

18   So if you look at the shallow pattern, so I

19   hope the legislation here in the states Won't take this -

20   - for Europe it would be good maybe, but then you could

21   test out this interesting legislation and we just see how

22   it goes.

23   (Laughter.)

24   MR. POUWELSE: So if you look at the shallow

25   patterns, so peer-to-peer is all about Kaza, file-

1   sharing, and all illegal stuff and disrupting business

2   models and also the unfortunate thing that it's very

3   efficient for things like explicit pictures.

4   So this is the slide I want to talk to in my

5   own work, because I no longer understand it.

6   (Laughter.)

7   MR. POUWELSE: So I think I'm ahead of

8   schedule. I was promised by eMail that I would get five

9   minutes to do -- to try to define a peer-to-peer a bit

10   more precisely.

11   So I would like to talk to you now about my

12   vision on the future of peer-to-peer. So a provocative

13   talk maybe on what if, if there is no solution, and if

14   peer-to-peer is here to stay.

15   So we have this peer-to-peer stuff, and I am

16   actually one of the few researchers that has been

17   dedicated to peer-to-peer together with the great work

18   presented this morning of Professor Keith Ross.

19   So I did some initial measurements of Kaza, and

20   two years ago, because I did a Ph.D. in resource

21   management, I thought BitTorrent had the potential to be

22   the market leader, and it turns out they're now clearly

23   the market leader. And they're occupying 35 percent of

24   the Internet band width, and computer science,

25   researchers cannot keep up. They're just too fast.

1   There have been now four studies, and I think I

2   conducted the largest both in time because I have been

3   taking traces one and a half years of BitTorrent, and,

4   also because I have exclusive access to big super

5   computers. And that my professor is not -- is sort of

6   immune to legal threats because my measurement

7   infrastructure also met with some Hollywood measurement

8   infrastructure. So we have generated a few complaints

9   there.

10   But I also watched the -- seeing the identity

11   of the person that injected popular movies in the

12   Internet. So that's also quite -- was critical

13   information for some of the stake holders here.

14   So I don't know if we still know what you did

15   last Christmas, but I was watching the super computer

16   because around that time these popular movies were

17   leaking on the Internet. And so it's like 12,000 people

18   were sharing that and downloading it from BitTorrent.

19   So you can use my research to both improve, or

20   to attack BitTorrent. And so what's demonstrated

21   yesterday, BitTorrent is now officially by the content

22   holder taken seriously. So it's the market leader, and

23   they're now attacking it.

24   So the site called UCEF.com, the second largest

25   BitTorrent peer-to-peer site is now taken off line due to

 1   legal reasons. They were putting a dedicated server in

 2   France, and it seems they were being taken down.

 3   So it will probably take three days or

 4   something for them to buy another server rack.

 5   (Laughter.)

 6   MR. POUWELSE: So I'm heading the peer-to-peer

 7   team with a few Ph.D. students, and a few master's

 8   students, and we're working on the module architecture

 9   for peer-to-peer. And working on video streaming from

10   one web cam to a million receivers.

11   So if you want to read more in detail about my

12   BitTorrent work, it's now yesterday I put it out on the

13   web. So when you can now Google at it if you type in

14   BitTorrent measurements and analysis.

15   So if you want to read that, okay. Most people

16   can read that, but a Ph.D. in computer science helps.

17   (Laughter.)

18   MR. POUWELSE: It's worth two years of research

19   both at Delf University and my time at MIT Boston. So it

20   involves the supernova.org web site. That's the market

21   leader with a few million people downloading copyrighted

22   content.

23   So I have the statistics of a fairly number of

24   a copyrighted files in the -- in my data base, and I will

25   be publishing that in a month with hopefully open data or

1   whatever license. And it contains all the statistics of

2   the downloading behavior.

3   So it's like this morning the people from Big

4   Champagne they have a commercial data base which is

5   probably not going back far enough as the early days of

6   BitTorrent.

7   Right. And so you can use this sort of trace

8   to get a feel for the download speed, and other issues.

9   And especially we would like to mention things like

10   integrity in BitTorrent.

11   So the reason why it is the market leader is

12   because there is no -- you can get away with downloading

13   and having no spyware, having no adult content or other

14   material. You know, this is a file-sharing system which

15   has built in measures to counter integrity attacks.

16   Right. So having read things about the

17   negatives about peer-to-peer file-sharing, peer-to-peer

18   in general, and to the great things about the positive

19   effects, which I will be addressing.

20   So I hope to give an understanding that there

21   is a big interlock between peer-to-peer technology in

22   general, which are on the Clay Shirky list of exploiting

23   CPU cycle, which is used in big super computers, and the

24   NASA example of the identifying meteorites impact.

25   So I explain the black scenario and how it

1   releases on peer-to-peer networks. I also explain how

2   communication is -- can be made more efficiently using

3   peer-to-peer technology, and information distribution and

4   storage and manipulation in general. Which was already

5   in other previous slides on this panel.

6   So in my opinion, peer-to-peer file-sharing is

7   an innovation driver for technology. So every 18 months

8   or so, there is a new generation, and if there are a lot

9   of law suits, so the current trend is like -- correct me

10   if I'm wrong. Around 220 law suits per month.

11   So if that number goes up, then people will

12   have an incentive to develop new technology which makes

13   sure that IP numbers can't be traced, but that's from a

14   personal --

15   (Interruption to proceedings.)

16   MR. POUWELSE: So in about a few months, if the

17   number of lawsuits goes up, then there is a price to pay

18   for privacy. That is, you get half the download speed,

19   or a quarter of the download speed.

20   So people do not value their privacy, they

21   value download speed more in general. So these programs

22   do not get -- so things like FreeNet, that have been

23   around for years, but they're just not very fast. So

24   people don't use them.

25   So one thing I want to address which is

         1   important if you want to put in legislation about peer-

         2   to-peer. Is that you move onto the path that you're

         3   going after the technology as also mentioned here before.

