

In the Matter of:

LabMD, Inc.

May 28, 2014
Trial - Public Record
Volume 6

Condensed Transcript with Word Index



For The Record, Inc.
(301) 870-8025 - www.ftrinc.net - (800) 921-5555

1119

1 FEDERAL TRADE COMMISSION
2 I N D E X
3 IN RE LABMD, INC.
4 TRIAL VOLUME 6
5 PUBLIC RECORD
6 MAY 28, 2014

7

8 WITNESS: DIRECT CROSS REDIRECT RECROSS VOIR
9 FISK 1123 1175 1208

10

11

12 EXHIBITS FOR ID IN EVID IN CAMERA STRICKEN/REJECTED
13 CX
14 (none)

15

16 RX
17 Number533 1134 1135

18

19 JX
20 (none)

21
22
23
24
25

1121

1 APPEARANCES:
2
3 ON BEHALF OF THE FEDERAL TRADE COMMISSION:
4 LAURA RIPOSO VANDRUFF, ESQ.
5 ALAIN SHEER, ESQ.
6 Federal Trade Commission
7 Bureau of Consumer Protection
8 Division of Privacy and Identity Protection
9 600 Pennsylvania Avenue, N.W.
10 Washington, D.C. 20580
11 (202) 326-2999
12 lvandruff@ftc.gov

13

14 ON BEHALF OF THE RESPONDENT:
15 WILLIAM A. SHERMAN, II, ESQ.
16 REED D. RUBINSTEIN, ESQ.
17 Dinsmore & Shohl LLP
18 801 Pennsylvania Avenue, N.W.
19 Suite 610
20 Washington, D.C. 20004
21 (202) 372-9100
22 william.sherman@dinsmore.com

23
24
25

1120

1 UNITED STATES OF AMERICA
2 FEDERAL TRADE COMMISSION

3 In the Matter of)
4 LabMD, Inc., a corporation,) Docket No. 9357
5 Respondent.)
6 -----)

7 May 28, 2014
8 10:37 a.m.
9 TRIAL VOLUME 6
10 PUBLIC RECORD

11

12 BEFORE THE HONORABLE D. MICHAEL CHAPPELL
13 Chief Administrative Law Judge
14 Federal Trade Commission
15 600 Pennsylvania Avenue, N.W.
16 Washington, D.C.

17

18

19 Reported by: Josett F. Whalen, Court Reporter

20
21
22
23
24
25

1122

1 APPEARANCES: (continued)
2
3 ON BEHALF OF THE RESPONDENT:
4 KENT G. HUNTINGTON, ESQ.
5 Cause of Action
6 1919 Pennsylvania Avenue, N.W.
7 Suite 650
8 Washington, D.C. 20006
9 (202) 499-2426
10 kent.huntington@causeofaction.org

11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

1123

1125

1 PROCEEDINGS
 2 - - - - -
 3 JUDGE CHAPPELL: Back on the record.
 4 Next witness.
 5 MR. SHERMAN: Mr. Adam Fisk.
 6 - - - - -
 7 Whereupon --
 8 ADAM FISK
 9 a witness, called for examination, having been first
 10 duly sworn, was examined and testified as follows:
 11 DIRECT EXAMINATION
 12 BY MR. SHERMAN:
 13 **Q. Good morning, Mr. Fisk.**
 14 **For the record, could you identify yourself and**
 15 **your current occupation.**
 16 A. Yeah. My name is Adam Fisk, and I'm the
 17 president and CEO of the Brave New Software Project.
 18 **Q. What is the Brave New Software Project?**
 19 A. We're a small business that is funded primarily
 20 by the State Department and the USAID, and we work also
 21 with entities such as Google and other NGOs to --
 22 **Q. I'm just going to ask you to speak a little more**
 23 **slowly --**
 24 A. Okay.
 25 **Q. -- before the court reporter does.**

1 **Q. What year was that?**
 2 A. Oh, that was 2000, summer of 2000, yeah. I
 3 think in June of 2000 I started.
 4 **Q. And what were your duties and responsibilities**
 5 **at LimeWire?**
 6 A. So I was the lead engineer on the software, so
 7 I -- the areas I really focused on were the search
 8 architectures that we developed over time at LimeWire.
 9 I wrote a lot of the user interface, and I touched all
 10 parts of the code really, so I just would -- I wrote a
 11 lot of the code and was one of the architects of the
 12 software.
 13 **Q. When you say "search architecture," what do you**
 14 **mean?**
 15 A. I mean just the -- basically, you know,
 16 LimeWire runs on this peer-to-peer network, so that --
 17 it has to search millions of computers, in theory, or
 18 this network of millions of computers in real time,
 19 so -- so the way to do that gets pretty complicated if
 20 you want to do that in an efficient manner.
 21 **Q. And you were the lead engineer in that effort;**
 22 **correct?**
 23 A. Correct.
 24 **Q. And there were other engineers or people who**
 25 **write code who worked with you?**

1124

1126

1 A. Okay.
 2 **Q. She has a three-strike rule, and I don't want**
 3 **you to get the first strike.**
 4 A. Okay. I'll slow down a little bit.
 5 JUDGE CHAPPELL: Well, there's the brushback
 6 pitch also. We don't want that either.
 7 THE WITNESS: Yeah.
 8 So I work with a variety of different entities,
 9 are primarily funded by the federal government to get
 10 around censors in countries that censor the Internet.
 11 So we worked on and built a tool called Lantern
 12 that is a piece of peer-to-peer software that bypasses
 13 censors in countries like China and Iran where the
 14 Internet is censored.
 15 BY MR. SHERMAN:
 16 **Q. What is your educational background?**
 17 A. I received my bachelor's from Brown University
 18 in computer science and U.S. history.
 19 **Q. Do you have any postgraduate degrees?**
 20 A. Zero.
 21 **Q. Upon graduating from Brown, what did you do?**
 22 A. I immediately started working at LimeWire, so I
 23 think it was, gosh, a couple weeks after graduating. My
 24 first job out of school was working on the peer-to-peer
 25 file-sharing program LimeWire.

1 A. That's right.
 2 **Q. Okay. And was LimeWire an active program when**
 3 **you started working at LimeWire?**
 4 A. So one of my colleagues, Chris Rohrs, was there
 5 for a couple of -- working on it for a couple of weeks
 6 before I started.
 7 **Q. Was it active?**
 8 A. Oh, sorry. Active. No. I mean, no, it
 9 wasn't -- we hadn't released it yet, so we didn't
 10 release it for probably another eight months or
 11 something like that.
 12 **Q. And after its release, did you continue to**
 13 **develop it and to -- develop it?**
 14 A. Yeah. Yeah. We changed it a lot over time, so
 15 the original sort of incarnation of the Gnutella
 16 network, which is the protocol that LimeWire uses, was
 17 much more sort of rudimentary, so we really iterated a
 18 lot on refining particularly the search architecture and
 19 also the downloading architecture to just make it work
 20 better and to make it more efficient.
 21 **Q. We'll get back to that, but I want to know kind**
 22 **of your career path after LimeWire, what did you do.**
 23 A. So I started a small business called
 24 Last Bamboo LLC, and we wrote a piece of software
 25 called LittleShoot that is -- integrates peer-to-peer

1127

1 in the browser in a much more sort of seamless way.
 2 And yeah, that was a bit of a learning process
 3 for me because we bootstrapped the whole company. And
 4 it was successful in some sense, in the sense that it
 5 got a lot of press and stuff like that, but we -- it
 6 wasn't -- I thought, you know, creating a start-up and
 7 making millions of dollars was very easy and after
 8 LimeWire but came to find that that wasn't always the
 9 case.
 10 **Q. And how long did you participate in that**
 11 **venture?**
 12 A. Gosh, so probably -- I mean, the entity still
 13 exists, so it's -- so the software still exists, so
 14 it's -- but I don't -- yeah, the entity still exists
 15 now. And a lot of the technology that's in Lantern is
 16 actually the -- based on the peer-to-peer technology in
 17 LittleShoot, so -- sorry -- so -- sorry -- Lantern is
 18 the tool that gets around censors in these countries
 19 around the world.
 20 **Q. Yeah, just very basically, how was LittleShoot**
 21 **different from LimeWire?**
 22 A. So we -- yeah. Sorry. It gets fairly complex
 23 pretty quickly. But it -- simply, simply, it tries to
 24 just create a more robust architecture for -- for doing
 25 peer-to-peer networking.

1128

1 **Q. When you say "robust," what do you mean?**
 2 A. Just more resilient, better engineered.
 3 So it's a -- it uses architectures from voice
 4 over IP which are just a little bit more thought out
 5 than the peer-to-peer architectures that you see on
 6 something like LimeWire.
 7 **Q. Was it geared towards searching a certain type**
 8 **of media or data?**
 9 A. Not necessarily, no.
 10 So it -- it was more of a -- it was really two
 11 things. It was a peer-to-peer platform and it was a --
 12 and also it was a -- this browser plug-in that made
 13 things like BitTorrent much easier to use in the
 14 browser.
 15 **Q. And so after that, what was your next venture or**
 16 **project or occupation?**
 17 A. Yeah. So from there I -- I started working on
 18 Lantern, so we sort of started getting just small
 19 grants from NGOs initially to apply some of these
 20 peer-to-peer concepts to getting around censors in
 21 these countries that censor access to the Internet, and
 22 so on.
 23 **Q. And just for the record, what's an NGO?**
 24 A. A nongovernmental organization, so just,
 25 you know, essentially a nonprofit.

1129

1 **Q. And did you found Lantern?**
 2 A. I did, yeah. Yeah.
 3 **Q. And so what is the goal or stated purpose of**
 4 **Lantern?**
 5 A. So the goal -- the goal is really to get around
 6 censors anywhere in the world in a -- in a blocking
 7 resistant way, so in a way that makes it very difficult
 8 for a government like China or Iran with sort of
 9 infinite resources or a lot more resources than we have
 10 certainly to block it.
 11 So it tries do that in a very -- it tries to
 12 bypass censors in a very blocking resistant way and in
 13 a scalable way so that, you know, if a hundred million
 14 users in China tomorrow decide to all use Lantern, it's
 15 designed to be able to handle that kind of traffic both
 16 technically and financially so that it wouldn't cost a
 17 lot of money.
 18 **Q. In terms of governmental censorship, how is that**
 19 **similar to data security and securing the network?**
 20 A. So there are a lot of similarities. I mean, in
 21 some ways you can think of the Chinese, what people call
 22 The Great Firewall as sort of the most sophisticated
 23 firewall in the world, like the Chinese just have
 24 incredible resources that they devote to it, you know,
 25 many billions of dollars every year, so it's -- it has a

1130

1 lot of similarities with, you know, on a much more basic
 2 level, a firewall that you might see on a typical -- at
 3 a typical small business or something like that but has
 4 many more -- it's much more complicated and has many
 5 more capabilities because it's working at this national
 6 Internet scale.
 7 **Q. Is the goal the same?**
 8 A. The goal -- yeah, the goal is the same in the
 9 sense that it's trying to control information coming in
 10 and out of the network.
 11 JUDGE CHAPPELL: I have a question.
 12 You mentioned Gnutella earlier.
 13 THE WITNESS: Yeah.
 14 JUDGE CHAPPELL: How does that compare to what
 15 you called LittleShoot? LittleShot I guess?
 16 THE WITNESS: Yeah, LittleShoot. Sorry.
 17 So LittleShoot does integrate -- LimeWire is
 18 all open source and LimeWire runs on the Gnutella
 19 protocol, so -- and LittleShoot actually integrates
 20 LimeWire.
 21 So LittleShoot is a little bit hard to wrap
 22 your head around because it incorporates these few
 23 different elements, but it also interoperates with
 24 Gnutella because it integrates the code from LimeWire.
 25 JUDGE CHAPPELL: Is Gnutella like a railroad and

1131

1 LimeWire the train that runs on the railroad?
 2 THE WITNESS: You could think of it that way. I
 3 mean, it's a -- maybe a little bit different in the
 4 sense that -- in the sense that the -- with LimeWire
 5 like the protocol -- the protocol to some extent doesn't
 6 exist without some implementation of it, so it's like
 7 you sort of need the train and the tracks at the same
 8 time somehow or the train is like building the tracks as
 9 it goes or something like that.
 10 JUDGE CHAPPELL: And then in that analogy, where
 11 does LittleShot or LittleShoot -- which is it?
 12 THE WITNESS: LittleShoot, yeah.
 13 JUDGE CHAPPELL: How does LittleShoot fit in
 14 that analogy?
 15 THE WITNESS: I mean, again, it's sort of these
 16 three different things, so it -- it is that train and
 17 those tracks, but then it also is basically saying these
 18 tracks aren't designed that well, so let's build a new
 19 railroad.
 20 JUDGE CHAPPELL: So it's sort of an integrated
 21 LimeWire and Gnutella in one thing, in one product.
 22 THE WITNESS: Well, that's really just this one
 23 little side of it.
 24 So LimeWire is already integrated into
 25 Gnutella, so LimeWire runs on Gnutella and defines a

1132

1 lot of what Gnutella is. And LittleShoot does that,
 2 but then it also creates this new peer-to-peer platform
 3 that uses really protocols from voice over IP that are
 4 just more robustly engineered, just more sort of thought
 5 out basically than this sort of what you my think of
 6 like a shoddy railroad track or something that is
 7 Gnutella.
 8 JUDGE CHAPPELL: And what's the status of
 9 LimeWire today?
 10 THE WITNESS: The company doesn't exist. Some
 11 of the code lives on, so their people, you know,
 12 replicated the code repository, so it's open source, so
 13 some people -- you know, you can still -- you can still
 14 build essentially the same thing as LimeWire using that
 15 open-source code. But for the most part, people don't
 16 really use it.
 17 JUDGE CHAPPELL: Okay. Thank you.
 18 BY MR. SHERMAN:
 19 **Q. So you're currently involved with Lantern;
 20 correct?**
 21 A. Correct.
 22 **Q. Along the way, have you had the opportunity to
 23 advise companies on Internet security or data security?**
 24 A. I have, yeah. I just -- I've advised a variety
 25 of companies.

1133

1 **Q. Can you describe that for us, please.**
 2 A. Yeah.
 3 So I've worked quite a bit with a company in
 4 New Zealand, a start-up that is also integrating
 5 peer-to-peer technology into their software.
 6 MS. VANDRUFF: Objection, Your Honor.
 7 I'm sorry to interrupt, Mr. Fisk.
 8 This explanation of his background is not
 9 included in his report, and I would ask that the court
 10 strike the testimony.
 11 JUDGE CHAPPELL: Is it in his CV? Because I
 12 thought we were talking about his background rather than
 13 his report.
 14 MS. VANDRUFF: Exactly, Your Honor. No.
 15 MR. SHERMAN: That's exactly what we were
 16 talking about.
 17 MS. VANDRUFF: It's not in his CV, Your Honor.
 18 MR. SHERMAN: Your Honor, we're talking about
 19 his background --
 20 THE WITNESS: Yeah.
 21 MR. SHERMAN: -- just to give the court a
 22 well-rounded view of who he is and the weight that
 23 should be accorded to his testimony.
 24 MS. VANDRUFF: And had it been included in his
 25 CV, Your Honor, we would have examined Mr. Fisk at

1134

1 greater length about this background.
 2 JUDGE CHAPPELL: She has a good point. We need
 3 to restrict his testimony to what's in the CV and in the
 4 expert report that has already been provided to opposing
 5 counsel.
 6 MR. SHERMAN: That's fine, Your Honor. We'll
 7 move on.
 8 MS. VANDRUFF: Thank you, Your Honor.
 9 JUDGE CHAPPELL: The objection is sustained.
 10 BY MR. SHERMAN:
 11 **Q. So let's go back to LimeWire and how it was
 12 designed and how it works. Okay?**
 13 **Can we put the first demonstrative exhibit up on
 14 the screen.**
 15 **In your report, you start out with a very basic
 16 engineering explanation of how computers communicate
 17 with one another; correct?**
 18 A. Correct.
 19 MR. SHERMAN: I'm going to mark for
 20 identification purposes at this -- I'm going to mark for
 21 identification purposes Mr. Fisk's expert witness
 22 report, and we will mark it as RX 533.
 23 (RX Exhibit Number 533 was marked for
 24 identification.)
 25 MR. SHERMAN: May I approach and hand this to

1135

1 the witness, Your Honor?
 2 JUDGE CHAPPELL: Go ahead.
 3 The expert report is not already in evidence?
 4 MR. SHERMAN: It's not, but we plan to move it
 5 in. We've conferred, and complaint counsel will not
 6 object to us moving it in.
 7 JUDGE CHAPPELL: Okay. Are you making the offer
 8 at this time?
 9 MR. SHERMAN: Yes, Your Honor.
 10 MS. VANDRUFF: No objection, Your Honor.
 11 JUDGE CHAPPELL: RX 533 is admitted.
 12 (RX Exhibit Number 533 was admitted into
 13 evidence.)
 14 MR. SHERMAN: Your Honor, with regard to
 15 counsel's last objection with regard to Mr. Fisk's
 16 testimony, on page 36, under Professional Affiliation,
 17 he does list that he sits on the technical advisory
 18 committee of the Open Internet Tools Project,
 19 serves as technical and security advisor to
 20 Human Interface Initiative in Auckland, New Zealand, as
 21 well as something else in Spanish.
 22 And so given that, I would like to at least be
 23 able to continue questioning him about that experience
 24 as it appears on his CV which has been provided to
 25 complaint counsel.

1136

1 MS. VANDRUFF: And Your Honor, I'd understood
 2 the examination to be different. If it's limited to the
 3 professional affiliations that are listed on the CV, I
 4 have no objection, Your Honor.
 5 JUDGE CHAPPELL: All right.
 6 MR. SHERMAN: But just to be clear, Your Honor,
 7 the professional affiliation states that he serves as
 8 technical and security advisor, and that's what I was
 9 questioning him about, whether or not he advised
 10 companies with regard to data security, and he was
 11 describing his participation with this company in
 12 New Zealand.
 13 JUDGE CHAPPELL: So in response to the previous
 14 objection, what you were going into is on the CV.
 15 MR. SHERMAN: Yes, sir.
 16 MS. VANDRUFF: Given Mr. Sherman's explanation
 17 of how he intends to conduct the examination, I have no
 18 objection if it relates to the affiliations that are
 19 listed on Mr. Fisk's CV, Your Honor.
 20 JUDGE CHAPPELL: Then I will vacate my previous
 21 sustained on the objection, or do you withdraw the
 22 objection?
 23 MS. VANDRUFF: I will withdraw the objection to
 24 the extent that Mr. Sherman's examination is in line
 25 with what is disclosed on the CV, Your Honor.

1137

1 JUDGE CHAPPELL: All right. Next question.
 2 MS. VANDRUFF: Thank you, Your Honor.
 3 MR. SHERMAN: Thank you, Counsel.
 4 BY MR. SHERMAN:
 5 **Q. Mr. Fisk, we were talking about advice, whether**
 6 **or not you had advised companies with regard to data**
 7 **security, and you began to explain what you were doing**
 8 **with a company in New Zealand.**
 9 **If you could please continue the explanation of**
 10 **how you participated with that company.**
 11 A. So, yeah, I've been down there a few times. And
 12 I sit on their advisory board and have also been fairly
 13 hands on with helping them to implement some of their --
 14 some of their technology.
 15 So they're a company that you can think of as
 16 sort of somewhere between LimeWire and Facebook, and
 17 I've just helped them map out the -- their architecture
 18 and certainly how that relates to being able to secure
 19 both their corporate data and the data of their users.
 20 **Q. Thank you, Mr. Fisk.**
 21 **Back to your expert witness report.**
 22 **What we have up on the screen actually appears**
 23 **on page 8 of your expert witness report, but if you**
 24 **could just give us an explanation of why this -- well,**
 25 **not why it's included, but what it depicts with regard**

1138

1 **to your report.**
 2 A. Okay. Yeah, so -- so this is simply showing
 3 two computers, A and B, with neither computer behind a
 4 firewall. And this is simply showing that a network
 5 connection in that scenario can be made between either
 6 computer in either direction, so A can make a network
 7 connection to B, and B can make a network connection to
 8 A.
 9 **Q. Can we put the next exhibit up.**
 10 **The next exhibit that's going to be up, can you**
 11 **explain what this is depicting.**
 12 A. So this is simply showing the case where
 13 computer A is behind a firewall, so this is showing that
 14 in that scenario, computer A can make an outgoing
 15 connection through the firewall to computer B, but
 16 because that firewall is in place around computer A,
 17 computer B cannot make an incoming network connection to
 18 A.
 19 **Q. And I notice in looking at the figure that the**
 20 **arrow from computer A goes through the firewall.**
 21 A. Correct.
 22 **Q. And does that depict some concept?**
 23 A. So that really just depicts that firewalls by
 24 default will allow outgoing connections, so, you know,
 25 we're sitting behind a firewall here undoubtedly on

1139

1 whatever network might be at the FTC and that that
 2 network will allow connections coming from computers on
 3 the inside of the firewall to the outside.
 4 **Q. And so in terms of B trying to make a connection**
 5 **to A, that connection is blocked by the firewall; is**
 6 **that correct?**
 7 A. That's correct.
 8 **Q. The next depiction on the screen is referenced**
 9 **on page 14 of your report.**
 10 **Can you explain to us what this is attempting to**
 11 **describe?**
 12 A. Yeah. So this is giving some visual
 13 representation of the topology of the Gnutella network.
 14 So in this diagram, computers A, B, C and D are
 15 essentially ultra peers. And this is simply showing the
 16 flow of a search that goes from A to B to C and then to
 17 D.
 18 JUDGE CHAPPELL: We're going to need to refer to
 19 these as demonstratives if you want the record to make
 20 sense.
 21 MR. SHERMAN: Thank you, Your Honor.
 22 And this would be RXD -- I'm sorry.
 23 JUDGE CHAPPELL: Why don't we make the first
 24 slide you put up next.
 25 MR. SHERMAN: So the first slide that appears on

1140

1 page 8 of Mr. Fisk's report --
 2 JUDGE CHAPPELL: If it's in his report already
 3 in evidence, then you can refer to it as the page number
 4 in the exhibit, either way. But somehow it needs to be
 5 referred to in the record --
 6 MR. SHERMAN: Okay.
 7 JUDGE CHAPPELL: -- what we're looking at.
 8 MR. SHERMAN: Thank you, Your Honor.
 9 What I will do is then refer to it by page
 10 number in the report.
 11 JUDGE CHAPPELL: Okay.
 12 MR. SHERMAN: Whereas page -- the first exhibit
 13 that we discussed having A and B with no firewall
 14 appears on page 8 and is listed as figure 2 in what has
 15 been marked as CX 533 -- I'm sorry -- RX 533 --
 16 thank you, Counsel -- as well as figure 3, which was the
 17 second depiction that we discussed, also appears on
 18 page 8 of RX 533.
 19 And what we are now discussing is the third
 20 figure that appears in the report. It's actually
 21 labeled figure 6 that appears on page 14 of RX 533.
 22 BY MR. SHERMAN:
 23 **Q. So, Mr. Fisk, as we're looking at figure 6 that**
 24 **appears on page 14 of your report, what do the boxes B**
 25 **and C represent?**

1141

1 A. Those are ultra peers, so they're computers that
 2 are on this diagram simply forwarding traffic on behalf
 3 of A.
 4 **Q. And what is D?**
 5 A. D -- you know, I realize I misspoke a little
 6 bit earlier in describing all of them as ultra peers,
 7 so we -- D is actually intentionally colored in the
 8 same color as those other computers connected to C, so
 9 D is supposed to be a what's called a leaf node in this,
 10 in this diagram, so it's simply a -- the intention is
 11 simply for it to be a computer that is receiving a
 12 message, if that makes sense.
 13 **Q. And what does an ultra peer do, in your**
 14 **estimation?**
 15 A. So an ultra peer is really just an optimization
 16 that we made to the network to make it denser really.
 17 So on a really large distributed network like
 18 Gnutella, like LimeWire, it's very difficult to do
 19 things like search the entire network at any one time,
 20 so what ultra peers do is, they first are not
 21 firewalled, so they're peers that can route traffic and
 22 accept incoming traffic.
 23 If we think back to some of those earlier
 24 diagrams, there are certainly computers that are not
 25 behind firewalls. But the effect of them is to make the

1142

1 network denser because they can -- they have a lot of
 2 connections.
 3 So -- so one way to think of it is, you know, if
 4 you want to -- it's sort of a six degrees of separation
 5 type of thing where it's like if you want to talk to
 6 someone who you don't know, you might ask someone who
 7 knows a lot of people if they know them, so ultra peers
 8 know a lot of people. And they make -- so they make the
 9 network denser.
 10 **Q. Is it possible for a computer to be an**
 11 **ultra peer if it is behind a firewall?**
 12 A. No.
 13 **Q. Why not?**
 14 A. Because the one of the whole purposes of them
 15 is to allow these incoming network connections.
 16 So in the diagram, B and C have all of these
 17 what we call leaf nodes. And basically those leaf nodes
 18 typically would be firewalled, but the only way for them
 19 to connect to the network, based on those diagrams that
 20 we saw earlier, is to connect to a computer that's not
 21 firewalled.
 22 So in order for them to participate in the
 23 network, they need to be able to connect to some
 24 computer that's not firewalled, and the topology we
 25 designed for that was ultra peers.

1143

1 **Q. I still don't really understand how a computer**
 2 **becomes an ultra peer.**
 3 A. Uh-huh.
 4 **Q. How does a computer become an ultra peer?**
 5 A. So yeah, so basically when you start up
 6 LimeWire, there's this series of things that we try and
 7 look at to decide whether or not a computer can be an
 8 ultra peer, so it was -- I think the method in the code
 9 was is ultra peer capable, you know.
 10 And basically there are like things such as the
 11 speed of the machine, whether or not the computer is
 12 firewalled, the operating system we would take into
 13 account, to make sure that it was a machine that was --
 14 that had this variety of characteristics that allowed it
 15 to be an ultra peer. And if it had that variety of
 16 characteristics, then we would just automatically elect
 17 it and appoint it to be an ultra peer.
 18 **Q. Now, is it the program that's electing or**
 19 **appointing these computers or is someone sitting back at**
 20 **LimeWire and saying, Boy, that's a good one right there,**
 21 **let's use that as an ultra peer?**
 22 A. Yeah, the software just does it automatically,
 23 so there's no one that -- we had no visibility or
 24 control into any computer on the network at any time
 25 because this is a totally distributed system, so it

1144

1 would just happen on the endpoints, on those home
 2 computers or any computer running LimeWire.
 3 **Q. Now, I think we looked at this one. Can we get**
 4 **the other one up?**
 5 **Okay. Can you describe then what this is**
 6 **depicting?**
 7 A. Yeah. So this is -- this is showing
 8 basically --
 9 **Q. And I need to hold up because this one is not in**
 10 **your report, Your Honor, so if we could reference this**
 11 **as RXD 14.**
 12 MS. VANDRUFF: And Your Honor, for the benefit
 13 of the record, I think it would be useful to Your Honor
 14 for Mr. Sherman to lay the foundation for this document
 15 which does not appear in the report. I don't believe
 16 that complaint counsel has any objection, but I'd like
 17 him to establish the foundation for the document.
 18 MR. SHERMAN: I have no problem doing that.
 19 MS. VANDRUFF: Thank you, Your Honor.
 20 BY MR. SHERMAN:
 21 **Q. So the figure up on the screen, Mr. Fisk, did**
 22 **you create the figure?**
 23 A. I did not. Actually this, I worked with a
 24 graphic designer, who also happens to be my sister, who
 25 created this, this --

1145

1 **Q. So you instructed her, however, on what you**
 2 **wished to be included in the depiction; correct?**
 3 A. Yeah. Yeah, that's right.
 4 **Q. Okay.**
 5 A. That's right.
 6 **Q. And in terms of what it depicts, can you explain**
 7 **what that is?**
 8 A. Yeah. So basically in order to get around this
 9 problem of firewalls only allowing these outgoing
 10 network connections, basically what happens here is that
 11 computer E sitting behind a firewall is at some point --
 12 well, at some prior point was able to create this
 13 outgoing connection to D. And because E is connected to
 14 D vicariously through C and B, E is also connected to A.
 15 **Q. Is it --**
 16 A. So -- yeah.
 17 **Q. Is it fair to say that E is searching for a**
 18 **document which A has?**
 19 A. This diagram is actually trying to depict the
 20 other way around, so A is searching for a document that
 21 E has, and this is showing how that can work.
 22 **Q. Okay. So could you explain then how A gets the**
 23 **document from E.**
 24 A. Yeah. So -- so prior to this or -- well, we
 25 could even -- you just use this straight diagram.

1146

1 A has sent a search request that has gone
 2 through B, C and D and then to E. And that search
 3 request has resulted in a search result. And A has
 4 clicked on that result and said, Okay, I want to
 5 download this file.
 6 But because E is firewalled, A can't directly
 7 download the file from E and instead has to send this
 8 little green push request message that says, Hey, B, let
 9 this guy down the line, E, know that I want to download
 10 this file and that E has to create an outgoing
 11 connection to me to facilitate that file download.
 12 **Q. How does D communicate with E if E is behind a**
 13 **firewall?**
 14 A. Because E has prior to this made an outgoing
 15 connection to D.
 16 So once -- the establishment of those
 17 connections is directional, but once those connections
 18 are made, traffic can flow in either direction.
 19 **Q. And so is it fair to say that D then**
 20 **communicates with E that A wants a document that E has?**
 21 A. That's correct.
 22 **Q. And then E does what?**
 23 A. Then E creates an outgoing connection to A that
 24 because it's outgoing will be allowed through the
 25 firewall. And in this case, it's very important to

1147

1 recognize that A is not firewalled.
 2 So E creates this outgoing connection to this
 3 nonfirewalled computer A. And once that connection is
 4 established, then A says, Okay, great, thanks, you know,
 5 for establishing this connection, now let me download,
 6 download the file.
 7 **Q. What would happen if A were firewalled?**
 8 A. If A were firewalled, this -- none of this would
 9 work, so -- because in that scenario neither A nor E can
 10 create a connection to the other.
 11 **Q. In speaking about peer-to-peer searches**
 12 **generally, are the searches in any way limited in terms**
 13 **of the time that they can exist?**
 14 A. The time that they can exist -- there
 15 definitely was some hard cap that we put in there, that
 16 I put in there. I don't remember exactly what that
 17 hard cap was, but there was a -- this whole adaptive
 18 search protocol that I wrote that would -- that would,
 19 you know, extend a search if necessary essentially for
 20 unpopular content but that would stop the search very
 21 quickly if a piece of content was very popular.
 22 **Q. And the purpose of stopping the search would be**
 23 **because?**
 24 A. Really just because on a peer-to-peer network
 25 like that, it's very easy for traffic to build up, so

1148

1 it's -- so especially with computers that aren't very
 2 powerful, it's really important for the network to be
 3 lightweight and efficient, both to not overload those
 4 computers and to make things like search work as well as
 5 possible so that they can reach as many computers as
 6 possible without overloading the network.
 7 **Q. Was there an approximate number of computers at**
 8 **which the search was capped?**
 9 A. Yeah. So if you're searching for something
 10 really, really rare, basically we would target I
 11 believe it was 200 results, so we would try to get you
 12 about 200 search results. And if something was really,
 13 really rare, we would -- the search would extend out to
 14 about 300,000 peers, something like that.
 15 But typically that would never happen because
 16 most searches were for much more popular content, so
 17 typically you'd never get that far. But a search like
 18 that, to get back to your earlier question about time,
 19 that might cap out at about a minute, something like
 20 that, so it would keep searching for about a minute.
 21 **Q. So is it fair to say that if you're looking for**
 22 **something rare, it's capped in two aspects; one would be**
 23 **the number of peers that it would search and the other**
 24 **would be time?**
 25 A. Yeah. Yeah. That code gets a little bit

1149

1 complicated, but it would -- it would certainly not
 2 extend -- so here's the tricky thing.
 3 So it would certainly not keep it -- continue to
 4 extend the search after those -- that minute, but like
 5 basically you're just this peer on the edge of the
 6 network and you've sent this search out already.
 7 Right?
 8 So by the time you've sent the search out to
 9 these other computers, at that point it's just this
 10 adaptive process that you don't entirely control, so
 11 it's -- so it's this -- and you don't know the exact
 12 topology of the network, so you're just guessing at even
 13 how many peers you're reaching.
 14 But it would -- like, I mean, in practice it's
 15 basically a matter of how long we showed the little
 16 spinner to show that you're still searching, you know.
 17 And that would basically disappear after about a minute
 18 because in practice there's not -- you're not going to
 19 see any more search results come back at that point.
 20 **Q. So would you consider it to be a search for**
 21 **something rare if one were searching for a one-of-a-kind**
 22 **document?**
 23 A. Yeah. I mean -- yeah. That's the rarest
 24 possible search except for a search for a document that
 25 doesn't exist.

1150

1 **Q. And would a search for that one-of-a-kind**
 2 **document using LimeWire be limited by both time and**
 3 **number of computers?**
 4 A. The time limit is more of a user interface
 5 thing I guess, but it's -- so it's -- in practice, it's
 6 more that it's limited by the number of computers that
 7 it will reach.
 8 And I should say the 300,000 number is also
 9 calculated based on a fixed network topology, so it
 10 assumes that, you know, every ultra peer is connected to
 11 approximately 30 leaves and approximately 30 other
 12 ultra peers and is basing its calculations on that. But
 13 in practice, the network is much more dynamic than that,
 14 so that's really the maximum maximum in sort of a
 15 perfect network topology of the number of peers that you
 16 would reach.
 17 **Q. And so if during the search for that**
 18 **one-of-a-kind document we're not looking -- we're not**
 19 **experiencing the maximum maximum network topology, does**
 20 **it make it even more unlikely that I would find that**
 21 **one-of-a-kind document?**
 22 MS. VANDRUFF: Objection, Your Honor. Leading.
 23 JUDGE CHAPPELL: I think the witness could say
 24 yes or no to that. That's overruled.
 25 MS. VANDRUFF: Thank you, Your Honor.

1151

1 THE WITNESS: Yes.
 2 BY MR. SHERMAN:
 3 **Q. Mr. Fisk, you also talk about browse host in**
 4 **your report.**
 5 **What is browse host?**
 6 A. So browse host is a message that you -- it's a
 7 network message that you could -- that you could send
 8 that would enable you to see all of the files that a
 9 given user was sharing.
 10 So if you receive a search result for a file and
 11 you wanted to see everything else that user was sharing,
 12 you could click on that file or you could click a
 13 "browse host" button and see the other files that user
 14 was sharing.
 15 **Q. Is the browse host function something that's**
 16 **used once a file is found?**
 17 A. That's correct. That's correct.
 18 So the only way -- or the primary way to learn
 19 about a computer or another user on the network was to
 20 search for them or to search for a file and then, yeah,
 21 once that file appeared, you could click it and click a
 22 "browse host" button. That's correct.
 23 **Q. So it's not the case that when using LimeWire,**
 24 **one could put in a search term and use the browse host**
 25 **function as they are initially searching for documents**

1152

1 **that fit that term.**
 2 A. That's correct.
 3 JUDGE CHAPPELL: That was leading.
 4 MR. SHERMAN: Well, that's correct, Judge. I
 5 didn't know how to get him there without leading him, so
 6 if the court wants me to rephrase, I will.
 7 JUDGE CHAPPELL: No. That ship has sailed.
 8 Go ahead.
 9 MR. SHERMAN: Thank you, Your Honor.
 10 BY MR. SHERMAN:
 11 **Q. Also in your report you talk about search terms**
 12 **or how LimeWire would divide up search terms.**
 13 A. Uh-huh.
 14 **Q. And in using a specific example -- and you can**
 15 **take that down -- if there were a search for a file**
 16 **named insuranceaging.pdf, for example, how would**
 17 **LimeWire I guess desegregate or segregate, is a better**
 18 **word, applicable searches for that document?**
 19 A. So -- so there are really two sides to that, so
 20 there's the sharing side and there's the searching
 21 side.
 22 So on the sharing side, when a user shares that
 23 particular file, LimeWire will take it, take the file
 24 name, and look for delimiters for keywords.
 25 **Q. And if I could stop you, I'd like to give you a**

1153

1 **more specific example.**
 2 A. Okay.
 3 **Q. The file name being searched for is**
 4 **insuranceaging_6.05.071.pdf.**
 5 **And to repeat the question then, how would**
 6 **LimeWire, the LimeWire program, allow one to search for**
 7 **that particular file?**
 8 A. So in that case, again there are these two
 9 sides to it, so there's the keywords that are searched
 10 for and then there's the keywords that are shared.
 11 So when you share that file, LimeWire will
 12 break it up into what it can ascertain are the keywords
 13 in the file, so it will use delimiters to figure that
 14 out.
 15 So in the case of the insurance aging file,
 16 you know, it's not intelligent enough to separate
 17 "insurance" from "aging," so it will just take
 18 "insurance" -- it will see that underscore and it will
 19 take "insuranceaging" as one big keyword, and then it
 20 will actually do what's called a little bit of prefix
 21 matching on that, on that keyword.
 22 So once it's identified "insuranceaging" as a
 23 keyword, it will then strip off the final characters of
 24 up to three, so it will enter "insuranceaging" as the
 25 keyword, and then it will enter "insuranceagin" without

1154

1 the "g" and then "insuranceagi" without the "n" and the
 2 "g" and "insuranceag" without the "ing" as all -- as
 3 separate, as separate keywords. And then it will also
 4 enter the numbers as keywords as well.
 5 But there was at the same time this quirky sort
 6 of other side to how search worked in the sense that by
 7 default on the searching side we would actually not
 8 allow numbers as search terms.
 9 So if you searched for the number "6," for
 10 example, we would see that in your search and we would
 11 not consider that a keyword that would, you know, go
 12 through the network.
 13 **Q. What is a delimiter?**
 14 A. So delimiters are -- there were a number of
 15 them. There were probably five or six or something, but
 16 certainly underscore. A dash would be a delimiter. I
 17 believe a slash would be a delimiter. There were a
 18 number of delimiters.
 19 So -- sorry. And you know, more generally, it's
 20 a character that we would consider to potentially
 21 separate keywords in a file name.
 22 **Q. So in the example of the**
 23 **insuranceaging_6.05.071.pdf, are each of the points a**
 24 **delimiter?**
 25 A. They actually are, yeah. And my report is --

1155

1 was -- I looked back at the code a little bit, and my
 2 report is actually slightly incorrect there, so it's
 3 actually -- yeah, I thought that we only used periods
 4 as delimiters for the file extension, but we actually
 5 did use it as a delimiter for the larger file name as
 6 well.
 7 **Q. And is the underscore a delimiter?**
 8 A. It is, yeah.
 9 **Q. And is it your testimony that if someone were**
 10 **to search for 6.05.071, would that search be allowed?**
 11 A. That specific search would be allowed. And this
 12 is -- because I slightly misremembered how we did the
 13 delimiters with the period, in that case the search
 14 would be allowed for that, but that would not be a
 15 keyword that's entered as shared, so that search
 16 actually on the -- in that case is sort of the inverse.
 17 The search would be allowed, but that would not match
 18 any keyword that was actually shared, if that makes
 19 sense.
 20 **Q. And so if an individual just searched the term**
 21 **"insurance," would they be able to find the file that I**
 22 **used in my example?**
 23 A. No.
 24 **Q. If they were just to search "aging," would they**
 25 **be able to find the file that I gave you in my example?**

1156

1 A. No.
 2 **Q. What if they were to search just "PDF," would**
 3 **they be able to find the file that I gave you in my**
 4 **example?**
 5 A. So that gets into this whole adaptive search
 6 thing again, so -- so "PDF" would be considered a
 7 keyword for that file that was shared, but because we
 8 did this whole adaptive search, because we implemented
 9 this whole adaptive search architecture, PDF is such a
 10 popular file type to share that you'd very quickly get
 11 200 results, you know, likely searching only a couple
 12 hundred computers, something like that.
 13 So -- so -- so it's not a search that --
 14 you know, it would be theoretically possible to find the
 15 insurance aging file using a search for "PDF," but it
 16 would be, you know, like a needle in a haystack or
 17 something like that, especially given that with LabMD's
 18 network configuration, that computer was behind a
 19 firewall, so -- so the way -- the way that search
 20 worked in that case was really important in the sense
 21 that -- in the sense that the -- as we saw in the
 22 earlier diagrams, the searcher would also have to not be
 23 behind a firewall.
 24 So the searcher searching for "PDF" in the
 25 LabMD case would only find a result for that file if

1157

1 they happened to randomly come across that computer out
 2 of these millions of computers out there but also if
 3 the searcher itself were not firewalled, which was
 4 very -- at that point on the Internet and today on the
 5 Internet is very rare, so it's very rare that you'd have
 6 a searcher not be firewalled.
 7 So in our, you know, data, we comment about
 8 95 percent of computers were behind firewalls, so you'd
 9 really be limiting the potential searchers to about
 10 5 percent of the overall network, and then you'd have to
 11 sort of randomly stumble across this file.
 12 MS. VANDRUFF: Your Honor, may I be heard?
 13 JUDGE CHAPPELL: Go ahead.
 14 MS. VANDRUFF: With respect to Mr. Fisk's
 15 testimony about 95 percent of computers being behind
 16 firewalls, that does not appear in his expert report. I
 17 would ask that that be stricken from the record.
 18 MR. SHERMAN: I do not think it does appear in
 19 his report, Your Honor. However, I thought it was a
 20 logical statement to make based on his knowledge and
 21 based on the explanation that he was giving to the
 22 question asked.
 23 JUDGE CHAPPELL: One thing we are in here is
 24 consistent.
 25 The objection is sustained.