         4   So I think I would even go as far as that Cline

         5   Server is a -- is the old paradigm, and that the

         6   peer-to-peer paradigm is more cost efficient because it

         7   allows for the better pooling of resources, and there is

         8   no guy in an office somewhere in Slovenia or something

         9   doing the maintenance of the Kaza network. So that helps

        10   a lot in economic perspective.

        11   And to the unfortunate mishap or I would call

        12   it some people's interest, there is no need for

        13   intermediaries in peer-to-peer. So that it's very

        14   difficult to make money out of this technology I think.

        15   Because it eliminates a single point of failure, and due

        16   to the distributive nature, it's also very reliable.

        17   So another point that serves as an example of

        18   the peer-to-peer drives the innovation is the social

        19   software now. Quite a good -- in the computer science

        20   field is that a lot of people are trying to make now

        21   software understand social structures. So that finally,

        22   maybe even in a decade, that your operating system

        23   understands who your friends are and who you trust.

        24   So that's sort of technology that doesn't exist

        25   yet. Things like -- are not yet understood by machine,

1   and so web site clicking by user making that machine

2   readable is something that people are working on in the

3   peer-to-peer file-sharing arena.

4   Right. Just a few slides left. Just explain

5   the eco system here, and black scenario. I think we have

6   all talked about technology and law. That's not

7   important to my opinion. Social demand, that is

8   important.

9   There were some numbers this morning, but I

10   think the numbers should be higher because there are a

11   lot of people that are not technologically savvy that are

12   using other people. So please download this new CD and

13   burn it for me, and then a few days later these people

14   have the new CD from BitTorrent or Kaza, whatever.

15   So we've got millions of users that are

16   addicted to access to free song, free games, free TV

17   shows and movies, and if you want to try to put that back

18   in the box, then you have to severely restrict freedom.

19   We're talking about coping the laws of China to prevent

20   peer-to-peer in another decade maybe.

21   If there is a social demand for free music,

22   then technology will fulfill that. There will always be

23   a Sean Flemming, or a whatever kind of guy who can

24   deliver this sort of stuff.

25   So filtering will not work, because the system

1   that begins to filter, will lose their interest to the

2   common user because they want to click for Brittany

3   Spears and Brittany Spears is no longer on there. So

4   that's very bad for them.

5   So they switch to a new way. A new system for

6   getting their free stuff. So what's the black scenario

7   then for the content industry; that's quite clear. So

8   things like ITunes Music Store, people can get music for

9   their IPod for free, but still it's easier to go there,

10   there's the sypware issue, it's -- it looks nicer. There

11   is an industry that works on that.

12   So the attitude that people have for going to

13   the ITunes Music Store, is in my opinion vital to the

14   whole peer-to-peer file-sharing equation. The new

15   generation that's brought up, that does not think it's

16   morally wrong to copy music, that's the key to the

17   equation.

18   If you put in legislation or something, you

19   really have to change their attitude. That would be the

20   better approach.

21   So the ITunes Music Store people really have to

22   foster their good feeling when you're doing the legal

23   thing. And on the other end of the spectrum, we have to

24   -- they can use this peer-to-peer technology to directly

25   bring the artist in contact with the consumer.

 1   Right. My last slide. After all this gloomy

 2   black scenario, so, as I mentioned, the peer-to-peer

 3   technology allows for efficient pooling of resources.

 4   So you can use for example the Skype

 5   technology. You can use it for virtually free phone

 6   calls to other PCs or even using the new technology by

 7   Siemans you can use it also to cordless phones.

 8   So this is, again, an existing example which is

 9   significant non-infringing use of technology such as

10   Super Bears, NASA convention, and fire wall avoidance,

11   which has been in the Kaza for some time. And people do

12   not want to get bothered with their fire wall or whatever

13   settings. They just want to make a phone call to their

14   friends, and they just want to do it in one click, and

15   then it happens.

16   So people want to use the software and

17   peer-to-peer technology has offered a unique way to do

18   it. So this doesn't have a CISCO switchboard or whatever

19   in between. There is no maintenance cost. It can

20   compete and it's very efficient use of peer-to-peer

21   technology.

22   So after this Skype example, just to the more

23   future technology like in the Clay Shirky slides that the

24   -- three sources of the volunteers on the Internet. So

25   if you have the volunteers and you have software to do

1   collaborative writing of an encyclopedia, so --

2   encyclopedia which is currently bigger than the

3   encyclopedia Britannica.

4   So people currently still do not trust the

5   opinions stated in the -- or other things, but for some

6   reason a group of people finds it hard to write a

7   collaborative document on George Bush, the Palestinian

8   conflict, or abortion. So there is a lot of software

9   which needs to be developed to do collaborative document

10   writing on controversial topics.

11   But there is progress in this field. So in a

12   few years I think -- the kind of angles will even include

13   scientific knowledge, and will change the way we think

14   about publishing scientific works.

15   So this is a technology which can fulfill as

16   the last bullet on the slide here. The dream of the

17   visionary decades ago that we can better -- get better

18   access to all the information and knowledge out there.

19   So that was my last point.

20   MR. ABBOTT: Thank you very much, Johan. I

21   know things are running late, but we started late, and I

22   think a number of provocative questions are on the table.

23   And actually, I would like to turn -- start out on the

24   issue of property rights.

25   Now, Michael Einhorn reminded us the importance

1   certainly in the mind of economists of property rights

2   protection. And the conventional wisdom, certainly from

3   some commentators, have been that, gee, P-to-P networks

4   is currently constituted or a great threat to the

5   incentives to create new copyrighted intellectual

6   property.

7   But is that really true? Is there any -- does

8   everyone agree, or do some disagree, that longer term

9   P-to-P pose -- could pose major harm to copyright

10   holders?

11   Yes. Is there anybody who would like to argue

12   that they don't pose a harm?