1158

1 MS. VANDRUFF: Thank you, Your Honor.
 2 JUDGE CHAPPELL: That part of the response will
 3 be disregarded for purposes of the decision.
 4 MS. VANDRUFF: Thank you, Your Honor.
 5 BY MR. SHERMAN:
 6 **Q. So you mentioned LabMD's data security, and you**
 7 **were asked to form an opinion concerning LabMD's data**
 8 **security; is that correct?**
 9 A. That's correct.
 10 **Q. And if you could turn to page 3 of your report.**
 11 A. Page 3 you said; correct?
 12 **Q. Yes.**
 13 **The opinion you were asked to give as stated**
 14 **there, is that your recollection as to what you were**
 15 **asked to opine?**
 16 A. Yes, that's correct.
 17 **Q. And what were you asked to opine?**
 18 A. I was asked to analyze the -- LabMD's network as
 19 it pertained to the adequacy of its data security.
 20 **Q. And in doing so, there were materials that you**
 21 **reviewed; is that correct?**
 22 A. Yes. Certainly.
 23 **Q. And if you would turn to page 37, which I think**
 24 **is the last page of your report, is that an accurate**
 25 **description of the materials that you used and reviewed,**

1159

1 analyzed and considered in forming your opinion in this
 2 case?
 3 A. It is.
 4 **Q. Now, Mr. Fisk, ultimately what was your opinion**
 5 **with regard to LabMD's data security?**
 6 A. My opinion was that over the course of the time
 7 period that I analyzed that their data security was
 8 adequate to protect their data and to protect their
 9 network.
 10 **Q. Generally what led you to that conclusion?**
 11 A. An analysis of the equipment they had in place
 12 certainly, an analysis of the depositions describing
 13 the network and the practices in place at the company,
 14 an analysis of certainly the ProviDyn report that looked
 15 at any vulnerabilities on the network.
 16 That's all that come to mind.
 17 **Q. Did you analyze whether or not LabMD had**
 18 **firewalls in place?**
 19 A. Certainly.
 20 **Q. And did they?**
 21 A. They did.
 22 **Q. And did you conclude whether or not those**
 23 **firewalls were doing what firewalls are supposed to do?**
 24 A. Yes, I did.
 25 MS. VANDRUFF: Objection. Leading, Your Honor.

1160

1 JUDGE CHAPPELL: I'll allow that. Overruled.
 2 MS. VANDRUFF: Thank you, Your Honor.
 3 BY MR. SHERMAN:
 4 **Q. I think your answer was yes to that last**
 5 **question?**
 6 A. Yes.
 7 **Q. Based on your review of all the materials, what**
 8 **were the firewalls at LabMD doing?**
 9 A. So they were -- they were serving the purpose of
 10 a firewall, which is to protect the network from
 11 unwanted incoming network connections that could in some
 12 way be malicious.
 13 **Q. Were you aware that or were you made aware in**
 14 **your review that a portion of LabMD's network was**
 15 **connected to the Internet?**
 16 A. Certainly.
 17 **Q. And did you know or did you become aware of the**
 18 **purpose for such connection within LabMD's network?**
 19 A. I did.
 20 **Q. And what was that purpose?**
 21 A. That purpose was to allow clients to send
 22 essentially patient information typically to LabMD's
 23 network so that they could do things such as order tests
 24 for a given patient.
 25 **Q. In your review, were you made aware of whether**

1161

1 or not specific workstations were connected to the
 2 Internet?
 3 A. Specific workstations, no. I believe everyone
 4 had network access in the sense that, you know, a
 5 typical workstation could use a Web browser to browse
 6 the Internet, so in that sense, workstations were
 7 connected and everyone could send e-mail, so they were
 8 connected to the Internet, but they were behind a
 9 firewall.
 10 **Q. Were you aware of whether or not there were**
 11 **limitations on access to certain information within the**
 12 **network?**
 13 A. Yes.
 14 MS. VANDRUFF: Objection, Your Honor. That, I
 15 believe that that is also not in Mr. Fisk's report,
 16 while he does address access to downloading, not to
 17 information within the network.
 18 MR. SHERMAN: Your Honor, I believe on
 19 page 28 of the report, the last paragraph, Mr. Fisk
 20 states that the connections in this case simply were
 21 not incoming connections requested to a workstation,
 22 rather they were outgoing requests depicted in
 23 figure 3.
 24 JUDGE CHAPPELL: Why don't you ask the witness
 25 if this is in the report.

1162

1 MR. SHERMAN: Yes, sir.
 2 BY MR. SHERMAN:
 3 **Q. Mr. Fisk, is it your recollection that it is in**
 4 **your report with regard to access to information within**
 5 **the network?**
 6 MS. VANDRUFF: Your Honor, I renew the
 7 objection. The explanation that Mr. Sherman just
 8 provided is not about access within the network but is
 9 instead about access to the Internet, which are distinct
 10 subjects, particularly in this case.
 11 MR. SHERMAN: Well, let me withdraw that, that
 12 line of questioning then, Your Honor, because it's
 13 really not a place that is necessary for me to go for
 14 our defense.
 15 JUDGE CHAPPELL: Okay. At this time, the
 16 objection is sustained, and the response which appears
 17 in the record will be disregarded.
 18 MS. VANDRUFF: Thank you, Your Honor. Thanks,
 19 Counsel.
 20 (Pause in the proceedings.)
 21 JUDGE CHAPPELL: Go ahead.
 22 BY MR. SHERMAN:
 23 **Q. Mr. Fisk, I ask you to turn to page 16 of your**
 24 **report.**
 25 **What equipment did you find to be utilized and**

1163

1 **operating on LabMD's network?**
 2 A. Yeah, as I say here, there were, you know, a
 3 variety of switches and routers and firewalls,
 4 workstations certainly, in place.
 5 I think I'm making a good point here that,
 6 you know, there's -- the switches and the cables and
 7 whatnot are just what create a computer network so that
 8 that's sort of inherent when you say that they had a
 9 network.
 10 **Q. And you go on in your report to describe a**
 11 **certain firewall that LabMD in place; is that correct?**
 12 A. That's correct, yeah. I describe both the
 13 ZyWALL 5 firewall as well as the Cisco 1841 firewall.
 14 **Q. Were you familiar with the capabilities of the**
 15 **ZyWALL 5 firewall?**
 16 A. I am. I am, yeah. Simply -- simply, I've
 17 never, you know, installed it personally myself, but
 18 certainly through looking at the documentation on the
 19 ZyWALL 5 I am familiar with it, yeah.
 20 **Q. And using your experience and your background,**
 21 **you evaluated the operations and the abilities of the**
 22 **ZyWALL firewall; is that correct?**
 23 A. That's correct.
 24 **Q. You also go on to describe the**
 25 **Cisco 1841 Integrated Services Router --**

1164

1 A. That's right.
 2 **Q. -- in your report; is that correct?**
 3 A. That is correct.
 4 **Q. And you found that LabMD had that as part of its**
 5 **network; is that correct?**
 6 A. That is correct.
 7 **Q. And based on your experience and your**
 8 **background, you were able to analyze and evaluate the**
 9 **Cisco 1841; is that correct?**
 10 A. That's correct.
 11 **Q. Also in your review, Mr. Fisk, you reviewed**
 12 **LabMD's user account policies; is that correct?**
 13 A. That's correct.
 14 **Q. And did you find LabMD's user account policies**
 15 **to be reasonable given the type of information that they**
 16 **were dealing with on a day-to-day basis?**
 17 MS. VANDRUFF: Objection, Your Honor. Leading.
 18 JUDGE CHAPPELL: I'm not sure that suggests an
 19 answer. Overruled.
 20 MS. VANDRUFF: Thank you, Your Honor.
 21 THE WITNESS: Sorry. I didn't quite hear that.
 22 I can answer?
 23 MR. SHERMAN:
 24 **Q. Well, do you want the question read back?**
 25 **Because you can answer it.**

1165

1 A. Yeah, I guess if you could read it back, that
 2 would be good.
 3 (The record was read as follows:)
 4 "QUESTION: And did you find LabMD's user
 5 account policies to be reasonable given the type of
 6 information that they were dealing with on a day-to-day
 7 basis?"
 8 THE WITNESS: I did.
 9 BY MR. SHERMAN:
 10 **Q. So, Mr. Fisk, given your review of the -- did**
 11 **you also consider the software that LabMD was using at**
 12 **the time?**
 13 A. I did.
 14 **Q. And did you take in fact all of the information**
 15 **that you were reviewing, including your education, your**
 16 **knowledge, your skill, your background, your experience,**
 17 **into evaluating each piece of equipment that LabMD had**
 18 **in operation at the time?**
 19 A. Certainly, yeah. I analyzed each piece of
 20 software or hardware that I had in evidence and
 21 determined any -- the degree to which it provided
 22 adequate security or not.
 23 **Q. Mr. Fisk, you also indicated that -- you**
 24 **mentioned in passing that you reviewed ProviDyn reports**
 25 **that were made available to you; is that correct?**

1166

1 A. That is correct.
 2 **Q. And what did those reports indicate?**
 3 MS. VANDRUFF: Your Honor, the results of the
 4 ProviDyn reports, with one exception, are not addressed
 5 in Mr. Fisk's report, and so given the open question, I
 6 want to make sure that the testimony that's elicited is
 7 limited to the opinions offered in his report.
 8 MR. SHERMAN: That's fine, Your Honor.
 9 in fact, I may just generalize the fact that he
 10 reviewed them.
 11 JUDGE CHAPPELL: You need to rephrase.
 12 Sustained.
 13 MS. VANDRUFF: Thank you, Your Honor.
 14 BY MR. SHERMAN:
 15 **Q. You did review the ProviDyn reports; is that**
 16 **correct?**
 17 A. Yes, I did.
 18 **Q. Okay. And you reviewed the vulnerabilities that**
 19 **were listed in those reports; is that correct?**
 20 A. That is correct.
 21 **Q. And given all of the information that you**
 22 **reviewed, including the ProviDyn reports, including the**
 23 **hardware, the software that was in place, the**
 24 **deposition testimony and other documents for your --**
 25 **that were provided for your review that are listed in**

1167

1 **your Appendix B, which are materials considered and**
 2 **relied upon, were you able to conclude whether or not**
 3 **LabMD's data security practices were reasonable or**
 4 **adequate under the circumstances during the relevant**
 5 **time frame?**
 6 A. I was, yeah. I mean, my overall conclusion was
 7 that they were not certainly the perfect practices by
 8 any stretch, but they were really more than adequate to
 9 secure the -- their data and their network. I was --
 10 given the sort of the nature of the case, I was actually
 11 surprised at the degree to which they protected their
 12 network and their data.
 13 **Q. And why would you say that it was more than**
 14 **adequate?**
 15 A. You know, particularly really the fact that
 16 they had two firewalls in place was -- you know,
 17 provided really a double layer of protection to any
 18 external intruder. And really external intruders are
 19 the primary threat to a small business network.
 20 So this double layer of firewalls with the
 21 ZyWALL 5 and the Cisco 1841 really provided a lot of
 22 protection. And also both of those pieces of hardware
 23 are just -- you know, they're not the most expensive
 24 hardware you can buy, but they're certainly more than
 25 adequate to protect a network of LabMD's size.

1168

1 **Q. And --**
 2 JUDGE CHAPPELL: Before you continue, we're
 3 going to take a short break. We'll reconvene at
 4 12:00 noon.
 5 We're in recess.
 6 (Recess)
 7 JUDGE CHAPPELL: We're back on the record.
 8 Go ahead.
 9 MR. SHERMAN: Thank you, Your Honor.
 10 On the issue, Your Honor, of the objection
 11 concerning how much of the Internet was behind the
 12 firewall, while that information is not in Mr. Fisk's
 13 report, it was specifically asked of him during his
 14 deposition by complaint counsel.
 15 The question was: What is the very small
 16 percentage of computers not behind a firewall? And he
 17 basically said that it was approximately 5 percent.
 18 And so it was my impression that the reason for
 19 the rule was such that neither counsel would be
 20 surprised by the analysis or opinions of the expert.
 21 And given that that information was disclosed to
 22 complaint counsel via one of their questions during his
 23 deposition, we would argue that that information should
 24 be allowed as part of his testimony here today.
 25 MS. VANDRUFF: And Your Honor, I don't dispute

1169

1 what Mr. Sherman has represented with respect to the
 2 deposition.
 3 Nonetheless, rule 3.31(a) provides that the
 4 report signed by the expert contain a complete
 5 statement of all opinions to be expressed and the basis
 6 and reasons therefor.
 7 And if one of the reasons for Mr. Fisk's
 8 opinions in this matter related to the percentage of
 9 computers behind firewalls, that should have been
 10 included in his report.
 11 And we are not withdrawing the objection.
 12 JUDGE CHAPPELL: I'm not going to allow
 13 information given in a depo to expand an expert report.
 14 If I do that, then there will be a precedent, and then
 15 every attorney is going to start red-lining depositions
 16 and transcripts. And I don't want to get into a death
 17 spiral in here.
 18 The rule says what it is. There's no wiggle
 19 room. We'll stick with the rule.
 20 So if you are making a motion, it's denied.
 21 MR. SHERMAN: Thank you, Your Honor.
 22 MS. VANDRUFF: Thank you, Your Honor.
 23 BY MR. SHERMAN:
 24 **Q. Mr. Fisk, in evaluating LabMD's network, did you**
 25 **evaluate whether or not they were utilizing FTP versus**

1170

1 **SFTP?**
 2 A. I did.
 3 **Q. And what does -- what do those acronyms stand**
 4 **for?**
 5 A. So "FTP" stands for file transfer protocol, and
 6 "SFTP" stands for secure file transfer protocol.
 7 **Q. And did you determine whether or not LabMD was**
 8 **using a secure file transfer protocol?**
 9 A. I did. And yes, they were.
 10 **Q. And what is a file transfer protocol used for?**
 11 A. So a file transfer protocol, you know, does
 12 really just what it says. It transfers files from one
 13 computer to another over a network. It has what's
 14 called a control channel and a data channel in the
 15 protocol itself.
 16 And really the difference between SFTP and FTP
 17 is a significant one in the sense that if you're just
 18 using FTP, any network observer can look at the actual
 19 contents of that data; whereas, if you're using SFTP,
 20 all of that data is encrypted and a network observer
 21 cannot decipher the contents of the data.
 22 MS. VANDRUFF: Your Honor, if I may be heard.
 23 With respect to FTP and SFTP, again, this is an
 24 opinion that is not contained in Mr. Fisk's expert
 25 report. And while it was a subject at his deposition, I

1171

1 think Your Honor's ruling on the prior issue is equally
 2 applicable here.
 3 MR. SHERMAN: Your Honor, I think Mr. Fisk has
 4 my copy of his opinions. May I approach the witness to
 5 retrieve it?
 6 JUDGE CHAPPELL: Sure.
 7 Don't we have other witnesses talking about
 8 FTP?
 9 MS. VANDRUFF: Your Honor, are you asking
 10 whether there are fact witnesses and complaint counsel
 11 expert witnesses who have addressed the question of
 12 FTP?
 13 JUDGE CHAPPELL: Isn't it in the record
 14 somewhere in a document or in testimony?
 15 MS. VANDRUFF: It is in the record, Your Honor.
 16 However, it does not appear in Mr. Fisk's expert report,
 17 and we would ask that his testimony about it be stricken
 18 from the record.
 19 JUDGE CHAPPELL: What I'm getting at is, rather
 20 than being rigid and hypertechnical, if something isn't
 21 disputed, why don't we let it go.
 22 MS. VANDRUFF: I believe that Mr. Fisk's opinion
 23 about whether FTP versus secure FTP was being used is in
 24 dispute, Your Honor, and it does not appear in his
 25 expert report.

1172

1 JUDGE CHAPPELL: So even though we have heard
 2 about FTP, we haven't heard about SFTP.
 3 MS. VANDRUFF: It was the testimony of
 4 Professor Hill that the secure FTP port was closed,
 5 Your Honor, and therefore that that protocol was not
 6 being used. Mr. Fisk does not address that issue in his
 7 expert report, and any testimony about it should not be
 8 received by the court.
 9 JUDGE CHAPPELL: Well, if that's true, then that
 10 testimony will not be allowed.
 11 And I'm going to remind you, Mr. Sherman, to
 12 please stick to the information in the expert report.
 13 MR. SHERMAN: I understand, Your Honor.
 14 JUDGE CHAPPELL: And if you think it's in the
 15 report, you're allowed to have your witness indicate
 16 where it is, but until I hear otherwise, the objection
 17 is sustained.
 18 MR. SHERMAN: Thank you, Your Honor.
 19 JUDGE CHAPPELL: And that response will be
 20 disregarded in the decision in this case.
 21 MS. VANDRUFF: Thank you, Your Honor.
 22 THE WITNESS: I do mention FTP in the report.
 23 I don't mean to speak out of turn.
 24 BY MR. SHERMAN:
 25 **Q. Well, do you mention FTP in the report?**

1173

1 A. I believe I discuss the anonymous FTP server.
 2 MR. SHERMAN: May I approach the witness,
 3 Your Honor?
 4 JUDGE CHAPPELL: Go ahead.
 5 And as far as limiting expert opinions, if I'm
 6 not mistaken, it is not only in the rule in
 7 black and white, it's also repeated in the additional
 8 provisions in my scheduling order. I made that
 9 abundantly clear.
 10 MR. SHERMAN: I understand, Your Honor.
 11 THE WITNESS: Does no one have a digital copy of
 12 this? Control F is an amazing feature.
 13 (Pause in the proceedings.)
 14 I don't actually see it so far here.
 15 BY MR. SHERMAN:
 16 **Q. Then we'll move on.**
 17 A. Okay.
 18 JUDGE CHAPPELL: And if the people diligently
 19 searching on your side of the room find it, then let us
 20 know.
 21 MR. SHERMAN: Thank you, Your Honor.
 22 JUDGE CHAPPELL: Because we're going to be fair
 23 about this. If it is in there, it comes in; if it's
 24 not, it doesn't. And again, I'll remind everyone, the
 25 expert report is in evidence.

1174

1 BY MR. SHERMAN:
 2 **Q. So, Mr. Fisk, based on your background, your
 3 education, your experience, and your review of the
 4 documentation contained in Appendix B of your report, do
 5 you have an opinion as to whether or not LabMD's data
 6 security practices were reasonable under the
 7 circumstances during the relevant time period?**
 8 A. You said do I have an opinion?
 9 **Q. Yes.**
 10 A. I do.
 11 **Q. And what is your understanding of what the
 12 relevant time period is? I'm not sure that's on the
 13 record.**
 14 A. I don't remember the exact dates off the top of
 15 my head, but I believe it's right here --
 16 **Q. Could you turn to page 3 of your report.**
 17 A. Yeah, I'm there. And it's from January 2005 to
 18 July 2010.
 19 **Q. And what is your opinion, sir?**
 20 A. My opinion, based on all of the software and
 21 hardware and network configuration evidence that I
 22 analyzed, is that their data security practices were
 23 not just adequate, but I really found them to be more
 24 than adequate in terms of deploying a system that had a
 25 redundant layer of firewall protection, that used

1175

1 perfectly adequate network hardware and that, you know,
 2 had reasonable -- beyond that, sort of reasonable
 3 company policies to limit the ability of any of their
 4 data to be compromised.
 5 So my opinion is that during the relevant time
 6 period, their practices and networks and hardware and
 7 software were more than adequate to protect their data.
 8 MR. SHERMAN: One moment, Your Honor.
 9 JUDGE CHAPPELL: All right.
 10 MR. SHERMAN: I have no further questions,
 11 Your Honor.
 12 JUDGE CHAPPELL: Any cross?
 13 MS. VANDRUFF: Yes, Your Honor.
 14 The court's indulgence, please.
 15 (Pause in the proceedings.)
 16 Thank you, Your Honor.
 17 - - - - -
 18 CROSS-EXAMINATION
 19 BY MS. VANDRUFF:
 20 **Q. Good afternoon, Mr. Fisk.**
 21 A. Hi.
 22 **Q. Mr. Fisk, this morning Mr. Sherman asked you**
 23 **about advising companies on data security. Do you**
 24 **remember that testimony?**
 25 A. I do.

1176

1 **Q. Okay. And you described work that you'd done**
 2 **with a New Zealand company. Do you remember that**
 3 **testimony?**
 4 A. I do.
 5 **Q. It was your testimony this morning that you've**
 6 **been asked by companies to evaluate whether they've**
 7 **employed reasonable and appropriate security measures on**
 8 **their network; is that correct?**
 9 A. That's correct.
 10 **Q. Do you remember your deposition in April of this**
 11 **year where Mr. Sheer asked you questions about this**
 12 **matter?**
 13 A. Vaguely.
 14 **Q. Okay. Were you -- did you sit for a deposition**
 15 **in this matter?**
 16 A. Yes, I did.
 17 **Q. Okay. And that deposition took place on**
 18 **April 22 of this year; is that correct?**
 19 A. Correct.
 20 MS. VANDRUFF: Permission to approach,
 21 Your Honor?
 22 JUDGE CHAPPELL: Go ahead.
 23 BY MS. VANDRUFF:
 24 **Q. Mr. Fisk, I've handed you a copy of your**
 25 **deposition transcript from April 22, 2014, and I'd ask**

1177

1 **that you turn to page 11, please.**
 2 **Are you with me, Mr. Fisk?**
 3 A. I believe so. Yes.
 4 **Q. At line 6 you were asked the following question**
 5 **and you gave the following answer:**
 6 **"Have you ever been asked by a company to**
 7 **evaluate whether it employed reasonable and appropriate**
 8 **security measures on its network to prevent**
 9 **unauthorized access to personal information?**
 10 **"ANSWER: I've never been asked that by**
 11 **external companies. I have done that for my own**
 12 **companies."**
 13 **Did I read that correctly?**
 14 A. You did.
 15 **Q. Thank you.**
 16 **Your current company, Brave New Software**
 17 **Project, makes a tool Lantern; correct?**
 18 A. That's correct.
 19 **Q. Lantern does not collect Social Security**
 20 **numbers, does it?**
 21 A. It does not.
 22 **Q. It does not collect consumer health information,**
 23 **does it?**
 24 A. It does not. Although it may transport consumer
 25 health information, it doesn't, you know, collect it in

1178

1 a database somewhere, but it certainly transports lots
 2 of things.
 3 **Q. Your company does not collect Social Security**
 4 **numbers or consumer health information; correct?**
 5 A. We do not, that's correct.
 6 **Q. Mr. Fisk, you've never served as a testifying**
 7 **or -- well, you've never served as a testifying expert**
 8 **witness before today; correct?**
 9 A. That's correct.
 10 **Q. You've never served as a consulting expert**
 11 **before today.**
 12 A. That's correct.
 13 **Q. In forming your opinions in this case, Mr. Fisk,**
 14 **you did not talk to any current LabMD employees, did**
 15 **you?**
 16 A. That's correct.
 17 **Q. You didn't talk to any former LabMD employees,**
 18 **did you?**
 19 A. In preparing my report?
 20 **Q. In preparing your opinions in this case, you did**
 21 **not talk to any former LabMD employees, did you?**
 22 A. That's correct.
 23 **Q. And in forming your opinions in this case, you**
 24 **did not talk to any former LabMD contractors, did you?**
 25 A. That's correct.

1179

1 **Q. Nor did you speak with any former LabMD vendors,**
2 **did you?**
3 A. That's correct.
4 **Q. Directing your attention to your report, you**
5 **quote extensively from user manuals, don't you?**
6 A. I do.
7 **Q. And those are user manuals for, for example, the**
8 **ZyWALL firewall; correct?**
9 A. That's correct.
10 **Q. But you didn't examine LabMD's ZyWALL firewall;**
11 **correct?**
12 A. To my knowledge, it no longer existed, so it
13 would not have been possible to examine it.
14 **Q. And you didn't examine the Cisco router that's**
15 **described in your report, did you?**
16 A. Again, I don't think that would have been
17 physically possible to do.
18 **Q. Nor did you examine the billing manager's**
19 **computer on which LimeWire had been installed; correct?**
20 A. That's correct. Again, that computer no
21 longer -- that employee no longer exists for the
22 company, and that computer no longer existed by the time
23 I gave my report.
24 **Q. With respect to the configuration of the**
25 **firewalls that you described for Mr. Sherman earlier**

1180

1 **today, you're not relying on any record evidence in this**
2 **case to support your conclusions regarding the**
3 **configuration of the Zywall firewall; correct?**
4 A. I'm relying on -- yes, I am relying on record
5 evidence. I'm relying on the depositions as well as the
6 manuals for the ZyWALL 5 firewall.
7 **Q. We'll circle back to that.**
8 **Mr. Fisk, you don't have an opinion as to**
9 **whether LabMD's security was reasonable and adequate**
10 **after July 2010, do you?**
11 MR. SHERMAN: Objection.
12 That's certainly not in his report.
13 MS. VANDRUFF: I'm confirming that his opinions
14 are limited to his report, Your Honor.
15 JUDGE CHAPPELL: He was asked if he had an
16 opinion. I'll allow that. Overruled.
17 THE WITNESS: I didn't specifically look at
18 that. No.
19 MS. VANDRUFF: Thank you, Your Honor.
20 Thank you, Mr. Fisk.
21 JUDGE CHAPPELL: By the way, the way that
22 question was worded, the witness could have just said
23 "Yes, I do, and here it is." However, he did not do
24 that, so let's move along.
25 MS. VANDRUFF: Thank you, Your Honor.

1181

1 JUDGE CHAPPELL: Because the question didn't
2 specify in his report.
3 MS. VANDRUFF: Thank you, Your Honor.
4 BY MS. VANDRUFF:
5 **Q. Mr. Fisk, your expert report doesn't disclose**
6 **how much you're being paid in this matter, does it?**
7 A. No, it does not.
8 **Q. And you're being paid \$500 per hour to work on**
9 **this case; is that correct?**
10 A. That is correct.
11 **Q. I'd like to turn now to LimeWire.**
12 **At any one time, two to five million users would**
13 **be on the LimeWire network; isn't that correct?**
14 A. That is correct.
15 **Q. And LimeWire allows a user to select a folder,**
16 **the contents of which will be available for sharing to**
17 **other LimeWire or P2P application users on the network;**
18 **correct?**
19 A. That is correct.
20 **Q. So in this case, in the facts of LabMD, once an**
21 **outsider, an outside user, that is, locates a file**
22 **shared by the billing manager's computer, the outside**
23 **user can use browse host to view and download any files**
24 **shared by the billing manager's computer; correct?**
25 MR. SHERMAN: Objection. Assumes facts not in

1182

1 evidence.
2 JUDGE CHAPPELL: The way the question is
3 worded, you include the phrase "in the facts of LabMD."
4 The objection is, it assumes facts not in evidence,
5 which means the premise of your question is incorrect.
6 What's your response?
7 MS. VANDRUFF: My response is that Mr. Fisk has
8 testified about the extensive review of the record in
9 this case and his familiarity with it and his
10 competence to offer opinions on behalf of respondent. I
11 think that those facts are in evidence and they're
12 familiar to Mr. Fisk.
13 JUDGE CHAPPELL: Well, we can get past this if
14 you have him assume the facts and then ask your
15 question, so we can move along.
16 MS. VANDRUFF: I will, Your Honor. Thank you,
17 Your Honor.
18 BY MS. VANDRUFF:
19 **Q. Mr. Fisk, I'd like you to assume that an outside**
20 **user who was not behind a firewall located a file on the**
21 **billing manager's computer at LabMD.**
22 **Given that, could the outside user use browse**
23 **host -- strike that.**
24 **Given that, it's correct, isn't it, that the**
25 **outside user could use browse host to view and download**

1183

1 **any files shared by the billing manager's computer?**
 2 A. That's correct. And I would just again say
 3 that the scenario where that other user is not behind a
 4 firewall is a very rare scenario, so it's about
 5 5 percent of other users who are not behind a firewall.
 6 **Q. But again, given that scenario, the other user**
 7 **could use browse host to view and download any files**
 8 **shared by the billing manager's computer; correct?**
 9 A. Correct. And to -- again, to get there is --
 10 requires a long series of sort of very lucky steps, but
 11 in the scenario where somehow that person knows about
 12 this computer at LabMD, that is correct.
 13 MS. VANDRUFF: The court's indulgence,
 14 Your Honor.
 15 (Pause in the proceedings.)
 16 BY MS. VANDRUFF:
 17 **Q. Mr. Fisk, your expert report addresses a number**
 18 **of subjects which you've described for His Honor this**
 19 **morning, but there are subjects that your report does**
 20 **not relate to.**
 21 **For example, your report does not address**
 22 **whether LabMD developed a comprehensive information**
 23 **security program, does it?**
 24 A. Developed a comprehensive information security
 25 program. Yeah, I guess I don't -- I don't really have

1184

1 a -- or yeah, it doesn't include an opinion on that.
 2 **Q. And your report does not address whether LabMD**
 3 **maintained more personal information on its network than**
 4 **was necessary, does it?**
 5 A. It doesn't mention that as part of this opinion,
 6 no.
 7 **Q. Your report does not address whether LabMD used**
 8 **adequate measures to prevent employees from accessing**
 9 **personal information not needed to perform their jobs,**
 10 **does it?**
 11 A. I mean, I believe I mention access controls in
 12 the report. Whether -- I don't think I mention
 13 specifically internally whether or not company -- or
 14 employees had access to -- like what information
 15 different employees had access to. I certainly talk
 16 about what an employee -- what employees were allowed to
 17 install software, which relates to what information they
 18 were allowed to access in the sense that in some cases
 19 you almost certainly needed software to access
 20 information.
 21 **Q. Let me ask the question one more time.**
 22 **Your report does not address whether LabMD --**
 23 **strike that.**
 24 **Your report does not address whether LabMD used**
 25 **adequate measures to prevent employees from accessing**

1185

1 **personal information not needed to perform their jobs.**
 2 A. Well, again, one of those measures would be to
 3 limit what software employees could install because
 4 presumably any information that you are accessing is
 5 accessed through software, so it addresses it in the
 6 sense that it discusses which employees were enabled to
 7 install software.
 8 **Q. Your report does not address whether LabMD**
 9 **adequately trained its employees to safeguard personal**
 10 **information, does it?**
 11 A. No. I don't really discuss training much
 12 there.
 13 **Q. Your report does not address whether LabMD used**
 14 **common authentication-related security measures, does**
 15 **it?**
 16 A. Whether it used common -- sorry. Can you repeat
 17 that?
 18 **Q. Your report does not address whether LabMD used**
 19 **common authentication-related security measures.**
 20 A. I mean, it addresses it in the sense that in
 21 some network scenarios in some, you know, security
 22 architectures you need authentication to do different
 23 things, so it certainly takes into account whether or
 24 not there were clear vulnerabilities on systems that
 25 should have authentication that did not.

1186

1 **Q. You've described your analysis, but I'm asking**
 2 **you about your report.**
 3 **Your report doesn't address authentication**
 4 **measures at LabMD, does it?**
 5 A. It doesn't mention it because I didn't -- that
 6 didn't come across as any sort of vulnerability. And if
 7 it had, I would have mentioned it.
 8 **Q. And your report doesn't address whether LabMD**
 9 **maintained and updated the operating systems of**
 10 **computers and other devices on its network, does it?**
 11 A. Again, I did analyze that aspect of their
 12 network and practices in reaching my conclusions, but I
 13 don't discuss it specifically in the report because I
 14 didn't find it to be relevant.
 15 MS. VANDRUFF: The court's indulgence,
 16 Your Honor.
 17 (Pause in the proceedings.)
 18 BY MS. VANDRUFF:
 19 **Q. Returning, Mr. Fisk, to LabMD's measures to**
 20 **prevent employees from accessing personal information,**
 21 **other than your assessment of LabMD's policies related**
 22 **to employees' ability to download software, your expert**
 23 **report does not address whether LabMD used adequate**
 24 **measures to prevent employees from accessing personal**
 25 **information not needed to perform their jobs.**

1187

1 A. Well, what I said earlier was that the key
 2 component there was whether or not users can or
 3 employees could install applications --
 4 **Q. Okay.**
 5 A. -- regardless of whether or not --
 6 **Q. So let me ask the question then more precisely.**
 7 JUDGE CHAPPELL: Hold on a second. You didn't
 8 let him finish.
 9 MS. VANDRUFF: I apologize, Your Honor.
 10 I apologize, Mr. Fisk.
 11 THE WITNESS: Oh, yeah, I was pretty much done.
 12 Whether regardless of whether or not they were
 13 downloading it from the Internet, is all I was going to
 14 say.
 15 BY MS. VANDRUFF:
 16 **Q. So setting aside your assessment of LabMD's**
 17 **policies related to employees' ability to install**
 18 **software, your expert report does not address whether**
 19 **LabMD used adequate measures to prevent employees from**
 20 **accessing personal information not needed to perform**
 21 **their jobs; correct?**
 22 A. Again, I don't specifically talk about it in the
 23 report, but I don't talk about it because it didn't
 24 strike me as an issue with their overall network
 25 security.

1188

1 **Q. I'd like to return to the record evidence that**
 2 **you said you referenced regarding the configuration of**
 3 **the Zywall firewall.**
 4 **The record evidence that you relied upon is**
 5 **cited in your expert report; correct?**
 6 A. I believe so.
 7 **Q. I ask you to please refer to your expert report**
 8 **which Mr. Sherman moved into evidence earlier today as**
 9 **RX 533, and I direct your attention, Mr. Fisk, to**
 10 **page 17.**
 11 **At page 17, the bottom of the page, you describe**
 12 **the Zywall firewall and its function on LabMD's network;**
 13 **correct?**
 14 A. That's correct.
 15 **Q. And you cite to two depositions for that**
 16 **opinion; isn't that correct?**
 17 A. That's correct.
 18 **Q. Okay. And the two depositions, Mr. Fisk, are**
 19 **the depositions of Mr. Allen Truett and Mr. Robert Hyer;**
 20 **is that correct?**
 21 A. That's correct.
 22 MS. VANDRUFF: Permission to approach,
 23 Your Honor?
 24 JUDGE CHAPPELL: Go ahead.
 25 (Pause in the proceedings.)

1189

1 BY MS. VANDRUFF:
 2 **Q. In support of the proposition that LabMD's**
 3 **firewalls protected servers and employees --**
 4 **excuse me -- that LabMD's firewalls protected servers**
 5 **and employee computers from incoming traffic, you've**
 6 **dropped two footnotes, footnotes 16 and 17; correct?**
 7 A. That's correct.
 8 **Q. Okay. And footnote 16 refers to the deposition**
 9 **of Mr. Hyer, which you have in front of you, an excerpt**
 10 **of which you have in front of you, at CX 0719. And I**
 11 **direct your attention to the cited, cited by you,**
 12 **portion of Mr. Hyer's deposition at page 91.**
 13 **And Jon, can we display that for the court,**
 14 **please.**
 15 **For the benefit of the record, let me read what**
 16 **appears on page 91 of Mr. Hyer's deposition.**
 17 **"QUESTION: -- while you were there?"**
 18 **"ANSWER: Yeah.**
 19 **"QUESTION: And is this on the servers in**
 20 **particular?"**
 21 **"ANSWER: Well, all of the servers and equipment**
 22 **took advantage of Windows firewalls to the extent that**
 23 **they could.**
 24 **"QUESTION: Were the Windows operating systems**
 25 **at LabMD that it used on its servers centrally**

1190

1 managed --
 2 **"ANSWER: Absolutely.**
 3 **"QUESTION: -- when you were at LabMD?"**
 4 **"ANSWER: Yes.**
 5 **"QUESTION: Were the Windows operating systems**
 6 **used on the desktops centrally managed?"**
 7 **"ANSWER: Yes.**
 8 **"QUESTION: Who centrally managed the operating**
 9 **systems on the servers?"**
 10 **"ANSWER: It was an IT function, so I was**
 11 **responsible for it. The -- we actually had different**
 12 **employees focused on the servers and the desktops."**
 13 **Did I read the questions and answers that appear**
 14 **on page 91 correctly?**
 15 A. You did.
 16 **Q. Okay. And page 91 is cited in support of the**
 17 **proposition that the firewalls at LabMD protected**
 18 **servers and employee computers from incoming network**
 19 **traffic; correct?**
 20 A. That's correct.
 21 **Q. Okay. You also cite for that proposition the**
 22 **deposition of Mr. Truett, which I've handed to you and**
 23 **it's been marked -- I've handed an excerpt to you.**
 24 **Excuse me, Mr. Fisk. It's been marked as CX 0731.**
 25 **And I direct your attention to the cited**

1191

1 portion, which is page 41, which begins with the
 2 question -- the first full question that appears on that
 3 page is:
 4 "Did LabMD implement your recommendations with
 5 respect to firewall equipment?
 6 "ANSWER: We did install firewall equipment at
 7 LabMD.
 8 "QUESTION: Did APT make any recommendations
 9 regarding firewall equipment that LabMD did not
 10 complement?
 11 "ANSWER: I don't remember.
 12 "QUESTION: To whom did LabMD make those
 13 recommendations?
 14 "ANSWER: I'm sorry. Can you repeat that?
 15 "QUESTION: The recommendations that LabMD --
 16 I'm sorry -- that APT made regarding firewall
 17 equipment, to whom at LabMD did APT make those
 18 recommendations?
 19 "ANSWER: I don't remember specific staff at
 20 LabMD. I don't remember exactly.
 21 "QUESTION: Do you recall if it was to
 22 Mr. Daugherty?
 23 "ANSWER: I don't recall. It might have been to
 24 Mr. Daugherty that we presented these proposals. I
 25 would assume it was, but I don't recall exactly.