13   MR. NOAM: Long term, I think it's true, but

14   there is always kind of an early stage in which there is

15   some fuzziness. And just remember, if property rights

16   would have been taken totally seriously, this country

17   wouldn't exist in its other phases.

18   People just kind of came and took, and in the

19   first century of this Republic, the media companies of

20   the day, the publishers and the music theaters and so on,

21   they also just took English stuff. And that kind of is a

22   way in which industries get going. Technologies get

23   going.

24   After that, you stabilize your homestead, your

25   property rights, the -- the property boundaries get

1   defined much more clearly.

2   But in the beginning, I don't think we should

3   kind of get hung up on it.

4   MR. ABBOTT: Michael, do you have a reaction to

5   that?

6   MR. SMITH: Hearing some of the discussion this

7   morning I am reminded of remarks that I first read in

8   Jean-Jacques Rousseau's Second Discourse, let us begin by

9   ignoring the facts.

10   What we have heard here are historical

11   analogies that have superficial resemblance to content

12   industries. We have heard a network tipping model used

13   for telecommunication extended over to the content

14   industry. We have heard a suggestion that 65 cents isn't

15   a fair price to charge because students don't think it's

16   fair.

17   We have definitely not considered, anyone even

18   suggesting what the facts are. Nobody has suggested what

19   it takes anybody to get paid. Nobody discussed the costs

20   or the bottom line or the profit rates.

21   They don't acknowledge that someone has to find

22   the band, record the band, promote the band, pay

23   overhead, and actually pay off the shareholders as well.

24   All I am saying here -- let me be more precise.

25   I am not saying whether 65 cents is fair or not. All I

1   am saying is I want to license that in an open market.

2   I want -- what I want is someone from the

3   record labels to sit down with a licensing agent, maybe

4   more than one, from let's say the peer-to-peer

5   industries. Someone who is empowered to negotiate and

6   they sit down in the same room and they work out and they

7   learn what it takes.

8   So that if someone is going to release a track,

9   when they release the track on a CD, or on ITunes, or on

10 a streaming service, or on peer-to-peer they can be sure

11 that in any case they get a reasonable rate of return

12 that is sufficient to cover, god forbid, A&R, marketing,

13 overhead; that's all we want to do.

14   That's all I suggest we're doing. And I am

15 saying don't believe Einhorn when he says 65 cents, just

16 get people in the same room and license, and negotiate

17 licenses.

18   MR. ABBOTT: I see. Okay. I see. As they

19 used to say, the natives are restless. Are there some

20 questions from the audience?

21   A PARTICIPANT: It's not -- most important

22 property rights -- let me tell you the property rights

23 that you're ignoring 100 percent. Very -- our right to

24 own a personal computer and to use them as we please.

25   That means there can't be -- when I get a file

1   from somebody, you don't have the right to copy it and

2   send it to somebody else. Ordinary private property

3   rights, ordinary -- my house -- eradicate completely and

4   place under the central control of what; the Red

5   Communist Party, or maybe the -- property rights demand

6   no TRN.

7   TRN kills property rights in computers, and --

8   that's the property rights that are under attack.

9   MR. ABBOTT: Well, yes. Eli?

10   MR. NOAM: Just quickly. Michael, as I said,

11   kind of just defined the music industry as some kind of a

12   public utility with a rate of return. Like we have so

13   many costs -- you know, these limos, they are really

14   expensive. So we've got to kind of have the -- built in

15   because we have to recoup this price.

16   What other industry, other than kind of

17   electric utilities or water utilities in the old days --

18   MR. EINHORN: They have a copyright. Under

19   106, Section 106 of the Copyright Act. They have

20   exclusive rights to reproduce and distribute their works.

21   This is a -- if you want to talk legality, this

22   is in the law. If you want to compare it -- no, don't

23   compare it to utilities. Read the statute. This is not

24   hard.

25   A PARTICIPANT: Subject to --

1   MR. EINHORN: Your -- I understand that -- that

2   position that you're advancing.

3   MR. ABBOTT: I see the sap is rising. Michael

4   Smith, do you have a thought?

5   MR. SMITH: I wanted to get back to the point

6   that I was trying to make, is that the technology is

7   going to change how the music industry does business.

8   And I think what we need to think about, is what are the

9   new business models that the music industry needs to be

10   thinking about.

11   One of those is going away from a sort of unit

12   based pricing, to bundling. And there is some very nice

13   work in the academic, actually by my advisor, that says

14   that by bundling a large number of pieces of content

15   together, the music industry can actually do better.

16   The music industry can actually extract more

17   revenue, which would allow them to cover both their A&R

18   and their limousines.

19   So again, I would really love to see the music

20   industry start to think creatively about ways that they

21   can actually use this technology to improve their

22   business, as opposed to bemoaning the piracy and the --

23   impact that's going to have.

24   MR. ABBOTT: Let me ask -- oh, Eli, you had

25   something to add, or not?

 1   MR. NOAM: I think he just said exactly the

 2   right thing. Every industry in this country, including

 3   banks, including universities, has to change their

 4   business model in light of technology.

 5   And I have no problem with the music industry

 6   kind of making vast profits. They just have to do it

 7   differently.

 8   MR. EINHORN: Wait a second. I think what I

 9   said here, is that I advocated competition between

10   different business models. I think what I said -- I'll

11   show you the slides again if I have to. Is that peer-to-

12   peer could work as another network that could beat the

13   competition, but I am not going to tell you what the

14   business model is going to be. I want to let the market

15   determine that. I just want to make sure everyone is on

16   the same level playing field.

17   Now, if you want to play the same level playing

18   field, they got to pay commensurate prices for profit --

19   for content. You got to have copyright, and you have got

20   to say, look, we're going to have to license the

21   copyright.