1192

1 "QUESTION: Do you recall making any
 2 recommendations to Mr. Boyle?
 3 "ANSWER: I don't recall making recommendations
 4 specifically to Mr. Boyle."
 5 And that last line spilled over onto page 42.
 6 Did I read that correctly Mr. Fisk?
 7 A. You did.
 8 Q. And this again was cited in support of the
 9 proposition in your report that the firewalls at LabMD
 10 protected servers and employee computers from incoming
 11 network traffic; is that correct?
 12 A. That is correct.
 13 Q. And beyond those two citations, you don't
 14 identify any other record support for the sentence
 15 "These firewalls protected servers and employee
 16 computers from incoming network traffic," do you,
 17 Mr. Fisk?
 18 A. Well, I believe I also cite page 58 of
 19 Allen Truett's deposition.
 20 Q. In the sentence that I read to you, "These
 21 firewalls protected servers and employee computers from
 22 incoming network traffic"?
 23 A. No. I cite it in the prior sentence.
 24 There were also discussions of the Zywall 5 in
 25 other depositions that I didn't cite, but those are --

1193

1 Q. I'm asking about what's cited in your report,
 2 Mr. Fisk.
 3 JUDGE CHAPPELL: Well, let the witness finish
 4 his answer.
 5 MS. VANDRUFF: I apologize, Your Honor. And I
 6 apologize to you, Mr. Fisk.
 7 JUDGE CHAPPELL: The question pending was:
 8 "Beyond those two citations, you don't identify any
 9 other record support." Therefore, he should have the
 10 opportunity to fully answer that.
 11 MS. VANDRUFF: Yes, Your Honor.
 12 THE WITNESS: So there were discussions of the
 13 Zywall 5 in a number of the depositions that I didn't
 14 specifically cite there but took into account when -- in
 15 forming my opinion.
 16 BY MS. VANDRUFF:
 17 Q. Let's turn to what you did cite. And you've
 18 mentioned Mr. Truett's deposition, which is noted at
 19 footnote 15 on page 17 of your expert report which has
 20 been marked as RX 533.
 21 You cite to Mr. Truett for the proposition that
 22 APT installed several Zywall 5 IPsec firewalls;
 23 correct?
 24 A. That is correct.
 25 MS. VANDRUFF: The court's indulgence,

1194

1 Your Honor.
 2 JUDGE CHAPPELL: Officer Proctor?
 3 (Pause in the proceedings.)
 4 MS. VANDRUFF: Do you need a moment,
 5 Your Honor?
 6 JUDGE CHAPPELL: Go ahead.
 7 BY MS. VANDRUFF:
 8 Q. Mr. Fisk, I'll withdraw that question.
 9 JUDGE CHAPPELL: All right. Now I need a
 10 moment.
 11 (Pause in the proceedings.)
 12 Go ahead.
 13 MS. VANDRUFF: Thank you, Your Honor.
 14 The court's indulgence, Your Honor.
 15 (Pause in the proceedings.)
 16 BY MS. VANDRUFF:
 17 Q. Mr. Fisk, you've talked about file sharing on
 18 P2P networks; correct?
 19 A. Correct.
 20 Q. It's your opinion, isn't it, that the risk of
 21 inadvertent sharing on P2P networks is an FTC concocted
 22 issue?
 23 A. I wouldn't describe it that way. I would
 24 describe it as an FTC -- inefficient use of FTC funds.
 25 Q. Well, you think that the FTC should be doing

1195

1 other things with its time; is that correct?
 2 A. Yes.
 3 **Q. Okay. And you believe that the risk of**
 4 **inadvertent sharing on P2P networks is an FTC concocted**
 5 **issue; isn't that right?**
 6 A. No. I think -- I wouldn't phrase it that way.
 7 **Q. Okay. Well, let me direct your attention back**
 8 **to your expert deposition -- excuse me -- the deposition**
 9 **that proceeded on April 22 of this year and specifically**
 10 **direct your attention to page 188.**
 11 (Pause in the proceedings.)
 12 Are you with me, Mr. Fisk?
 13 A. I am.
 14 **Q. I direct your attention, please, to line --**
 15 **excuse me -- line 9 on page 188 where you were asked**
 16 **the following question and you gave the following**
 17 **answer:**
 18 "QUESTION: Were you asked to modify LimeWire in
 19 any way that would address that issue?
 20 "ANSWER: The inadvertent file-sharing issue?
 21 Again, my feeling of that issue is it's basically an FTC
 22 concocted issue."
 23 Did I read that correctly?
 24 A. You did.
 25 **Q. Thank you.**

1196

1 **In your expert report, your opinion regarding**
 2 **the likelihood of users finding the 1718 File using**
 3 **LimeWire's search function is restricted to casual or**
 4 **typical users of LimeWire; correct?**
 5 A. Is restricted to casual or typical users of
 6 LimeWire.
 7 Sorry. Can you repeat the question?
 8 **Q. Certainly.**
 9 **In your expert report, you describe your**
 10 **opinions regarding the likelihood of users finding the**
 11 **1718 File using LimeWire's search function as being**
 12 **restricted to casual or typical users of LimeWire.**
 13 A. Yeah. I mean, I think users of LimeWire, the
 14 software itself, in general would be very unlikely to
 15 ever find the file because, I mean, certainly most of
 16 those users are casual users, but -- but I would say
 17 more sophisticated users would not use LimeWire, the
 18 software, to do that, yeah.
 19 **Q. Your report does not address the likelihood of**
 20 **criminals finding the 1718 File using LimeWire;**
 21 **correct?**
 22 A. Well, again, if those criminals are considered
 23 more sophisticated users, they would not -- if they
 24 were sophisticated like technical criminals, they would
 25 not use LimeWire to find the 1718 File because it would

1197

1 be a just a stupid way to do it. Bad criminals might
 2 try to.
 3 I mumble sometimes I have to remember.
 4 **Q. Mr. Fisk, let me ask you a question, and I think**
 5 **this is a yes-or-no question. Your Honor will correct**
 6 **me if it's not.**
 7 **But your report does not address the likelihood**
 8 **of criminals finding the 1718 File using LimeWire, does**
 9 **it?**
 10 A. Well, I go into the ability of any users or
 11 people in general to find the 1718 File, which would
 12 certainly include criminals, and I analyze the ways in
 13 which you could find the file through LimeWire as well
 14 as through other means.
 15 MS. VANDRUFF: Your Honor, I'd move to strike
 16 that as nonresponsive and ask that the witness be
 17 instructed to answer.
 18 MR. SHERMAN: Your Honor, I think he answered
 19 the question in that the way the question was posed, it
 20 opened itself up to interpretation and to explanation.
 21 MS. VANDRUFF: Your Honor, the question related
 22 specifically to what the report addressed. I don't
 23 think it was open to interpretation.
 24 JUDGE CHAPPELL: Well, based on what he said
 25 some moments ago, if indeed his opinion is that

1198

1 sophisticated-type users would not use LimeWire, then
 2 it doesn't take a leap to mean that's also an opinion
 3 that if these criminals are sophisticated, they would
 4 not use LimeWire. In that regard, then there is an
 5 opinion. One opinion creates the other.
 6 If he says sophisticated users would not use
 7 LimeWire, if he says criminal types you're referring to
 8 are sophisticated, then I can see why his answer is
 9 fair, so I overrule the objection.
 10 MS. VANDRUFF: Thank you, Your Honor.
 11 BY MS. VANDRUFF:
 12 **Q. Mr. Fisk, you're familiar with the 1718 File on**
 13 **a LabMD computer; correct?**
 14 A. Yes.
 15 **Q. And when the billing manager's computer at**
 16 **LimeWire was -- excuse me.**
 17 **When the billing manager's computer at LabMD**
 18 **was running LimeWire, any user on the LimeWire network**
 19 **who located the 1718 File could download it; correct?**
 20 A. Yes. And again, that's a very small subset of
 21 users on the LimeWire network. But if you were able to
 22 access it through a variety of steps that it would take
 23 to access it, to find it in the search results,
 24 including not being behind a firewall, then yes.
 25 But that does also relate to the whole

1199

1201

1 sophisticated user thing. You probably don't want me to
 2 go into that, but that is relevant.
 3 **Q. That was not my question. Thank you, Mr. Fisk.**
 4 **Mr. Fisk, you do not have an opinion about the**
 5 **most likely manner in which the 1718 File was disclosed;**
 6 **correct?**
 7 A. The most likely manner? Yeah, I'm not sure what
 8 the most likely manner is. That's correct.
 9 **Q. And the FBI's involvement is not the most likely**
 10 **way that the 1718 File was disclosed; correct?**
 11 A. I just said I didn't have an opinion about what
 12 the most likely way that it was shared was, so -- so,
 13 you know -- so I don't understand that question I guess.
 14 Like if the -- if I don't have an opinion about what was
 15 the most likely way, then -- then I don't -- I don't --
 16 I really don't know how it was shared, so that would
 17 also apply to the FBI being the means through which it
 18 was shared.
 19 **Q. And that would be equally applicable to other**
 20 **entities like BigChampagne and the Recording Industry**
 21 **Association of America and the Motion Picture**
 22 **Association of America; correct?**
 23 A. That's correct. Those are all entities who
 24 have sophistication to not use LimeWire and to do a more
 25 sophisticated search of the network, but I don't -- I

1 MS. VANDRUFF: I understand, Your Honor.
 2 BY MS. VANDRUFF:
 3 **Q. Similarly, Mr. Fisk, it's not your opinion that**
 4 **the 1718 File was disclosed without authorization**
 5 **because an employee e-mailed it as an attachment to a**
 6 **friend; correct?**
 7 A. It's not my opinion that that didn't happen.
 8 It's my opinion -- are you again asking this most likely
 9 thing? I don't think you included the phrase "most
 10 likely" in that.
 11 **Q. Allow me to ask the question again. Thank you,**
 12 **Mr. Fisk.**
 13 **It is not your opinion that the most likely way**
 14 **that the 1718 File was disclosed without authorization**
 15 **was because an employee e-mailed it as an attachment to**
 16 **a friend; correct?**
 17 A. Yeah. Again, that is just a possible way.
 18 **Q. Your report states that there's no evidence that**
 19 **the 1718 File was shared with anyone on LimeWire;**
 20 **correct?**
 21 A. I'm sorry. Say that one more time. It states
 22 that what?
 23 **Q. That there's no evidence that the 1718 File was**
 24 **shared with anyone on LimeWire.**
 25 A. I don't believe I specifically state that in the

1200

1202

1 don't know if they were able to actually access this
 2 file or not. That is correct.
 3 **Q. It's not your opinion that the most likely way**
 4 **that the 1718 File was disclosed was through the**
 5 **involvement of BigChampagne; correct?**
 6 MR. SHERMAN: Objection. Asked and answered.
 7 JUDGE CHAPPELL: I'll allow that. Overruled.
 8 THE WITNESS: Again, that is correct. I don't
 9 know the most likely way that it was shared.
 10 BY MS. VANDRUFF:
 11 **Q. It's not your opinion, Mr. Fisk, that the**
 12 **1718 File was disclosed without authorization because an**
 13 **employee copied it to a portable storage device like a**
 14 **thumb drive; correct?**
 15 A. Yeah. Again, these are all ways that it could
 16 have been shared. I don't have an opinion as to what
 17 the most likely way was.
 18 JUDGE CHAPPELL: And I want to be clear on my
 19 previous ruling. I'm just trying to apply some logic
 20 here. I'm not creating new opinions.
 21 If, for example, I have the opinion that only
 22 you, Counselor, have access to a network, I can see how
 23 that can be seen also as an opinion that he doesn't have
 24 access and I don't have access. That's the point I was
 25 making. I'm just applying logic.

1 report.
 2 **Q. Allow me to direct your attention, please, to**
 3 **page 12 of the document that's been marked as RX 533.**
 4 **Let me know when you're with me, Mr. Fisk.**
 5 A. I'm there.
 6 **Q. Okay. And at footnote 10, you indicate there's**
 7 **no evidence that the 1718 File was shared with anyone on**
 8 **LimeWire; correct?**
 9 A. That's correct.
 10 **Q. Okay. But it's also true that there's no**
 11 **evidence that the 1718 File was not shared on LimeWire;**
 12 **correct?**
 13 A. That's correct.
 14 **Q. When a file is downloaded by a LimeWire user,**
 15 **it is shared by default from that user's computer;**
 16 **correct?**
 17 A. That is correct.
 18 **Q. And so if the 1718 File had been downloaded to**
 19 **another user's computer through LimeWire, there's no way**
 20 **for the original source of the file to recall the file;**
 21 **correct?**
 22 A. That is correct.
 23 JUDGE CHAPPELL: Hold on a second.
 24 I want to make sure we're being consistent not
 25 with the truth but what I've heard previously.

1203

1 MS. VANDRUFF: Certainly.
 2 JUDGE CHAPPELL: Going back two questions,
 3 "When a file is downloaded by a LimeWire user, it is
 4 shared by default from that user's computer," can we
 5 clarify whether that's only possible if that user puts
 6 it in a file that allows it to be shared, because that
 7 was missing. And I think we've heard testimony that the
 8 case with LimeWire is, if I downloaded it from your
 9 computer, if I don't have it in a sharing folder or a
 10 designated folder, no, you cannot get it, another
 11 LimeWire person cannot get it.
 12 I'm not testifying here. I'm just trying to
 13 make the record consistent.
 14 MS. VANDRUFF: I appreciate that.
 15 JUDGE CHAPPELL: He's the expert. You're the
 16 attorney.
 17 BY MS. VANDRUFF:
 18 **Q. I appreciate that, Your Honor.**
 19 **And His Honor has raised an interesting point,**
 20 **Mr. Fisk, and I think that you can shed some light on**
 21 **His Honor's question.**
 22 **When a user downloads a file from another**
 23 **computer running LimeWire, it is saved to that user's**
 24 **computer; correct?**
 25 A. That's correct.

1204

1 **Q. And it's saved by default to that user's sharing**
 2 **file; correct?**
 3 A. Sharing folder, correct. Yeah.
 4 **Q. Okay. So to address His Honor's question, while**
 5 **the initial user must designate a folder for sharing and**
 6 **put files in that folder, the person who downloads the**
 7 **folder, that file is automatically shared by default;**
 8 **correct?**
 9 A. Yeah. The person who downloads the file into
 10 their -- by default, that file is downloaded and saved
 11 to their shared folder, and that shared folder is
 12 automatically reshared, so yes, by default, any file
 13 that anyone downloads on the Gnutella network using
 14 LimeWire is automatically reshared by the downloader.
 15 JUDGE CHAPPELL: And just so I'm clear, then if
 16 I downloaded it into a shared folder, I can't then move
 17 it immediately out of that folder, making it
 18 unavailable?
 19 THE WITNESS: You certainly can. You certainly
 20 can.
 21 JUDGE CHAPPELL: But so until I take that
 22 action, though, it would be shareable.
 23 THE WITNESS: Yes. That's right. That's right.
 24 So you would have to actively move it from that
 25 folder or actively unshare your default shared folder.

1205

1 JUDGE CHAPPELL: And just so I'm clear, when I
 2 downloaded it, if I'm a LimeWire user, we've been told
 3 by default it goes to the shared folder, but does it
 4 have to? Can I not direct it to go, for example, to the
 5 desktop instead of the shared folder?
 6 THE WITNESS: You can. You can choose your
 7 shared folder and you can choose that your shared folder
 8 not be shared or your download folder may be more
 9 accurately not be shared.
 10 JUDGE CHAPPELL: So just so we're clear, if
 11 someone takes it -- if some LimeWire user downloads a
 12 file from another LimeWire user, it's available to be
 13 shared by other LimeWire users if it's downloaded into
 14 the default shared folder and left there.
 15 THE WITNESS: That's correct. And obviously
 16 really the key is that in order for that whole sequence
 17 to even ever take place, they would have had to somehow
 18 find the file and download the file.
 19 JUDGE CHAPPELL: I was assuming that part
 20 already.
 21 THE WITNESS: Okay. Yeah. That's the part
 22 that's dicey.
 23 MS. VANDRUFF: Thank you, Mr. Fisk.
 24 Thank you, Your Honor.
 25 The court's indulgence, Your Honor.

1206

1 (Pause in the proceedings.)
 2 BY MS. VANDRUFF:
 3 **Q. Mr. Fisk, before we addressed His Honor's**
 4 **question -- and forgive me if I've already asked this,**
 5 **and I don't intend to draw an asked-and-answered**
 6 **objection -- but for the benefit of the record, if the**
 7 **1718 File was downloaded to another user's computer by**
 8 **LimeWire, there's no way for the original source of the**
 9 **file to recall that file; correct?**
 10 A. That's correct.
 11 **Q. And there's no way --**
 12 JUDGE CHAPPELL: Let me ask something along
 13 those lines, too, I've been wondering -- and it may be
 14 in the record -- since you're the LimeWire guy
 15 evidently.
 16 If I'm the user the file is downloaded from, do
 17 I have any way of knowing it's been downloaded from my
 18 computer?
 19 THE WITNESS: You do. You do. We would track
 20 statistics on all of those, all of your files, so if you
 21 looked in your library, you would see all of your shared
 22 files and you would see how many times each file had
 23 been uploaded, which is interesting in this case
 24 because, as far as I understand it, the screen shot of
 25 that, of Ms. Woodson's library, showed zero for all

1207

1 uploads of that file.
 2 MS. VANDRUFF: Excuse me, Your Honor. With
 3 apologies for interrupting Mr. Fisk, what he's just
 4 described is evidence that has not been produced to
 5 complaint counsel in this matter.
 6 JUDGE CHAPPELL: Well, I'm going to exclude
 7 what he just said about looking at her computer,
 8 whatever he just said. I'm not accepting that as fact
 9 or opinion.
 10 What I'm -- and I think he answered my
 11 question.
 12 If I'm an active LimeWire user, I can see that a
 13 file has been downloaded and I can see how many times
 14 it's been downloaded?
 15 THE WITNESS: Yeah, that's correct.
 16 JUDGE CHAPPELL: All right. Thank you.
 17 MS. VANDRUFF: The court's indulgence,
 18 Your Honor.
 19 (Pause in the proceedings.)
 20 BY MS. VANDRUFF:
 21 **Q. So, Mr. Fisk, we were talking about recalling a**
 22 **file.**
 23 **There's no way for the original user to prevent**
 24 **resharing of a file that was downloaded from the**
 25 **original user's computer; correct?**

1208

1 A. That's correct.
 2 **Q. And there's no way for the original source of a**
 3 **file to permanently remove the file from the P2P network**
 4 **after it's been shared; correct?**
 5 A. That's correct.
 6 MS. VANDRUFF: No further cross at this time,
 7 Your Honor, subject to any redirect.
 8 JUDGE CHAPPELL: Any redirect?
 9 MR. SHERMAN: Yes, sir.
 10 - - - - -
 11 REDIRECT EXAMINATION
 12 BY MR. SHERMAN:
 13 **Q. Mr. Fisk, you were directed to page 188 of your**
 14 **deposition and directed to line 11, and your answer was:**
 15 **"The inadvertent file sharing issue? Again, my feeling**
 16 **of that issue is that it's basically an FTC concocted**
 17 **issue."**
 18 **What did you mean by that?**
 19 A. So, you know -- and this is an issue that the
 20 FTC has been pursuing for some time and -- or I think --
 21 I think no longer pursues. But -- but just based on my
 22 knowledge of LimeWire and Gnutella and the way that
 23 users share content and the way that we designed the
 24 user interface to make it clear to users what was
 25 happening when they were sharing files, I felt that this

1209

1 idea that inadvertent file sharing, that people were
 2 mistakenly sharing files on the network, causing some
 3 major harm, societal harm, was a -- just a complete
 4 overblowing of that issue and a complete
 5 misappropriation of FTC resources.
 6 **Q. You also mentioned on cross that using LimeWire**
 7 **as a method to search for files for which the searcher**
 8 **would use for some criminal activity is not a very**
 9 **efficient way to commit a crime; is that correct?**
 10 A. That's correct, yeah. You know, based on all
 11 of these issues that I have mentioned of adaptive
 12 search and most users on the network being behind a
 13 firewall means that in order to effectively use the
 14 Gnutella network and LimeWire -- well, let's say the
 15 Gnutella network as a means for criminal activity, using
 16 LimeWire to do that would just be an extremely
 17 inefficient approach and would be just an approach
 18 that, you know, really unsophisticated criminals would
 19 use and would likely use very unsuccessfully I would
 20 say.
 21 MR. SHERMAN: One moment, Your Honor, please.
 22 (Pause in the proceedings.)
 23 BY MR. SHERMAN:
 24 **Q. Mr. Fisk, you were asked a lot of questions**
 25 **about what your opinion wasn't.**

1210

1 A. Uh-huh.
 2 **Q. And I believe your answer was that you didn't**
 3 **specifically mention those things because you did not**
 4 **see them as an issue.**
 5 **Is that correct?**
 6 A. That's correct.
 7 **Q. Is it true to say that you did not see them as**
 8 **an issue affecting LabMD's data security?**
 9 MS. VANDRUFF: Objection. Leading, Your Honor.
 10 JUDGE CHAPPELL: Sustained.
 11 BY MR. SHERMAN:
 12 **Q. Well, what issue did you see them as not having**
 13 **any impact on?**
 14 A. Yeah, so my report was on the adequacy of or
 15 inadequacy of LabMD's data security, and so I took into
 16 account every -- all of the factors I had in evidence
 17 when reaching my conclusions. And I mention in my
 18 report the evidence that I felt was relevant to
 19 answering that question of LabMD's data security. And
 20 the thing -- if I -- the things that specifically came
 21 up that I left out were things that I left out because I
 22 didn't think they were relevant to answering the
 23 question of whether or not LabMD had adequate data
 24 security.
 25 MR. SHERMAN: I have no further questions.

1211

1 JUDGE CHAPPELL: Recross?
 2 MS. VANDRUFF: No recross, Your Honor, although
 3 at this time complaint counsel wishes to make a motion,
 4 and we'd be happy to have the witness excused prior to
 5 doing so.
 6 JUDGE CHAPPELL: Thank you, sir. You're
 7 excused.
 8 THE WITNESS: Thank you.
 9 MR. SHERMAN: This witness is excused; is that
 10 correct?
 11 MS. VANDRUFF: That is correct, Mr. Sherman.
 12 (Pause in the proceedings.)
 13 At this time, Your Honor, complaint counsel
 14 objects to Mr. Fisk's qualification as an expert on two
 15 of the topics for which he was offered, specifically,
 16 the adequacy of LabMD's network security, hardware or
 17 software policies, practices and procedures and the
 18 topics of his rebuttal testimony with respect to
 19 complaint counsel's expert Dr. Hill insofar as
 20 Mr. Fisk's opinion related to network security,
 21 hardware, software policies, practices and procedures.
 22 Complaint counsel does not seek to limit
 23 Mr. Fisk's opinions as they relate to the technology
 24 behind the program known as LimeWire or the operation of
 25 peer-to-peer networks.