22   And if Steve Jobs pays 65 cents per download on

23   ITune, I think that a P-to-P network could pretty much

24   figure out that they should be paying somewhere in that

25   same range.

1   Otherwise, it would be essential on the part of

2   the record label to say, look, if you're only going to

3   pay me 45 cents on Kaza, and 65 cents with ITunes, you

4   know what I'm going to do, I'm going to do everything

5   possible to crush Kaza.

6   Of course, I'm not going to come out and say

7   that, but deep inside that's what my incentives are going

8   to be, and if I'm intelligent, I'll do that.

9   If you want to give the best incentives in the

10   long run for a fair and efficient build out of all these

11   different technologies, the best thing to do is license

12   the content equitably, reflecting the costs that go in,

13   making sure that everybody who goes in gets paid for

14   their input regardless of what technology comes out

15   there.

16   I am all in favor of new business models.

17   MR. AUGUSTSON: But the question was, and the

18   question is, for 65 cents, if that's the number, is

19   developed under a business plan, a business strategy

20   where technology was not a key player.

21   And today, if you did it all over today, from

22   ground zero, it wouldn't cost 65 cents. That's the

23   issue. That's the distinction. If Steve is paying 65

24   cents for it, he's actually probably paying royalties to

25   people who don't contribute to the current business model

1   that it's in relationship to what they're getting paid.

2   A PARTICIPANT: What should the price be?

3   MR. EINHORN: I have no idea. Good, thank you.

4   Thank you, license in the market. In a free market.

5   MR. AUGUSTSON: I thought that's what I said,

6   because I think students in the market we were talking

7   about, and the students will decide if they will pay 65,

8   95, or 10.

9   MR. SMITH: The beauty of the bundling

10   paradigm, is it allows the record industry to sell music

11   that the consumer values at a penny, for a penny. And to

12   sell music that consumers values at $10, for $10, and

13   capture the surplus from that, which is what they are

14   indeed entitled to do.

15   And in fact, my advisor and I are working on

16   some consumer surplus numbers, and, you know, just sort

17   of rough estimates, we feel like the music industry has

18   about a billion dollars of added revenue laying on the

19   table by not moving from a per unit basis, to a bundled

20   basis.

21   CHAIRMAN MAJORAS: But how do you address Mr.

22   Einhorn's question about developing this talent? Isn't

23   there some costs in there where the music industry has to

24   go out and develop a talent, market the talent; how do

25   you address that? I'm really interested in his question.

1   You said the students will set the price of

2   what they want to pay, but aren't they interested in the

3   artist that has already been developed and already been

4   polished --

5   MR. SMITH: My point in making that was that

6   you don't set a market price by what the seller suggests

7   their profit and their cost on it is.

8   And it becomes -- if the price is at a level

9   that they don't want to pay, assuming there is -- the

10   problem today, of course, there is an alternative that

11   the price is zero. And that's the underlying issue

12   that's the issue.

13   CHAIRMAN MAJORAS: But then going forward, even

14   if I were to accept what you are suggesting, who is going

15   to bear the cost in developing that talent? I guess the

16   market will determine what the price will be, but that --

17   MR. SMITH: Is the market fully -- what is the

18   money that the market could generate if it were fueled at

19   the level that people would buy in an unfettered way?

20   I don't know the answer to that, but when it

21   becomes a -- comes at a level that you buy 10 times what

22   you would buy because the price is at a level that it's a

23   nuisance level, the money that gets thrown into that

24   marketplace, to me, may well still be the same that's

25   generating today all that.

1   I don't pretend to understand the numbers. I

2   know what people are telling us today. I know what our

3   students are telling us today.

4   I mean our surveys show that in our environment

5   -- that our environment where we're providing a

6   subscription service. When it comes to download or buy,

7   they will not buy at 99 cents.

8   They will go back to a service that's not --

9   that is illegal and free, because that's their -- now I'm

10   not saying that's right. But that's actually the test in

11   our environment where we have statistics.

12   MR. ABBOTT: We have a question. Could someone

13   actually in the P-to-P business respond?

14   Yes, two people near the mike.

15   A PARTICIPANT: What's the question?

16   A PARTICIPANT: Exactly what has just been

17   said.

18   MR. ABBOTT: Well, respond to what has just

19   been said, yes.

20   A PARTICIPANT: Are you talking about --

21   A PARTICIPANT: Speak really loudly, and we'll

22   hear --

23   A PARTICIPANT: I think, again, that the

24   bundling paradigm says that you can make the pie bigger,

25   right. So that if you're paying for the development of

1   the artist today -- the question is how do you divide up

2   that bigger pie.

3   And there actually are some very nice ways to

4   infer the value that consumers have for particular

5   artists. You can divide this up in accordance to the

6   value that consumers have for artists.

7   So I think you can solve that problem.

8   A PARTICIPANT: Mr. Einhorn, you talk about

9   ignoring the facts --

10   MR. EINHORN: Hold on, let me --

11   A PARTICIPANT: No, no, let -- I think you

12   spoke enough, but go ahead.

13   MR. EINHORN: I will respond to him. In

14   response there, I have no problems with what you're

15   saying. If that's true, that will come out in the nature

16   of the licensing that takes place.

17   If it is true that in fact there is other ways

18   to license this stuff that's more efficient, to generate

19   more profits, this should -- will best be recognized in a

20   licensing relationship between record labels and suitable

21   licensees from the distributed computing industry and

22   other peer-to-peer providers who are capable of licensing

23   on the other side once they get in and learn the facts of

24   what it really takes to deliver this stuff.

25   A PARTICIPANT: Well, you know, that may not

1   really be true. Can we -- back to ignoring the facts

2   level playing field.