1212

1 Of course, I understand Your Honor's rulings,
 2 that this court is likely to admit this report and
 3 testimony and weigh it according to the credibility
 4 determinations that Your Honor makes.
 5 However, I'd argue that Mr. Fisk's report and
 6 the testimony on the topics on which complaint counsel
 7 is seeking relief should be accorded no weight or very
 8 little weight.
 9 Mr. Fisk's opinions with respect to those
 10 topics do not meet the standards of Daubert. He's
 11 lacking in expertise in the field of network security,
 12 and the gravamen of Mr. Fisk's opinions on network
 13 security relate to default settings of various hardware
 14 and software, and Mr. Fisk's opinions are not adequately
 15 grounded in the record evidence.
 16 Therefore, complaint counsel moves to exclude
 17 Mr. Fisk's opinions on the adequacy of LabMD's network
 18 security and his opinions in rebuttal to Dr. Hill's
 19 opinions as they relate to network security.
 20 JUDGE CHAPPELL: Any response?
 21 MR. SHERMAN: Yes, Your Honor.
 22 Consistent with the court's orders and rulings
 23 in regard to the expert testimony and the expert
 24 reports that have been submitted in this case, I would
 25 urge the court to continue consistently with its stance

1213

1 on permitting the evidence to be admitted and accorded
 2 whatever weight the court believes necessary.
 3 I would argue and urge the court, however, to
 4 take into consideration Mr. Fisk's experience and his
 5 background, particularly in terms of his ability to --
 6 his experience as the lead engineer on the development
 7 of the LimeWire program on the Gnutella network.
 8 Since that is one of the central issues here,
 9 and complaint counsel has seen fit to make the 1718 File
 10 and its alleged escape from LabMD central to its case, I
 11 think that Mr. Fisk's opinions with regard not only to
 12 the technology related to LimeWire but how that
 13 technology in turn affects data security should be given
 14 considerable weight.
 15 And also given Mr. Fisk's constant and
 16 continuous work and employment and business ownership in
 17 the area of data security, specifically in his current
 18 position and his current development of Lantern, which
 19 he testified is a software or a program that is designed
 20 specifically to defeat security measures set out by
 21 governments, such as Iran and China, to limit the amount
 22 of information coming into those countries and being
 23 made available to the individuals in those countries who
 24 use the Internet and who seek information available upon
 25 the Internet, his testimony was that this is very

1214

1 similar to security of a network, except on a much
 2 larger scale. They are securing the entire access to
 3 the Internet for an entire country's population.
 4 And so given his work in this area, dealing
 5 with, writing code, creating programs that look at the
 6 security measures that nations put in place, I think he
 7 is well-qualified to determine whether or not the data
 8 security measures of a small business, doing well, but
 9 still a small business here in the United States.
 10 Thank you, Your Honor.
 11 JUDGE CHAPPELL: Okay. The objection and the
 12 response are in the record.
 13 The objection is overruled.
 14 MS. VANDRUFF: Thank you, Your Honor.
 15 JUDGE CHAPPELL: As I've said, for reasons
 16 stated a couple times in the record previously, I will
 17 consider the opinions and I will consider the
 18 qualifications, and I will give due weight which should
 19 be accorded to any opinions that were offered by this
 20 witness. And my reasons will be made clear in the
 21 decision if I accept or rely upon any of the opinions of
 22 this witness.
 23 Anything further?
 24 MR. SHERMAN: Your Honor, there is nothing
 25 further.

1215

1217

1 As we informed the court yesterday, we have
2 condensed our defense. We have no witnesses available
3 to present this afternoon nor tomorrow, and we would
4 resume presenting witnesses in our case on Friday
5 morning.

6 JUDGE CHAPPELL: And who is scheduled for
7 Friday?

8 MR. SHERMAN: Friday morning we have
9 Mr. Robert Boback, the CEO of Tiversa, and
10 Mr. Rick Wallace, a former employee of Tiversa.

11 JUDGE CHAPPELL: And then how many other
12 witnesses do you have?

13 MR. SHERMAN: Your Honor, we are strongly
14 considering eliminating Mr. Truett. He would be the
15 only other witness which we represented to the court
16 that we would present on the following Tuesday, but we
17 are weighing whether or not he is essential to our
18 defense.

19 JUDGE CHAPPELL: All right. That's good to
20 know, so there's a chance you will rest on Friday.

21 MR. SHERMAN: That's correct, Your Honor.

22 JUDGE CHAPPELL: All right.

23 Anything from the government?

24 MS. VANDRUFF: Nothing from complaint counsel,
25 Your Honor. Thank you.

1 CERTIFICATION OF REPORTER

2

3 DOCKET/FILE NUMBER: 9357

4 CASE TITLE: LabMd, Inc.

5 HEARING DATE: May 28, 2014

6

7 I HEREBY CERTIFY that the transcript contained
8 herein is a full and accurate transcript of the notes
9 taken by me at the hearing on the above cause before the
10 FEDERAL TRADE COMMISSION to the best of my knowledge and
11 belief.

12

13 DATED: JUNE 3, 2014

14

15

16 JOSETT F. WHALEN, RMR

17

18

19 CERTIFICATION OF PROOFREADER

20

21 I HEREBY CERTIFY that I proofread the transcript
22 for accuracy in spelling, hyphenation, punctuation and
23 format.

24

25 ELIZABETH M. FARRELL

1216

1 JUDGE CHAPPELL: All right. So we will
2 reconvene on Friday at 0930.
3 We're in recess.
4 (Whereupon, the foregoing hearing was adjourned
5 at 1:21 p.m.)
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

<p>A</p> <p>\$500 1181:8</p> <p>a.m 1120:8</p> <p>abilities 1163:21</p> <p>ability 1175:3 1186:22 1187:17 1197:10 1213:5</p> <p>able 1129:15 1135:23 1137:18 1142:23 1145:12 1155:21,25 1156:3 1164:8 1167:2 1198:21 1200:1</p> <p>Absolutely 1190:2</p> <p>abundantly 1173:9</p> <p>accept 1141:22 1214:21</p> <p>accepting 1207:8</p> <p>access 1128:21 1161:4,11,16 1162:4,8,9 1177:9 1184:11,14,15,18 1184:19 1198:22 1198:23 1200:1,22 1200:24,24 1214:2</p> <p>accessed 1185:5</p> <p>accessing 1184:8,25 1185:4 1186:20,24 1187:20</p> <p>accorded 1133:23 1212:7 1213:1 1214:19</p> <p>account 1143:13 1164:12,14 1165:5 1185:23 1193:14 1210:16</p> <p>accuracy 1217:22</p> <p>accurate 1158:24 1217:8</p> <p>accurately 1205:9</p> <p>acronyms 1170:3</p> <p>action 1122:5 1204:22</p> <p>active 1126:2,7,8 1207:12</p> <p>actively 1204:24,25</p>	<p>activity 1209:8,15</p> <p>actual 1170:18</p> <p>Adam 1123:5,8,16</p> <p>adaptive 1147:17 1149:10 1156:5,8 1156:9 1209:11</p> <p>additional 1173:7</p> <p>address 1161:16 1172:6 1183:21 1184:2,7,22,24 1185:8,13,18 1186:3,8,23 1187:18 1195:19 1196:19 1197:7 1204:4</p> <p>addressed 1166:4 1171:11 1197:22 1206:3</p> <p>addresses 1183:17 1185:5,20</p> <p>adequacy 1158:19 1210:14 1211:16 1212:17</p> <p>adequate 1159:8 1165:22 1167:4,8 1167:14,25 1174:23,24 1175:1 1175:7 1180:9 1184:8,25 1186:23 1187:19 1210:23</p> <p>adequately 1185:9 1212:14</p> <p>adjourned 1216:4</p> <p>Administrative 1120:13</p> <p>admit 1212:2</p> <p>admitted 1135:11 1135:12 1213:1</p> <p>advantage 1189:22</p> <p>advice 1137:5</p> <p>advise 1132:23</p> <p>advised 1132:24 1136:9 1137:6</p> <p>advising 1175:23</p> <p>advisor 1135:19 1136:8</p> <p>advisory 1135:17 1137:12</p> <p>affiliation 1135:16 1136:7</p> <p>affiliations 1136:3 1136:18</p> <p>afternoon 1175:20 1215:3</p> <p>aging 1153:15,17 1155:24 1156:15</p> <p>ago 1197:25</p> <p>ahead 1135:2 1152:8 1157:13 1162:21 1168:8 1173:4 1176:22 1188:24 1194:6,12</p> <p>ALAIN 1121:5</p> <p>alleged 1213:10</p> <p>Allen 1188:19 1192:19</p> <p>allow 1138:24 1139:2 1142:15 1153:6 1154:8 1160:1,21 1169:12 1180:16 1200:7 1201:11 1202:2</p> <p>allowed 1143:14 1146:24 1155:10 1155:11,14,17 1168:24 1172:10 1172:15 1184:16 1184:18</p> <p>allowing 1145:9</p> <p>allows 1181:15 1203:6</p> <p>amazing 1173:12</p> <p>America 1120:1 1199:21,22</p> <p>amount 1213:21</p> <p>analogy 1131:10,14</p> <p>analysis 1159:11,12 1159:14 1168:20 1186:1</p> <p>analyze 1158:18 1159:17 1164:8 1186:11 1197:12</p> <p>analyzed 1159:1,7 1165:19 1174:22</p>	<p>anonymous 1173:1</p> <p>answer 1160:4 1164:19,22,25 1177:5,10 1189:18 1189:21 1190:2,4 1190:7,10 1191:6 1191:11,14,19,23 1192:3 1193:4,10 1195:17,20 1197:17 1198:8 1208:14 1210:2</p> <p>answered 1197:18 1200:6 1207:10</p> <p>answering 1210:19 1210:22</p> <p>answers 1190:13</p> <p>apologies 1207:3</p> <p>apologize 1187:9,10 1193:5,6</p> <p>appear 1144:15 1157:16,18 1171:16,24 1190:13</p> <p>APPEARANCES 1121:1 1122:1</p> <p>appeared 1151:21</p> <p>appears 1135:24 1137:22 1139:25 1140:14,17,20,21 1140:24 1162:16 1189:16 1191:2</p> <p>Appendix 1167:1 1174:4</p> <p>applicable 1152:18 1171:2 1199:19</p> <p>application 1181:17</p> <p>applications 1187:3</p> <p>apply 1128:19 1199:17 1200:19</p> <p>applying 1200:25</p> <p>appoint 1143:17</p> <p>appointing 1143:19</p> <p>appreciate 1203:14 1203:18</p> <p>approach 1134:25 1171:4 1173:2 1176:20 1188:22</p>	<p>1209:17,17</p> <p>appropriate 1176:7 1177:7</p> <p>approximate 1148:7</p> <p>approximately 1150:11,11 1168:17</p> <p>April 1176:10,18,25 1195:9</p> <p>APT 1191:8,16,17 1193:22</p> <p>architects 1125:11</p> <p>architecture 1125:13 1126:18 1126:19 1127:24 1137:17 1156:9</p> <p>architectures 1125:8 1128:3,5 1185:22</p> <p>area 1213:17 1214:4</p> <p>areas 1125:7</p> <p>argue 1168:23 1212:5 1213:3</p> <p>arrow 1138:20</p> <p>ascertain 1153:12</p> <p>aside 1187:16</p> <p>asked 1157:22 1158:7,13,15,17 1158:18 1168:13 1175:22 1176:6,11 1177:4,6,10 1180:15 1195:15 1195:18 1200:6 1206:4 1209:24</p> <p>asked-and-answe... 1206:5</p> <p>asking 1171:9 1186:1 1193:1 1201:8</p> <p>aspect 1186:11</p> <p>aspects 1148:22</p> <p>assessment 1186:21 1187:16</p> <p>Association 1199:21 1199:22</p> <p>assume 1182:14,19 1191:25</p>
--	---	--	--

assumes 1150:10 1181:25 1182:4	background 1124:16 1133:8,12 1133:19 1134:1 1163:20 1164:8 1165:16 1174:2 1213:5	beyond 1175:2 1192:13 1193:8	1167:19 1213:16 1214:8,9	1196:16
assuming 1205:19	Bad 1197:1	big 1153:19	button 1151:13,22	cause 1122:5 1217:9
attachment 1201:5 1201:15	Bamboo 1126:24	BigChampagne 1199:20 1200:5	buy 1167:24	causing 1209:2
attempting 1139:10	based 1127:16 1142:19 1150:9 1157:20,21 1160:7 1164:7 1174:2,20 1197:24 1208:21 1209:10	billing 1179:18 1181:22,24 1182:21 1183:1,8 1198:15,17	bypass 1129:12	cancel 1124:10 1128:21
attention 1179:4 1188:9 1189:11 1190:25 1195:7,10 1195:14 1202:2	basic 1130:1 1134:15	billions 1129:25	bypasses 1124:12	censored 1124:14
attorney 1169:15 1203:16	basically 1125:15 1127:20 1131:17 1132:5 1142:17 1143:5,10 1144:8 1145:8,10 1148:10 1149:5,15,17 1168:17 1195:21 1208:16	bit 1124:4 1127:2 1128:4 1130:21 1131:3 1133:3 1141:6 1148:25 1153:20 1155:1	<hr/> C <hr/>	censors 1124:10,13 1127:18 1128:20 1129:6,12
Auckland 1135:20	basing 1150:12	BitTorrent 1128:13	C 1123:1 1139:14,16 1140:25 1141:8 1142:16 1145:14 1146:2 1217:1,1 1217:19,19	central 1129:18
authentication 1185:22,25 1186:3	basis 1164:16 1165:7 1169:5	black 1173:7	called 1123:9 1124:11 1126:23 1126:25 1130:15 1141:9 1153:20 1170:14	centrally 1189:25 1190:6,8
authentication-rel... 1185:14,19	began 1137:7	block 1129:10	cables 1163:6	CEO 1123:17 1215:9
authorization 1200:12 1201:4,14	begins 1191:1	blocked 1139:5	calculated 1150:9	certain 1128:7 1161:11 1163:11
automatically 1143:16,22 1204:7 1204:12,14	behalf 1121:3,14 1122:3 1141:2 1182:10	blocking 1129:6,12	calculations 1150:12	certainly 1129:10 1137:18 1141:24 1149:1,3 1154:16 1158:22 1159:12 1159:14,19 1160:16 1163:4,18 1165:19 1167:7,24 1178:1 1180:12 1184:15,19 1185:23 1196:8,15 1197:12 1203:1 1204:19,19
available 1165:25 1181:16 1205:12 1213:23,24 1215:2	beliefs 1150:12	board 1137:12	call 1129:21 1142:17	CERTIFY 1217:7 1217:21
Avenue 1120:15 1121:9,18 1122:6	belief 1217:11	Boback 1215:9	called 1123:9 1124:11 1126:23 1126:25 1130:15 1141:9 1153:20 1170:14	chance 1215:20
aware 1160:13,13 1160:17,25 1161:10	believe 1144:15 1148:11 1154:17 1161:3,15,18 1171:22 1173:1 1174:15 1177:3 1184:11 1188:6 1192:18 1195:3 1201:25 1210:2	bootstrapped 1127:3	call 1129:21 1142:17	changed 1126:14
<hr/> B <hr/>	beginning 1137:7	bottom 1188:11	called 1123:9 1124:11 1126:23 1126:25 1130:15 1141:9 1153:20 1170:14	channel 1170:14,14
B 1138:3,7,7,15,17 1139:4,14,16 1140:13,24 1142:16 1145:14 1146:2,8 1167:1 1174:4	begins 1191:1	boxes 1140:24	cap 1147:15,17 1148:19	CHAPPELL 1120:12 1123:3 1124:5 1130:11,14 1130:25 1131:10 1131:13,20 1132:8 1132:17 1133:11 1134:2,9 1135:2,7 1135:11 1136:5,13 1136:20 1137:1 1139:18,23 1140:2 1140:7,11 1150:23 1152:3,7 1157:13 1157:23 1158:2
bachelor's 1124:17	behalf 1121:3,14 1122:3 1141:2 1182:10	Boyle 1143:20	capabilities 1130:5 1163:14	
back 1123:3 1126:21 1134:11 1137:21 1141:23 1143:19 1148:18 1149:19 1155:1 1164:24 1165:1 1168:7 1180:7 1195:7 1203:2	beliefs 1150:12	Boyle 1192:2,4	capable 1143:9	
	benefit 1144:12 1189:15 1206:6	Brave 1123:17,18 1177:16	capped 1148:8,22	
	best 1217:10	break 1153:12 1168:3	career 1126:22	
	better 1126:20 1128:2 1152:17	Brown 1124:17,21	case 1127:9 1138:12 1146:25 1151:23 1153:8,15 1155:13 1155:16 1156:20 1156:25 1159:2 1161:20 1162:10 1167:10 1172:20 1178:13,20,23 1180:2 1181:9,20 1182:9 1203:8 1206:23 1212:24 1213:10 1215:4 1217:4	
		browse 1151:3,5,6 1151:13,15,22,24 1161:5 1181:23 1182:22,25 1183:7	cases 1184:18	
		browser 1127:1 1128:12,14 1161:5	casual 1196:3,5,12	
		brushback 1124:5		
		build 1131:18 1132:14 1147:25		
		building 1131:8		
		built 1124:11		
		Bureau 1121:7		
		business 1123:19 1126:23 1130:3		

1160:1 1161:24 1162:15,21 1164:18 1166:11 1168:2,7 1169:12 1171:6,13,19 1172:1,9,14,19 1173:4,18,22 1175:9,12 1176:22 1180:15,21 1181:1 1182:2,13 1187:7 1188:24 1193:3,7 1194:2,6,9 1197:24 1200:7,18 1202:23 1203:2,15 1204:15,21 1205:1 1205:10,19 1206:12 1207:6,16 1208:8 1210:10 1211:1,6 1212:20 1214:11,15 1215:6 1215:11,19,22 1216:1 character 1154:20 characteristics 1143:14,16 characters 1153:23 Chief 1120:13 China 1124:13 1129:8,14 1213:21 Chinese 1129:21,23 choose 1205:6,7 Chris 1126:4 circle 1180:7 circumstances 1167:4 1174:7 Cisco 1163:13,25 1164:9 1167:21 1179:14 citations 1192:13 1193:8 cite 1188:15 1190:21 1192:18 1192:23,25 1193:14,17,21 cited 1188:5 1189:11,11 1190:16,25 1192:8	1193:1 clarify 1203:5 clear 1136:6 1173:9 1185:24 1200:18 1204:15 1205:1,10 1208:24 1214:20 click 1151:12,12,21 1151:21 clicked 1146:4 clients 1160:21 closed 1172:4 code 1125:10,11,25 1130:24 1132:11 1132:12,15 1143:8 1148:25 1155:1 1214:5 colleagues 1126:4 collect 1177:19,22 1177:25 1178:3 color 1141:8 colored 1141:7 come 1149:19 1157:1 1159:16 1186:6 comes 1173:23 coming 1130:9 1139:2 1213:22 comment 1157:7 Commission 1119:1 1120:1,14 1121:3 1121:6 1217:10 commit 1209:9 committee 1135:18 common 1185:14,16 1185:19 communicate 1134:16 1146:12 communicates 1146:20 companies 1132:23 1132:25 1136:10 1137:6 1175:23 1176:6 1177:11,12 company 1127:3 1132:10 1133:3 1136:11 1137:8,10 1137:15 1159:13	1175:3 1176:2 1177:6,16 1178:3 1179:22 1184:13 compare 1130:14 competence 1182:10 complaint 1135:5 1135:25 1144:16 1168:14,22 1171:10 1207:5 1211:3,13,19,22 1212:6,16 1213:9 1215:24 complement 1191:10 complete 1169:4 1209:3,4 complex 1127:22 complicated 1125:19 1130:4 1149:1 component 1187:2 comprehensive 1183:22,24 compromised 1175:4 computer 1124:18 1138:3,6,13,14,15 1138:16,17,20 1141:11 1142:10 1142:20,24 1143:1 1143:4,7,11,24 1144:2 1145:11 1147:3 1151:19 1156:18 1157:1 1163:7 1170:13 1179:19,20,22 1181:22,24 1182:21 1183:1,8 1183:12 1198:13 1198:15,17 1202:15,19 1203:4 1203:9,23,24 1206:7,18 1207:7 1207:25 computers 1125:17 1125:18 1134:16 1138:3 1139:2,14	1141:1,8,24 1143:19 1144:2 1148:1,4,5,7 1149:9 1150:3,6 1156:12 1157:2,8 1157:15 1168:16 1169:9 1186:10 1189:5 1190:18 1192:10,16,21 concept 1138:22 concepts 1128:20 concerning 1158:7 1168:11 conclude 1159:22 1167:2 conclusion 1159:10 1167:6 conclusions 1180:2 1186:12 1210:17 concocted 1194:21 1195:4,22 1208:16 condensed 1215:2 conduct 1136:17 conferred 1135:5 configuration 1156:18 1174:21 1179:24 1180:3 1188:2 confirming 1180:13 connect 1142:19,20 1142:23 connected 1141:8 1145:13,14 1150:10 1160:15 1161:1,7,8 connection 1138:5,7 1138:7,15,17 1139:4,5 1145:13 1146:11,15,23 1147:2,3,5,10 1160:18 connections 1138:24 1139:2 1142:2,15 1145:10 1146:17 1146:17 1160:11 1161:20,21 consider 1149:20	1154:11,20 1165:11 1214:17 1214:17 considerable 1213:14 consideration 1213:4 considered 1156:6 1159:1 1167:1 1196:22 considering 1215:14 consistent 1157:24 1202:24 1203:13 1212:22 consistently 1212:25 constant 1213:15 consulting 1178:10 consumer 1121:7 1177:22,24 1178:4 contain 1169:4 contained 1170:24 1174:4 1217:7 content 1147:20,21 1148:16 1208:23 contents 1170:19,21 1181:16 continue 1126:12 1135:23 1137:9 1149:3 1168:2 1212:25 continued 1122:1 continuous 1213:16 contractors 1178:24 control 1130:9 1143:24 1149:10 1170:14 1173:12 controls 1184:11 copied 1200:13 copy 1171:4 1173:11 1176:24 corporate 1137:19 corporation 1120:4 correct 1125:22,23 1132:20,21 1134:17,18 1138:21 1139:6,7 1145:2 1146:21
---	---	--	---	---

1151:17,17,22 1152:2,4 1158:8,9 1158:11,16,21 1163:11,12,22,23 1164:2,3,5,6,9,10 1164:12,13 1165:25 1166:1,16 1166:19,20 1176:8 1176:9,18,19 1177:17,18 1178:4 1178:5,8,9,12,16 1178:22,25 1179:3 1179:8,9,11,19,20 1180:3 1181:9,10 1181:13,14,18,19 1181:24 1182:24 1183:2,8,9,12 1187:21 1188:5,13 1188:14,16,17,20 1188:21 1189:6,7 1190:19,20 1192:11,12 1193:23,24 1194:18,19 1195:1 1196:4,21 1197:5 1198:13,19 1199:6 1199:8,10,22,23 1200:2,5,8,14 1201:6,16,20 1202:8,9,12,13,16 1202:17,21,22 1203:24,25 1204:2 1204:3,8 1205:15 1206:9,10 1207:15 1207:25 1208:1,4 1208:5 1209:9,10 1210:5,6 1211:10 1211:11 1215:21 correctly 1177:13 1190:14 1192:6 1195:23 cost 1129:16 counsel 1134:5 1135:5,25 1137:3 1140:16 1144:16 1162:19 1168:14 1168:19,22	1171:10 1207:5 1211:3,13,22 1212:6,16 1213:9 1215:24 counsel's 1135:15 1211:19 Counselor 1200:22 countries 1124:10 1124:13 1127:18 1128:21 1213:22 1213:23 country's 1214:3 couple 1124:23 1126:5,5 1156:11 1214:16 course 1159:6 1212:1 court 1120:19 1123:25 1133:9,21 1152:6 1172:8 1189:13 1212:2,25 1213:2,3 1215:1 1215:15 court's 1175:14 1183:13 1186:15 1193:25 1194:14 1205:25 1207:17 1212:22 create 1127:24 1144:22 1145:12 1146:10 1147:10 1163:7 created 1144:25 creates 1132:2 1146:23 1147:2 1198:5 creating 1127:6 1200:20 1214:5 credibility 1212:3 crime 1209:9 criminal 1198:7 1209:8,15 criminals 1196:20 1196:22,24 1197:1 1197:8,12 1198:3 1209:18 cross 1119:8	1175:12 1208:6 1209:6 CROSS-EXAMI... 1175:18 current 1123:15 1177:16 1178:14 1213:17,18 currently 1132:19 CV 1133:11,17,25 1134:3 1135:24 1136:3,14,19,25 CX 1119:13 1140:15 1189:10 1190:24 <hr/> D D 1119:2 1120:12 1121:16 1123:1 1139:14,17 1141:4 1141:5,7,9 1145:13,14 1146:2 1146:12,15,19 1217:19 D.C 1120:16 1121:10,20 1122:8 dash 1154:16 data 1128:8 1129:19 1132:23 1136:10 1137:6,19,19 1157:7 1158:6,7 1158:19 1159:5,7 1159:8 1167:3,9 1167:12 1170:14 1170:19,20,21 1174:5,22 1175:4 1175:7,23 1210:8 1210:15,19,23 1213:13,17 1214:7 database 1178:1 DATE 1217:5 DATED 1217:13 dates 1174:14 Daubert 1212:10 Daugherty 1191:22 1191:24 day-to-day 1164:16 1165:6 dealing 1164:16	1165:6 1214:4 death 1169:16 decide 1129:14 1143:7 decipher 1170:21 decision 1158:3 1172:20 1214:21 default 1138:24 1154:7 1202:15 1203:4 1204:1,7 1204:10,12,25 1205:3,14 1212:13 defeat 1213:20 defense 1162:14 1215:2,18 defines 1131:25 definitely 1147:15 degree 1165:21 1167:11 degrees 1124:19 1142:4 delimiter 1154:13 1154:16,17,24 1155:5,7 delimiters 1152:24 1153:13 1154:14 1154:18 1155:4,13 demonstrative 1134:13 demonstratives 1139:19 denied 1169:20 denser 1141:16 1142:1,9 Department 1123:20 depict 1138:22 1145:19 depicted 1161:22 depicting 1138:11 1144:6 depiction 1139:8 1140:17 1145:2 depicts 1137:25 1138:23 1145:6 deploying 1174:24 depo 1169:13	depos 1169:15 deposition 1166:24 1168:14,23 1169:2 1170:25 1176:10 1176:14,17,25 1189:8,12,16 1190:22 1192:19 1193:18 1195:8,8 1208:14 depositions 1159:12 1180:5 1188:15,18 1188:19 1192:25 1193:13 describe 1133:1 1139:11 1144:5 1163:10,12,24 1188:11 1194:23 1194:24 1196:9 described 1176:1 1179:15,25 1183:18 1186:1 1207:4 describing 1136:11 1141:6 1159:12 description 1158:25 desegregate 1152:17 designate 1204:5 designated 1203:10 designed 1129:15 1131:18 1134:12 1142:25 1208:23 1213:19 designer 1144:24 desktop 1205:5 desktops 1190:6,12 determinations 1212:4 determine 1170:7 1214:7 determined 1165:21 develop 1126:13,13 developed 1125:8 1183:22,24 development 1213:6 1213:18 device 1200:13 devices 1186:10
--	---	---	--	--

<p>devote 1129:24 diagram 1139:14 1141:2,10 1142:16 1145:19,25 diagrams 1141:24 1142:19 1156:22 dicey 1205:22 difference 1170:16 different 1124:8 1127:21 1130:23 1131:3,16 1136:2 1184:15 1185:22 1190:11 difficult 1129:7 1141:18 digital 1173:11 diligently 1173:18 Dinsmore 1121:17 direct 1119:8 1123:11 1188:9 1189:11 1190:25 1195:7,10,14 1202:2 1205:4 directed 1208:13,14 Directing 1179:4 direction 1138:6 1146:18 directional 1146:17 directly 1146:6 disappear 1149:17 disclose 1181:5 disclosed 1136:25 1168:21 1199:5,10 1200:4,12 1201:4 1201:14 discuss 1173:1 1185:11 1186:13 discussed 1140:13 1140:17 discusses 1185:6 discussing 1140:19 discussions 1192:24 1193:12 display 1189:13 dispute 1168:25 1171:24 disputed 1171:21</p>	<p>disregarded 1158:3 1162:17 1172:20 distinct 1162:9 distributed 1141:17 1143:25 divide 1152:12 Division 1121:8 Docket 1120:4 DOCKET/FILE 1217:3 document 1144:14 1144:17 1145:18 1145:20,23 1146:20 1149:22 1149:24 1150:2,18 1150:21 1152:18 1171:14 1202:3 documentation 1163:18 1174:4 documents 1151:25 1166:24 doing 1127:24 1137:7 1144:18 1158:20 1159:23 1160:8 1194:25 1211:5 1214:8 dollars 1127:7 1129:25 double 1167:17,20 download 1146:5,7 1146:9,11 1147:5 1147:6 1181:23 1182:25 1183:7 1186:22 1198:19 1205:8,18 downloaded 1202:14,18 1203:3 1203:8 1204:10,16 1205:2,13 1206:7 1206:16,17 1207:13,14,24 downloader 1204:14 downloading 1126:19 1161:16 1187:13 downloads 1203:22</p>	<p>1204:6,9,13 1205:11 Dr 1211:19 1212:18 draw 1206:5 drive 1200:14 dropped 1189:6 due 1214:18 duly 1123:10 duties 1125:4 dynamic 1150:13</p> <hr/> <p style="text-align: center;">E</p> <hr/> <p>E 1119:2 1123:1,1 1145:11,13,14,17 1145:21,23 1146:2 1146:6,7,9,10,12 1146:12,14,20,20 1146:22,23 1147:2 1147:9 1217:1,1,1 1217:19,19,19 e-mail 1161:7 e-mailed 1201:5,15 earlier 1130:12 1141:6,23 1142:20 1148:18 1156:22 1179:25 1187:1 1188:8 easier 1128:13 easy 1127:7 1147:25 edge 1149:5 education 1165:15 1174:3 educational 1124:16 effect 1141:25 effectively 1209:13 efficient 1125:20 1126:20 1148:3 1209:9 effort 1125:21 eight 1126:10 either 1124:6 1138:5,6 1140:4 1146:18 elect 1143:16 electing 1143:18 elements 1130:23 elicited 1166:6</p>	<p>eliminating 1215:14 ELIZABETH 1217:25 employed 1176:7 1177:7 employee 1179:21 1184:16 1189:5 1190:18 1192:10 1192:15,21 1200:13 1201:5,15 1215:10 employees 1178:14 1178:17,21 1184:8 1184:14,15,16,25 1185:3,6,9 1186:20,22,24 1187:3,17,19 1189:3 1190:12 employment 1213:16 enable 1151:8 enabled 1185:6 encrypted 1170:20 endpoints 1144:1 engineer 1125:6,21 1213:6 engineered 1128:2 1132:4 engineering 1134:16 engineers 1125:24 enter 1153:24,25 1154:4 entered 1155:15 entire 1141:19 1214:2,3 entirely 1149:10 entities 1123:21 1124:8 1199:20,23 entity 1127:12,14 equally 1171:1 1199:19 equipment 1159:11 1162:25 1165:17 1189:21 1191:5,6 1191:9,17 escape 1213:10 especially 1148:1</p>	<p>1156:17 ESQ 1121:4,5,15,16 1122:4 essential 1215:17 essentially 1128:25 1132:14 1139:15 1147:19 1160:22 establish 1144:17 established 1147:4 establishing 1147:5 establishment 1146:16 estimation 1141:14 evaluate 1164:8 1169:25 1176:6 1177:7 evaluated 1163:21 evaluating 1165:17 1169:24 EVID 1119:12 evidence 1135:3,13 1140:3 1165:20 1173:25 1174:21 1180:1,5 1182:1,4 1182:11 1188:1,4 1188:8 1201:18,23 1202:7,11 1207:4 1210:16,18 1212:15 1213:1 evidently 1206:15 exact 1149:11 1174:14 exactly 1133:14,15 1147:16 1191:20 1191:25 examination 1123:9 1123:11 1136:2,17 1136:24 1208:11 examine 1179:10,13 1179:14,18 examined 1123:10 1133:25 example 1152:14,16 1153:1 1154:10,22 1155:22,25 1156:4 1179:7 1183:21 1200:21 1205:4</p>
---	---	--	---	--

<p>exception 1166:4 excerpt 1189:9 1190:23 exclude 1207:6 1212:16 excuse 1189:4 1190:24 1195:8,15 1198:16 1207:2 excused 1211:4,7,9 exhibit 1134:13,23 1135:12 1138:9,10 1140:4,12 EXHIBITS 1119:12 exist 1131:6 1132:10 1147:13,14 1149:25 existed 1179:12,22 exists 1127:13,13,14 1179:21 expand 1169:13 expensive 1167:23 experience 1135:23 1163:20 1164:7 1165:16 1174:3 1213:4,6 experiencing 1150:19 expert 1134:4,21 1135:3 1137:21,23 1157:16 1168:20 1169:4,13 1170:24 1171:11,16,25 1172:7,12 1173:5 1173:25 1178:7,10 1181:5 1183:17 1186:22 1187:18 1188:5,7 1193:19 1195:8 1196:1,9 1203:15 1211:14 1211:19 1212:23 1212:23 expertise 1212:11 explain 1137:7 1138:11 1139:10 1145:6,22 explanation 1133:8 1134:16 1136:16</p>	<p>1137:9,24 1157:21 1162:7 1197:20 expressed 1169:5 extend 1147:19 1148:13 1149:2,4 extension 1155:4 extensive 1182:8 extensively 1179:5 extent 1131:5 1136:24 1189:22 external 1167:18,18 1177:11 extremely 1209:16</p> <hr/> <p style="text-align: center;">F</p> <hr/> <p>F 1120:19 1173:12 1217:1,1,16,19,19 1217:19 Facebook 1137:16 facilitate 1146:11 fact 1165:14 1166:9 1166:9 1167:15 1171:10 1207:8 factors 1210:16 facts 1181:20,25 1182:3,4,11,14 fair 1145:17 1146:19 1148:21 1173:22 1198:9 fairly 1127:22 1137:12 familiar 1163:14,19 1182:12 1198:12 familiarity 1182:9 far 1148:17 1173:5 1173:14 1206:24 FARRELL 1217:25 FBI 1199:17 FBI's 1199:9 feature 1173:12 federal 1119:1 1120:1,14 1121:3 1121:6 1124:9 1217:10 feeling 1195:21 1208:15 felt 1208:25 1210:18</p>	<p>field 1212:11 figure 1138:19 1140:14,16,20,21 1140:23 1144:21 1144:22 1153:13 1161:23 file 1146:5,7,10,11 1147:6 1151:10,12 1151:16,20,21 1152:15,23,23 1153:3,7,11,13,15 1154:21 1155:4,5 1155:21,25 1156:3 1156:7,10,15,25 1157:11 1170:5,6 1170:8,10,11 1181:21 1182:20 1194:17 1196:2,11 1196:15,20,25 1197:8,11,13 1198:12,19 1199:5 1199:10 1200:2,4 1200:12 1201:4,14 1201:19,23 1202:7 1202:11,14,18,20 1202:20 1203:3,6 1203:22 1204:2,7 1204:9,10,12 1205:12,18,18 1206:7,9,9,16,22 1207:1,13,22,24 1208:3,3,15 1209:1 1213:9 file-sharing 1124:25 1195:20 files 1151:8,13 1170:12 1181:23 1183:1,7 1204:6 1206:20,22 1208:25 1209:2,7 final 1153:23 financially 1129:16 find 1127:8 1150:20 1155:21,25 1156:3 1156:14,25 1162:25 1164:14 1165:4 1173:19</p>	<p>1186:14 1196:15 1196:25 1197:11 1197:13 1198:23 1205:18 finding 1196:2,10 1196:20 1197:8 fine 1134:6 1166:8 finish 1187:8 1193:3 firewall 1129:22,23 1130:2 1138:4,13 1138:15,16,20,25 1139:3,5 1140:13 1142:11 1145:11 1146:13,25 1156:19,23 1160:10 1161:9 1163:11,13,13,15 1163:22 1168:12 1168:16 1174:25 1179:8,10 1180:3 1180:6 1182:20 1183:4,5 1188:3 1188:12 1191:5,6 1191:9,16 1198:24 1209:13 firewalled 1141:21 1142:18,21,24 1143:12 1146:6 1147:1,7,8 1157:3 1157:6 firewalls 1138:23 1141:25 1145:9 1157:8,16 1159:18 1159:23,23 1160:8 1163:3 1167:16,20 1169:9 1179:25 1189:3,4,22 1190:17 1192:9,15 1192:21 1193:22 first 1123:9 1124:3 1124:24 1134:13 1139:23,25 1140:12 1141:20 1191:2 Fisk 1119:9 1123:5 1123:8,13,16 1133:7,25 1137:5</p>	<p>1137:20 1140:23 1144:21 1151:3 1159:4 1161:19 1162:3,23 1164:11 1165:10,23 1169:24 1171:3 1172:6 1174:2 1175:20,22 1176:24 1177:2 1178:6,13 1180:8 1180:20 1181:5 1182:7,12,19 1183:17 1186:19 1187:10 1188:9,18 1190:24 1192:6,17 1193:2,6 1194:8 1194:17 1195:12 1197:4 1198:12 1199:3,4 1200:11 1201:3,12 1202:4 1203:20 1205:23 1206:3 1207:3,21 1208:13 1209:24 Fisk's 1134:21 1135:15 1136:19 1140:1 1157:14 1161:15 1166:5 1168:12 1169:7 1170:24 1171:16 1171:22 1211:14 1211:20,23 1212:5 1212:9,12,14,17 1213:4,11,15 fit 1131:13 1152:1 1213:9 five 1154:15 1181:12 fixed 1150:9 flow 1139:16 1146:18 focused 1125:7 1190:12 folder 1181:15 1203:9,10 1204:3 1204:5,6,7,11,11 1204:16,17,25,25 1205:3,5,7,7,8,14</p>
---	--	---	---	---

following 1177:4,5 1195:16,16 1215:16	1208:6 1210:25 1214:23,25	going 1123:22 1134:19,20 1136:14 1138:10 1139:18 1149:18 1168:3 1169:12,15 1172:11 1173:22 1187:13 1203:2 1207:6	happened 1157:1 happening 1208:25 happens 1144:24 1145:10 happy 1211:4 hard 1130:21 1147:15,17 hardware 1165:20 1166:23 1167:22 1167:24 1174:21 1175:1,6 1211:16 1211:21 1212:13	1162:6,12,18 1164:17,20 1166:3 1166:8,13 1168:9 1168:10,25 1169:21,22 1170:22 1171:3,9 1171:15,24 1172:5 1172:13,18,21 1173:3,10,21 1175:8,11,13,16 1176:21 1180:14 1180:19,25 1181:3 1182:16,17 1183:14,18 1186:16 1187:9 1188:23 1193:5,11 1194:1,5,13,14 1197:5,15,18,21 1198:10 1201:1 1203:18,19 1205:24,25 1207:2 1207:18 1208:7 1209:21 1210:9 1211:2,13 1212:4 1212:21 1214:10 1214:14,24 1215:13,21,25
follows 1123:10 1165:3	G	good 1123:13 1134:2 1143:20 1163:5 1165:2 1175:20 1215:19	harm 1209:3,3 haystack 1156:16 head 1130:22 1174:15 health 1177:22,25 1178:4 hear 1164:21 1172:16 heard 1157:12 1170:22 1172:1,2 1202:25 1203:7 hearing 1216:4 1217:5,9 helped 1137:17 helping 1137:13 Hey 1146:8 Hi 1175:21 Hill 1172:4 1211:19 Hill's 1212:18 history 1124:18 hold 1144:9 1187:7 1202:23 home 1144:1 Honor 1133:6,14,17 1133:18,25 1134:6 1134:8 1135:1,9 1135:10,14 1136:1 1136:4,6,19,25 1137:2 1139:21 1140:8 1144:10,12 1144:13,19 1150:22,25 1152:9 1157:12,19 1158:1 1158:4 1159:25 1160:2 1161:14,18	Honor's 1171:1 1203:21 1204:4 1206:3 1212:1 HONORABLE 1120:12 host 1151:3,5,6,13 1151:15,22,24 1181:23 1182:23 1182:25 1183:7 hour 1181:8 Human 1135:20 hundred 1129:13 1156:12 HUNTINGTON 1122:4 Hyer 1188:19 1189:9 Hyer's 1189:12,16 hypertechnical 1171:20
footnote 1189:8 1193:19 1202:6	g 1122:4 1123:1 1154:1,2	Google 1123:21		
footnotes 1189:6,6	geared 1128:7	gosh 1124:23 1127:12		
foregoing 1216:4	general 1196:14 1197:11	government 1124:9 1129:8 1215:23		
forgive 1206:4	generalize 1166:9	governmental 1129:18		
form 1158:7	generally 1147:12 1154:19 1159:10	governments 1213:21		
format 1217:23	getting 1128:18,20 1171:19	graduating 1124:21 1124:23		
former 1178:17,21 1178:24 1179:1 1215:10	give 1133:21 1137:24 1152:25 1158:13 1214:18	grants 1128:19		
forming 1159:1 1178:13,23 1193:15	given 1135:22 1136:16 1151:9 1156:17 1160:24 1164:15 1165:5,10 1166:5,21 1167:10 1168:21 1169:13 1182:22,24 1183:6 1213:13,15 1214:4	graphic 1144:24		
forwarding 1141:2	giving 1139:12 1157:21	gravamen 1212:12		
found 1129:1 1151:16 1164:4 1174:23	Gnutella 1126:15 1130:12,18,24,25 1131:21,25,25 1132:1,7 1139:13 1141:18 1204:13 1208:22 1209:14 1209:15 1213:7	great 1129:22 1147:4		
foundation 1144:14 1144:17	go 1134:11 1135:2 1152:8 1154:11 1157:13 1162:13 1162:21 1163:10 1163:24 1168:8 1171:21 1173:4 1176:22 1188:24 1194:6,12 1197:10 1199:2 1205:4	green 1146:8		
frame 1167:5		grounded 1212:15		
Friday 1215:4,7,8 1215:20 1216:2		guess 1130:15 1150:5 1152:17 1165:1 1183:25 1199:13		
friend 1201:6,16		guessing 1149:12		
front 1189:9,10		guy 1146:9 1206:14		
FTC 1139:1 1194:21,24,24,25 1195:4,21 1208:16 1208:20 1209:5		H		
FTP 1169:25 1170:5 1170:16,18,23 1171:8,12,23,23 1172:2,4,22,25 1173:1		hand 1134:25		
full 1191:2 1217:8		handed 1176:24 1190:22,23		
fully 1193:10		handle 1129:15		
function 1151:15,25 1188:12 1190:10 1196:3,11		hands 1137:13		
funded 1123:19 1124:9		happen 1144:1 1147:7 1148:15 1201:7		
funds 1194:24	goal 1129:3,5,5 1130:7,8,8			
further 1175:10	goes 1131:9 1138:20 1139:16 1205:3			