3   You talk about -- competitive services, like

4   Apple's ITunes, Real Networks' Rapshody. You talk about

5   unpaid licenses by companies, peer-to-peer companies like

6   Mropheus. By the way, I'm CEO of Morpheus.

7   Well, I testified in Senator Smith's

8   subcommittee hearing in July on competition. And what I

9   introduced to the record then, which I'll repeat here, is

10   that we have a company, a competitive service, by the

11   name of Rhapsody, owned by the Real Networks, that had

12   negotiated a deal with us to distribute Rhapsody through

13   Morpheus.

14   Yet that deal got called off at the eleventh

15   hour, because -- and this is a quote from Real Networks

16   to us. Morpheus has been black listed by the record

17   labels, and Real cannot do a deal with you because you

18   are black listed.

19   So it's difficult to work out licensing

20   agreement when you're blacklisted. And my question to

21   you is, what is your definition of restraint of trade?

22   MR. EINHORN: I have no problems if you take

23   lodging a complaint with the FCC or the Justice

24   Department, or picking up some kind of a suit on any

25   action which you think is a restraint of trade, or an

1   anti-trust violation, or an unconscionable contract, or

2   breach of contract; I have no problems with that.

3   A PARTICIPANT: And we have.

4   MR. EINHORN: Good. What I am saying is this.

5   You are not going to solve your problems in those

6   particular domains by suggesting that you go over to work

7   out -- I don't know how you're going to do it yet. Some

8   licensing at numbers that no one bothers to identify.

9   Perhaps we're going to go to some kind of alternate

10   compensation system, funded by tax, by tax on computers.

11   I mean, if you want to file these complaints,

12   I'm --

13   A PARTICIPANT: The Rhapsody deal was at those

14   numbers.

15   MR. EINHORN: Fine.

16   A PARTICIPANT: Already negotiated.

17   MR. EINHORN: Then I think --

18   A PARTICIPANT: But when you're blacklisted --

19   MR. EINHORN: I think you --

20   A PARTICIPANT: -- from doing business with

21   third parties, there is a problem there.

22   MR. EINHORN: I think you should --

23   A PARTICIPANT: You cannot do the licensing

24   when you're blacklisted.

25   MR. EINHORN: You're in the right room right

1   now.

2   A PARTICIPANT: And that's why I'm standing up

3   here.

4   MR. EINHORN: You have access to the FTC, you

5   have access to the Justice Department, you have access to

6   private attorneys --

7   A PARTICIPANT: I know about private attorneys,

8   believe me.

9   MR. EINHORN: Good.

10   (Laughter.)

11   MR. EINHORN: If you think that I think that

12 simply by having a licensing process that stops the other

13 side from behaving unconscionably, I'd be crazy.

14   Of course you have to enforce contract law and

15 anti-trust law.

16   A PARTICIPANT: When you talk about -- we're

17 doing harms to competitive services when competitive

18 services wanted to work with us, there is a problem. But

19 thank you.

20   MR. MITCHELL: I just wanted to offer to answer

21 the question that you had raised for the peer-to-peer,

22 which I don't think was really answered.

23   I am John Mitchell. I am an attorney in

24 private practice, and while I don't represent a peer-to-

25 peer network, I represent the precursors to the peer-to-

1   peer networks, the -- I represent music and video

2   retailers.

3   And I think the fundamental flaw in the

4   question of what the price is is the question. That's

5   the anti-trust harm here, is that people on every side

6   are trying to set a price, 65 cents.

7   The Supreme Court was very clear 60 years ago

8   when it condemned that very practice in the motion

9   picture industry of bundling. And we would really have

10 price set if individual copyrighted works were offered on

11 the market as individual pieces, rather than as a bundle.

12   I am an author of a musical composition that I

13 wrote in high school as a class assignment. My professor

14 gave me a passing grade, but I would probably have to pay

15 you to download it.

16   Yet the irony is -- I mean, that's the market

17 value, I can assure you. You wouldn't want to hear it.

18   But the irony of Mr. Einhorn's model is that

19 mine would be worth 65 cents because it would be part of

20 -- if you want anybody else's, you have to be wiling to

21 pay 65 cents for mine. But --

22   MR. EINHORN: No, no, no.

23   MR. MITCHELL: To move on a little bit, though,

24 I think the real core question here, if we can first of

25 all unbundle this and let the prices start working,

1   retailers eight years ago were ready, willing and able to

2   offer what ITunes is offering now on an a lacarté basis,

3   and could not get the time of the day from record

4   companies who wanted to own the market.

5   That allowed entry of Napster to fill the

6   demand retailers wanted to fill and could not.

7   Eventually retailers were still kept out of it, but

8   ITunes was given the opportunity to do something that was

9   seen as innovative, which was really available back in

10   the '90s.

11   And I guess the real question here, I'm

12   interested in from an anti-trust stand point, is given

13   this history of control over the methods of

14   dissemination, if we actually got to the point where we

15   had competing peer-to-peer distribution systems, or

16   disseminations systems I should say, because it's not

17   actually distributions because those have to be physical

18   copies under the Copyright Act to use J's entreaty to be

19   precise.

20   Assuming that every peer-to-peer is going to

21   have some leakage, meaning no matter how tightly you

22   configure it, no matter how closed your system. No

23   matter if it's on the system that they're developing at

24   the University to have authentication of the user, there

25   will be some leakage of infringing works.

1   Then we have competing systems. One, which has

2   the blessing of the copyright owner, like we have with

3   MovieLink and things of this nature. That could be

4   rewarded by turning a blind eye to a certain amount of

5   leakage if it is efficient to do it that way because the

6   profits are good, yet threaten to put out of business

7   through litigation the competing peer-to-peer network

8   that has a modest amount of leakage, the same amount or

9   less, but nevertheless there's that $150,000 per

10   violation hammered over the head.

11   So how can we address having competing

12   peer-to-peer systems that are not under the control of

13   the copyright owner in terms of dictating exactly how

14   efficient they need to be, or what software they need to

15   use.

16   MR. SMITH: Let me go back to the bundling

17   point again, because what I think what I heard you say is

18   that people don't value your content by 65 cents, they

19   will never download it.

20   And again, the beauty of bundling is that for a

21   zero marginal cost good, if somebody values it at a

22   penny, the record industry should be perfectly happy to

23   sell it for a penny, as long as they can keep selling it

24   for a dollar to the people who value it for a dollar.

25   And the bundling, again, without my course

1   slides I can't go into the math, but bundling allows you

2   to do that.

3   My point is that that's going to require a

4   radical change in the record industry, and the record

5   industry as any sort of long standing business is rather

6   risk diverse.

7   And in the mean time, we are facing a world

8   where there could be large gains in both consumer and

9   producer surplus that aren't being achieved because of

10   the wrong incentives to do that.

11   So I'm sorry, Eli, did you have something to

12   say?

13   MR. NOAM: Well, I mean part of what all this

14   does, is the electronic access, the downloading, is it

15   destroys the ability to keep bundles together if people

16   don't want them to be bundled together.

17   So that will also happen. But I think kind of

18   the Commissioner deserves an answer to her question,

19   which is will people invest in new artists or in artists.

20   The answer is, I think, first, what we observe

21   here is an industry that has its fundamental problem is

22   that it has a very low marginal cost, and very high fixed

23   costs.

24   In a competitive environment the price will be

25   driven down to levels where the fixed costs cannot be

 1   supported.

 2   So at some level what it has been doing is, by

 3   being a relative small oligopoly that kept the prices

 4   relatively high.

 5   What we now observe is that this kind of

 6   collapsing in slow motion, or not so slow motion. The

 7   music industry is not alone in that, by the way. This is

 8   taking place all over the information sector.

 9   Now, what can they do in that environment;

10   first, I don't think they will in the long term remain

11   able to maintain high prices. This will come down

12   continuously. Number one.

13   And therefore, you can make up with us in two

14   ways. One, is to reduce your cost structure

15   considerably, which means probably lower investment in

16   artists. With the artists probably finding other ways in

17   which they can support themselves. Just simply different

18   ways from the traditional ones.

19   Some people will be hurt from that. That's

20   unavoidable, but that's kind of in the way of what -- the

21   destructive forces of capitalism in summary mean.

22   Artists are not exempt from that. It's not just kind of

23   stockholders who kind of take hits.

24   Now, secondly, you have to make up in volume.

25   So maybe your costs comes down from 65 cents, Michael, to

1   5 cents, maybe, but if you sell a lot of 5 cent songs,

2   you come up with a lot of money.

3   I'm not saying 5 is the number, but the point

4   is that you may just kind of have a lot of people

5   spending a lot of time while the meter is clicking for

6   small amounts, micro payment-type thing. And there are

7   lots of people who listen to music. More than ever.

8   A PARTICIPANT: Someone that --

9   A PARTICIPANT: I wanted -- what I think is a

10   very important fact, because while there is this

11   recording industry price of where the content owners get

12   65 cents, and then ITunes adds 34 cents, and it's 99

13   cents, and that seems to be the model. There is another

14   record industry sanctioned service which is right now

15   charging an effective price of .01 per download. There

16   was testimony at a -- at the House Intellectual Property

17   Subcommittee. This followed a hearing on campus piracy,

18   which talks about different sanction models.

19   And the CEO of MusicNet testified that they now

20   have a record industry sanction service on campus which

21   is charging $3 per month, and that the average user is

22   downloading 10 songs per day, which is 300 per month in a

23   30 day month, which works out to a penny per song.

24   Now, these are tether downloads. They are

25   supposedly downloads which cannot be moved off the

1   computer and burned to CD or transferred to a portable

2   device. I'm not sure there isn't some engineering

3   student who hasn't figured out how to untether them.

4   But if they can offer tethered downloads,

5   unlimited tethered downloads for $3 a month, I don't know

6   what the right addition of value is for taking away the

7   tether factor, whether that doubles the price or triples

8   the price.

9   Let's say it triples it, you can have an

10   unlimited download service for $9 a month. I would

11   hazard that millions of people, to avoid spoof files, to

12   avoid legal risk, would sign up for that.

13   And doesn't that suggest that the ultimate

14   model for the industry might not be something that's like

15   selling singles on-line, but much more like what we're

16   used to paying for cell phone service and ISP

17   connectivity and cable TV.

18   More pricing it like a service with a sale

19   price, and up to some set limit, they don't care whether

20   you never use it, or whether you use the max.

21   A PARTICIPANT: What you're talking about is a

22   big bundle, at a flat price per month. Let me point out

23   that also solves another problem the record faced, which

24   is sort of the per sale doctrine.

25   Amazon has a very liquid used good market.

 1   Something stopping -- it's illegal, but there's really

 2   nothing stopping someone from buying a CD, ripping it,

 3   and then selling it for 20 percent discount on Amazon.com

 4   and keeping all the content.

 5   And we actually have a study that shows about

 6   23 percent of the used products, used CD sales on Amazon,

 7   are actually directly cannibalizing new product sales.

 8   And it's actually about 30 percent for DVDs.

 9   The beauty of these licenses is that then you

10   take away the first sale doctrine. Right. You can't --

11   I can't then sell those things. They're actually

12   tethered.

13   Again, I think there are a lot of creative ways

14   that the record industry could actually really benefit

15   from technology. I would love to see that dialog start

16   between the record industry and the technology companies.

17   MR. ABBOTT: Respond, Michael. We'll have time

18   for two more questions.

19   MR. EINHORN: First of all, regarding the cost

20   of content. I really got to get 65 cents straight. I am

21   not in favor of 65. I said a licensing arrangement.

22   Okay?

23   You can license some stuff at 65 cents, for the

24   gentleman who spoke, 10 cents, you get them in the same

25   room and let them bang each other's heads together.

1   For all I know, a Legacy catalog will go for

2   less, because you don't have to market. You're marketing

3   it A&R. You go where you can get all distribution

4   prices. This includes, Mr. Corwin, your idea about

5   Rhapsody, or a subscription service where you pay a

6   certain fee per month. Let them also work out that, and

7   negotiate that kind of licensing fee.

8   Get them in the same room. Figure out what's

9   the appropriate license for a streaming service, or even

10   a download service, where you buy a certain amount per

11   month.

12   As for the cost of management. Eli, if in fact

13   it is true that the record labels are so inefficient

14   with, I know, the Cadillacs and the cocaine and the

15   payola and everything else; this seems like a reasonable

16   responsibility for the shareholders to look out for.

17   They can punish their management by finding their costs

18   are too high.

19   If it's so terrible to pay money to the radio

20   stations, you can take that one up in front of the FCC.

21   The RIAA will be on your side. They already filed

22   against the paying of money to independent radio

23   promoters. Those are responsible policy issues we can

24   discuss.

25   You're not going to discuss that, those are

1   different issues. You have to take care of those in

2   their own domains. And finally, how do we get

3   competition among different peer-to-peer providers.

4   That's what someone said.

5   How do we ensure the market is competitive;

6   I'll say it again, have a licensing agent for the peer-

7   to-peer providers come in, maybe one person, maybe one

8   organization, maybe a group, and negotiate a collective

9   licensing with various labels to make sure that their

10 organization will get right. Thank you. Thank you, sir.

11   A PARTICIPANT: So you're in favor of

12 compulsory licensing?

13   MR. EINHORN: No, I am not for compulsory

14 licensing. I am for negotiated licensing between a

15 licensing agent on one side, and labels on the other.

16   MR. NOAM: The FTC should look into that.

17   CHAIRMAN MAJORAS: I think --

18   MR. NOAM: Yes. I --

19   MR. EINHORN: The Justice Department in 1976,

20 heard the BMI case. It is not anti-competitive to have a

21 licensing agent like that. Okay. And I know people

22 right now who are licensing agents working on behalf of

23 peer-to-peer companies.

24   MR. ABBOTT: Any questions left on the floor?

25   MR. FREEDMAN: Hi, Marc Freedman, with

1   RazorPop. I had one question, and it was in response to

2   Mr. Einhorn. Filtering is not supported by the DCIA, and

3   I think you may have talked to one of the members and

4   misunderstood his response.

5   But one of the other panelists mentioned

6   filtering doesn't work. I think speaking for many of the

7   members of the industry, we saw five years ago that

8   filtering doesn't work. It's not legal in terms of

9   having a centralized system. It's not effective as they

10   found out, which is the reason that the judge shut down

11   Napster.

12   So it seems to be quite a regressive practice,

13   and it's ironic that the entertainment industry should

14   look at that as their salvation.

15   And it certainly imposes and externality on the

16   peer-to-peer developers and on the peer-to-peer networks

17   to somehow accommodate this huge data base and this huge

18   processing involved with such filtering.

19   What is the panel's perspective on filtering as

20   a possible solution?

21   MR. POUWELSE: Yes, I would like to take,

22   first, the reaction to -- so I agree fully that the

23   filtering doesn't work from a technological point.

24   So we would like to stress again that if users

25   do not want to license vendors, and there's one bad

1   player in the field who just gives away with a single

2   click all the content, all the Brittany you can eat.

3   Then that's the system will people will follow if they do

4   not have them all value that downloading Brittany Spears

5   illegally is wrong.

6   So I would like to take this question to the

7   panel again. So if there is one -- if -- that there is

8   one bad player in the industry that where people can go

9   there for zero cost downloads, and how are the other

10   players going to compete with that player who do not have

11   any burden of licensing costs and is based on a -- on a

12   open source kind of -- so you have no litigation and all

13   the other works.

14   MR. AUGUSTSON: I think the underlying is that

15   we -- that the moral value of the individuals pursuing it

16   is one angle, and all of us have, in my opinion, you know

17   -- it's nice to blame higher education, because it's when

18   they get to us that they really got those skills refined

19   and have these really broad networks.

20   But you know where they developed that lack of

21   moral fiber, is in your families and your friends'

22   families.

23   And I challenge all of you, what are your

24   12-year-olds, your 8-year-olds, your 14-year-olds doing,

25   and what are you counseling them to do.

1   I mean I've sat at dinner where an executive

2   was proud to ask his son that, and he said do you

3   download, and he said, no. And he said, why not; because

4   you won't let me. And he said he was the only kid

5   amongst his friends. There's the problem.

6   Isn't the underlying issue to heck with which

7   industry is getting gored today. Isn't it the issue that

8   we're raising a bunch of youngsters who don't understand

9   the value of intellectual property? Isn't that a concern

10   to any -- I mean it is to me, anyway.

11   And so I think they will follow. Our

12   experience has been that we have a free, free sharing

13   service on our campus that has broad-based usage, but

14   when -- the excuse today is, oh, the rotten industry has

15   been ripping us off for years, and, you know, we're --

16   and we tolerate that.

17   I mean, I'm talking about one on one with your

18   own kids. One on one with your own --

19   A PARTICIPANT: Well, I would argue with that.

20   I think the young people are getting something that

21   perhaps the older people don't necessarily get. The

22   young people understand that a digital file is

23   fundamentally different from a CD.

24   MR. AUGUSTSON: Does that make it free? That's

25   all I'm -- you know, price it the way you want, different

1   doesn't make the intellectual property and the investment

2   of the individual to create that property worthless.

3   And as long as they go after it free, then

4   they're saying there's no value to it.

5   A PARTICIPANT: Well, it's not that they're

6   saying there's no value. They're saying there's no

7   choice, which is fundamentally different. They're saying

8   that the choice that you give between paying a buck at

9   ITunes and getting something for free over file-sharing,

10   which may come with spyware, it may come with viruses,

11   may be a bogus file; it may be very time consuming.

12   They're making the choice that they would rather use

13   file-sharing.

14   MR. AUGUSTSON: And I'm challenging you, what

15   is your responsibility as a parent and as a member of

16   your community of whether you think that's an acceptable

17   choice.

18   We were challenged in our university, as all

19   are, that 80 to 90 percent of our resident halls are

20   using our networks for illegal activity.

21   Whether we agree with the environment that

22   created that or not, I feel that we were right in taking

23   action that says we have to do something, because that's

24   morally wrong for our institution to be in that place.

25   I'm saying it's not us -- those kids, those are

1   freshman and sophomores. Those are 17 and 18 year olds

2   that are coming from your high schools, and they ain't

3   learning it in our place.

4   Now I think there's a responsibility on the

5   part of all of us --

6   A PARTICIPANT: This is a generation that was

7   fundamentally raised on the free marketplace, and these

8   are consumers talking. And I suggest that the

9   marketplace listen.

10   MR. AUGUSTSON: So free is okay?

11   A PARTICIPANT: I didn't say that. I said they

12   didn't have a choice.

13   MR. AUGUSTSON: We're not going to make it.

14   MR. ABBOTT: Well, I think a very quick

15   comment. We really are running well over time, but I

16   think -- but -- Michael.

17   MR. SMITH: Concerning the DCIA, this is what I

18   found. P-to-P revenue engine on the DCI web site, DCIA

19   is 10 companies, including digital containers and

20   relatable -- and maybe I'm reading this wrong. It says

21   for alacarté sales, digital containers will apply DRM to

22   protect the test content, and Relatable will use

23   acoustical finger printing to identify test content,

24   enter into P-to-P distribution by consumers.

25   Now, there comes a point where maybe I'm not

1 reading past double speak here, but this seems to be

2 pretty clear here that it's saying, to my mind, they're

3 saying that DRM and finger printing work.

4   A PARTICIPANT: Well, let me just address that,

5 which is it works in the context of consumer choice. It

6 works in the context of allowing the user the choice

7 between getting an unknown quantity free over the

8 Internet, which, again, may have spyware or viruses, or

9 be a bogus file, or be of dubious quality, and having an

10 authentic, legitimate content, which includes the finger

11 printing process; that's the context in which that

12 service is offered.

13   It's not in either, or, it's -- respect the

14 consumer. Let them have -- make the choice.

15   A PARTICIPANT: I think my comment will go

16 directly to a lot of what's been said right here.

17   I think that the fact that today Adam Eisgrau

18 has sat at the table with so many other people has

19 significantly changed the equation. And I think that one

20 of the most -- and the problem with the question that was

21 asked, the question was will P-to-P serve the copyright

22 holder.

23   And I don't think that's the right question. I

24 think the right question is will P-to-P serve copyright.

25 Or, to be more specific, exclusive rights, which is the

1   language in the Constitution, or to the promotion of

2   profits of use for arts and sciences.

3   And this talk about meeting in a room and

4   hashing things out, that's an obsolete thing. I don't

5   think it's going to work for P-to-P. That started in

6   1900 with the first register of copyright, Thorbald

7   Solberg.

8   He went to Congress because he had radio,

9   movies, player pianos; he had all this disruptive

10   technology coming up. And he went to them, to Congress,

11   who are the ones who have the power, to grant statutory

12   rights. Not intellectual property.

13   These are exclusive rights that can be designed

14   by Congress in a way they please to serve the purpose.

15   They're not natural rights.

16   So he went to Congress and said, look, we've

17   got this coming up. You have to do it. And they begged

18   off, and they begged off, and they begged off, probably

19   for the same reasons they've been begging off for the

20   last 20 years.

21   Then what happened was the Librarian of

22   Congress said, well, why don't I call together a

23   conference of all the industry leaders. And you know

24   what they said, they said we could not do that. That

25   would be highly inappropriate.

1   Then what they said was, why don't you do it on

2   your own dime and report back to us. And that

3   establishes practice where supposedly copyright is hashed

4   out among the stakeholders instead of Congress.

5   And a final comment. You know, one of the

6   things that NY has been dealing with is the fact that its

7   copyright has been reversed. It has been changed by this

8   hyping of this language, perpendigital copy. Which is

9   just a coded way of saying that somehow technology has

10   required that we change the fundamental nature of

11   copyright. Like it's some kind of a prior restraint

12   where the author actually has the right to set -- you

13   know, put DRM on a static work.

14   And that's not the purpose of copyright. I'm

15   supposed to be able to get information and use it.

16   You're supposed to publish. Okay.

17   And right now, what we're looking at, is the

18   fact that -- it's a weird thing. Einhorn is talking

19   about efficiency, and I'm not an economist, but I've

20   always had this strange problem with the Chicago school.

21   That somehow it's okay to collude over this coming up

22   with standards for common conventions over abstractions.

23   And the weird thing was that that came in right

24   at the early '80s, exactly the same time when this

25   technology spread. Where we have highly flexible

1   computers, highly flexible Internet, highly flexible

2   works.

3   MR. ABBOTT: Thank you.

4   A PARTICIPANT: Thank you.

5   MR. ABBOTT: Thank you very much. I know

6   people have strong opinions. There will be more on

7   copyright tomorrow morning. Thank you for coming. I'll

8   see you tomorrow.

9   MR. PAHL: Thank you. Actually, we did have

10   closing remarks on our agenda, but given the late hour,

11   we're going to forego them.

12   So thank you for the lively and provocative

13   debate, and we will see you tomorrow.

14   (Whereupon, at 5:43 p.m., the workshop was

15   adjourned, to reconvene Thursday, December 16, 2004.)

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1   CERTIFICATION OF REPORTER

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3   CASE TITLE: PEER-TO-PEER FILE-SHARING TECHNOLOGY

4   HEARING DATE: DECEMBER 15, 2004

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6   I hereby certify that the transcript contained

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