<p>hyphenation 1217:22</p> <hr/> <p style="text-align: center;">I</p> <hr/> <p>ID 1119:12 idea 1209:1 identification 1134:20,21,24 identified 1153:22 identify 1123:14 1192:14 1193:8 Identity 1121:8 II 1121:15 immediately 1124:22 1204:17 impact 1210:13 implement 1137:13 1191:4 implementation 1131:6 implemented 1156:8 important 1146:25 1148:2 1156:20 impression 1168:18 inadequacy 1210:15 inadvertent 1194:21 1195:4,20 1208:15 1209:1 incarnation 1126:15 include 1182:3 1184:1 1197:12 included 1133:9,24 1137:25 1145:2 1169:10 1201:9 including 1165:15 1166:22,22 1198:24 incoming 1138:17 1141:22 1142:15 1160:11 1161:21 1189:5 1190:18 1192:10,16,22 incorporates 1130:22 incorrect 1155:2 1182:5</p>	<p>incredible 1129:24 indicate 1166:2 1172:15 1202:6 indicated 1165:23 individual 1155:20 individuals 1213:23 indulgence 1175:14 1183:13 1186:15 1193:25 1194:14 1205:25 1207:17 Industry 1199:20 inefficient 1194:24 1209:17 infinite 1129:9 information 1130:9 1160:22 1161:11 1161:17 1162:4 1164:15 1165:6,14 1166:21 1168:12 1168:21,23 1169:13 1172:12 1177:9,22,25 1178:4 1183:22,24 1184:3,9,14,17,20 1185:1,4,10 1186:20,25 1187:20 1213:22 1213:24 informed 1215:1 ing 1154:2 inherent 1163:8 initial 1204:5 initially 1128:19 1151:25 Initiative 1135:20 inside 1139:3 insofar 1211:19 install 1184:17 1185:3,7 1187:3 1187:17 1191:6 installed 1163:17 1179:19 1193:22 instructed 1145:1 1197:17 insurance 1153:15 1153:17,18 1155:21 1156:15</p>	<p>insuranceag 1154:2 insuranceagi 1154:1 insuranceagin 1153:25 insuranceaging 1153:19,22,24 insuranceaging.pdf 1152:16 insuranceaging_6... 1153:4 1154:23 integrate 1130:17 integrated 1131:20 1131:24 1163:25 integrates 1126:25 1130:19,24 integrating 1133:4 intelligent 1153:16 intend 1206:5 intends 1136:17 intention 1141:10 intentionally 1141:7 interesting 1203:19 1206:23 interface 1125:9 1135:20 1150:4 1208:24 internally 1184:13 Internet 1124:10,14 1128:21 1130:6 1132:23 1135:18 1157:4,5 1160:15 1161:2,6,8 1162:9 1168:11 1187:13 1213:24,25 1214:3 interoperates 1130:23 interpretation 1197:20,23 interrupt 1133:7 interrupting 1207:3 intruder 1167:18 intruders 1167:18 inverse 1155:16 involved 1132:19 involvement 1199:9 1200:5 IP 1128:4 1132:3</p>	<p>IPSec 1193:22 Iran 1124:13 1129:8 1213:21 issue 1168:10 1171:1 1172:6 1187:24 1194:22 1195:5,19,20,21 1195:22 1208:15 1208:16,17,19 1209:4 1210:4,8 1210:12 issues 1209:11 1213:8 iterated 1126:17</p> <hr/> <p style="text-align: center;">J</p> <hr/> <p>January 1174:17 job 1124:24 jobs 1184:9 1185:1 1186:25 1187:21 Jon 1189:13 Josett 1120:19 1217:16 Judge 1120:13 1123:3 1124:5 1130:11,14,25 1131:10,13,20 1132:8,17 1133:11 1134:2,9 1135:2,7 1135:11 1136:5,13 1136:20 1137:1 1139:18,23 1140:2 1140:7,11 1150:23 1152:3,4,7 1157:13,23 1158:2 1160:1 1161:24 1162:15,21 1164:18 1166:11 1168:2,7 1169:12 1171:6,13,19 1172:1,9,14,19 1173:4,18,22 1175:9,12 1176:22 1180:15,21 1181:1 1182:2,13 1187:7 1188:24 1193:3,7 1194:2,6,9</p>	<p>1197:24 1200:7,18 1202:23 1203:2,15 1204:15,21 1205:1 1205:10,19 1206:12 1207:6,16 1208:8 1210:10 1211:1,6 1212:20 1214:11,15 1215:6 1215:11,19,22 1216:1 July 1174:18 1180:10 June 1125:3 1217:13 JX 1119:19</p> <hr/> <p style="text-align: center;">K</p> <hr/> <p>keep 1148:20 1149:3 KENT 1122:4 kent.huntington... 1122:10 key 1187:1 1205:16 keyword 1153:19,21 1153:23,25 1154:11 1155:15 1155:18 1156:7 keywords 1152:24 1153:9,10,12 1154:3,4,21 kind 1126:21 1129:15 know 1125:15 1126:21 1127:6 1128:25 1129:13 1129:24 1130:1 1132:11,13 1138:24 1141:5 1142:3,6,7,8 1143:9 1146:9 1147:4,19 1149:11 1149:16 1150:10 1152:5 1153:16 1154:11,19 1156:11,14,16 1157:7 1160:17 1161:4 1163:2,6</p>
---	---	---	--	---

<p>1163:17 1167:15 1167:16,23 1170:11 1173:20 1175:1 1177:25 1185:21 1199:13 1199:16 1200:1,9 1202:4 1208:19 1209:10,18 1215:20 knowing 1206:17 knowledge 1157:20 1165:16 1179:12 1208:22 1217:10 known 1211:24 knows 1142:7 1183:11</p> <hr/> <p style="text-align: center;">L</p> <hr/> <p>labeled 1140:21 LabMD 1119:3 1120:4 1156:25 1159:17 1160:8 1163:11 1164:4 1165:11,17 1170:7 1178:14,17,21,24 1179:1 1181:20 1182:3,21 1183:12 1183:22 1184:2,7 1184:22,24 1185:8 1185:13,18 1186:4 1186:8,23 1187:19 1189:25 1190:3,17 1191:4,7,9,12,15 1191:17,20 1192:9 1198:13,17 1210:23 1213:10 1217:4 LabMD's 1156:17 1158:6,7,18 1159:5 1160:14,18 1160:22 1163:1 1164:12,14 1165:4 1167:3,25 1169:24 1174:5 1179:10 1180:9 1186:19,21 1187:16 1188:12 1189:2,4 1210:8</p>	<p>1210:15,19 1211:16 1212:17 lacking 1212:11 Lantern 1124:11 1127:15,17 1128:18 1129:1,4 1129:14 1132:19 1177:17,19 1213:18 large 1141:17 larger 1155:5 1214:2 LAURA 1121:4 Law 1120:13 lay 1144:14 layer 1167:17,20 1174:25 lead 1125:6,21 1213:6 leading 1150:22 1152:3,5 1159:25 1164:17 1210:9 leaf 1141:9 1142:17 1142:17 leap 1198:2 learn 1151:18 learning 1127:2 leaves 1150:11 led 1159:10 left 1205:14 1210:21 1210:21 length 1134:1 let's 1131:18 1134:11 1143:21 1180:24 1193:17 1209:14 level 1130:2 library 1206:21,25 light 1203:20 lightweight 1148:3 likelihood 1196:2,10 1196:19 1197:7 LimeWire 1124:22 1124:25 1125:5,8 1125:16 1126:2,3 1126:16,22 1127:8 1127:21 1128:6</p>	<p>1130:17,18,20,24 1131:1,4,21,24,25 1132:9,14 1134:11 1137:16 1141:18 1143:6,20 1144:2 1150:2 1151:23 1152:12,17,23 1153:6,6,11 1179:19 1181:11 1181:13,15,17 1195:18 1196:4,6 1196:12,13,17,20 1196:25 1197:8,13 1198:1,4,7,16,18 1198:18,21 1199:24 1201:19 1201:24 1202:8,11 1202:14,19 1203:3 1203:8,11,23 1204:14 1205:2,11 1205:12,13 1206:8 1206:14 1207:12 1208:22 1209:6,14 1209:16 1211:24 1213:7,12 LimeWire's 1196:3 1196:11 limit 1150:4 1175:3 1185:3 1211:22 1213:21 limitations 1161:11 limited 1136:2 1147:12 1150:2,6 1166:7 1180:14 limiting 1157:9 1173:5 line 1136:24 1146:9 1162:12 1177:4 1192:5 1195:14,15 1208:14 lines 1206:13 list 1135:17 listed 1136:3,19 1140:14 1166:19 1166:25 little 1123:22 1124:4 1128:4 1130:21</p>	<p>1131:3,23 1141:5 1146:8 1148:25 1149:15 1153:20 1155:1 1212:8 LittleShoot 1126:25 1127:17,20 1130:15,16,17,19 1130:21 1131:11 1131:12,13 1132:1 LittleShot 1130:15 1131:11 lives 1132:11 LLC 1126:24 LLP 1121:17 located 1182:20 1198:19 locates 1181:21 logic 1200:19,25 logical 1157:20 long 1127:10 1149:15 1183:10 longer 1179:12,21 1179:21,22 1208:21 look 1143:7 1152:24 1170:18 1180:17 1214:5 looked 1144:3 1155:1 1159:14 1206:21 looking 1138:19 1140:7,23 1148:21 1150:18 1163:18 1207:7 lot 1125:9,11 1126:14,18 1127:5 1127:15 1129:9,17 1129:20 1130:1 1132:1 1142:1,7,8 1167:21 1209:24 lots 1178:1 lucky 1183:10 lvandruff@ftc.gov 1121:12</p> <hr/> <p style="text-align: center;">M</p> <hr/> <p>M 1217:25</p>	<p>machine 1143:11,13 maintained 1184:3 1186:9 major 1209:3 making 1127:7 1135:7 1163:5 1169:20 1192:1,3 1200:25 1204:17 malicious 1160:12 managed 1190:1,6,8 manager's 1179:18 1181:22,24 1182:21 1183:1,8 1198:15,17 manner 1125:20 1199:5,7,8 manuals 1179:5,7 1180:6 map 1137:17 mark 1134:19,20,22 marked 1134:23 1140:15 1190:23 1190:24 1193:20 1202:3 match 1155:17 matching 1153:21 materials 1158:20 1158:25 1160:7 1167:1 matter 1120:3 1149:15 1169:8 1176:12,15 1181:6 1207:5 maximum 1150:14 1150:14,19,19 mean 1125:14,15 1126:8 1127:12 1128:1 1129:20 1131:3,15 1149:14 1149:23 1167:6 1172:23 1184:11 1185:20 1196:13 1196:15 1198:2 1208:18 means 1182:5 1197:14 1199:17 1209:13,15</p>
--	---	---	--	---

<p>measures 1176:7 1177:8 1184:8,25 1185:2,14,19 1186:4,19,24 1187:19 1213:20 1214:6,8 media 1128:8 meet 1212:10 mention 1172:22,25 1184:5,11,12 1186:5 1210:3,17 mentioned 1130:12 1158:6 1165:24 1186:7 1193:18 1209:6,11 message 1141:12 1146:8 1151:6,7 method 1143:8 1209:7 MICHAEL 1120:12 million 1129:13 1181:12 millions 1125:17,18 1127:7 1157:2 mind 1159:16 minute 1148:19,20 1149:4,17 misappropriation 1209:5 misremembered 1155:12 missing 1203:7 misspoke 1141:5 mistaken 1173:6 mistakenly 1209:2 modify 1195:18 moment 1175:8 1194:4,10 1209:21 moments 1197:25 money 1129:17 months 1126:10 morning 1123:13 1175:22 1176:5 1183:19 1215:5,8 motion 1169:20 1199:21 1211:3 move 1134:7 1135:4</p>	<p>1173:16 1180:24 1182:15 1197:15 1204:16,24 moved 1188:8 moves 1212:16 moving 1135:6 mumble 1197:3</p> <hr/> <p style="text-align: center;">N</p> <hr/> <p>n 1119:2 1123:1 1154:1 1217:1,19 N.W 1120:15 1121:9 1121:18 1122:6 name 1123:16 1152:24 1153:3 1154:21 1155:5 named 1152:16 national 1130:5 nations 1214:6 nature 1167:10 necessarily 1128:9 necessary 1147:19 1162:13 1184:4 1213:2 need 1131:7 1134:2 1139:18 1142:23 1144:9 1166:11 1185:22 1194:4,9 needed 1184:9,19 1185:1 1186:25 1187:20 needle 1156:16 needs 1140:4 neither 1138:3 1147:9 1168:19 network 1125:16,18 1126:16 1129:19 1130:10 1138:4,6 1138:7,17 1139:1 1139:2,13 1141:16 1141:17,19 1142:1 1142:9,15,19,23 1143:24 1145:10 1147:24 1148:2,6 1149:6,12 1150:9 1150:13,15,19 1151:7,19 1154:12</p>	<p>1156:18 1157:10 1158:18 1159:9,13 1159:15 1160:10 1160:11,14,18,23 1161:4,12,17 1162:5,8 1163:1,7 1163:9 1164:5 1167:9,12,19,25 1169:24 1170:13 1170:18,20 1174:21 1175:1 1176:8 1177:8 1181:13,17 1184:3 1185:21 1186:10 1186:12 1187:24 1188:12 1190:18 1192:11,16,22 1198:18,21 1199:25 1200:22 1204:13 1208:3 1209:2,12,14,15 1211:16,20 1212:11,12,17,19 1213:7 1214:1 networking 1127:25 networks 1175:6 1194:18,21 1195:4 1211:25 never 1148:15,17 1163:17 1177:10 1178:6,7,10 new 1123:17,18 1131:18 1132:2 1133:4 1135:20 1136:12 1137:8 1176:2 1177:16 1200:20 NGO 1128:23 NGOs 1123:21 1128:19 node 1141:9 nodes 1142:17,17 nonfirewalled 1147:3 nongovernmental 1128:24 nonprofit 1128:25</p>	<p>nonresponsive 1197:16 noon 1168:4 noted 1193:18 notes 1217:8 notice 1138:19 number 1134:23 1135:12 1140:3,10 1148:7,23 1150:3 1150:6,8,15 1154:9,14,18 1183:17 1193:13 1217:3 Number533 1119:17 numbers 1154:4,8 1177:20 1178:4</p> <hr/> <p style="text-align: center;">O</p> <hr/> <p>O 1123:1 1217:1,1,1 1217:19,19,19,19 object 1135:6 objection 1133:6 1134:9 1135:10,15 1136:4,14,18,21 1136:22,23 1144:16 1150:22 1157:25 1159:25 1161:14 1162:7,16 1164:17 1168:10 1169:11 1172:16 1180:11 1181:25 1182:4 1198:9 1200:6 1206:6 1210:9 1214:11,13 objects 1211:14 observer 1170:18,20 obviously 1205:15 occupation 1123:15 1128:16 offer 1135:7 1182:10 offered 1166:7 1211:15 1214:19 Officer 1194:2 Oh 1125:2 1126:8 1187:11</p>	<p>Okay 1123:24 1124:1,4 1126:2 1132:17 1134:12 1135:7 1138:2 1140:6,11 1144:5 1145:4,22 1146:4 1147:4 1153:2 1162:15 1166:18 1173:17 1176:1,14 1176:17 1187:4 1188:18 1189:8 1190:16,21 1195:3 1195:7 1202:6,10 1204:4 1205:21 1214:11 once 1146:16,17 1147:3 1151:16,21 1153:22 1181:20 one-of-a-kind 1149:21 1150:1,18 1150:21 open 1130:18 1132:12 1135:18 1166:5 1197:23 open-source 1132:15 opened 1197:20 operating 1143:12 1163:1 1186:9 1189:24 1190:5,8 operation 1165:18 1211:24 operations 1163:21 opine 1158:15,17 opinion 1158:7,13 1159:1,4,6 1170:24 1171:22 1174:5,8,19,20 1175:5 1180:8,16 1184:1,5 1188:16 1193:15 1194:20 1196:1 1197:25 1198:2,5,5 1199:4 1199:11,14 1200:3 1200:11,16,21,23 1201:3,7,8,13 1207:9 1209:25</p>
---	---	---	--	---

<p>1211:20 opinions 1166:7 1168:20 1169:5,8 1171:4 1173:5 1178:13,20,23 1180:13 1182:10 1196:10 1200:20 1211:23 1212:9,12 1212:14,17,18,19 1213:11 1214:17 1214:19,21 opportunity 1132:22 1193:10 opposing 1134:4 optimization 1141:15 order 1142:22 1145:8 1160:23 1173:8 1205:16 1209:13 orders 1212:22 organization 1128:24 original 1126:15 1202:20 1206:8 1207:23,25 1208:2 outgoing 1138:14,24 1145:9,13 1146:10 1146:14,23,24 1147:2 1161:22 outside 1139:3 1181:21,22 1182:19,22,25 outsider 1181:21 overall 1157:10 1167:6 1187:24 overblowing 1209:4 overload 1148:3 overloading 1148:6 overrule 1198:9 overruled 1150:24 1160:1 1164:19 1180:16 1200:7 1214:13 ownership 1213:16</p> <hr/> <p style="text-align: center;">P</p>	<p>P 1123:1 1217:1,19 p.m 1216:5 P2P 1181:17 1194:18,21 1195:4 1208:3 page 1135:16 1137:23 1139:9 1140:1,3,9,12,14 1140:18,21,24 1158:10,11,23,24 1161:19 1162:23 1174:16 1177:1 1188:10,11,11 1189:12,16 1190:14,16 1191:1 1191:3 1192:5,18 1193:19 1195:10 1195:15 1202:3 1208:13 paid 1181:6,8 paragraph 1161:19 part 1132:15 1158:2 1164:4 1168:24 1184:5 1205:19,21 participate 1127:10 1142:22 participated 1137:10 participation 1136:11 particular 1152:23 1153:7 1189:20 particularly 1126:18 1162:10 1167:15 1213:5 parts 1125:10 passing 1165:24 path 1126:22 patient 1160:22,24 Pause 1162:20 1173:13 1175:15 1183:15 1186:17 1188:25 1194:3,11 1194:15 1195:11 1206:1 1207:19 1209:22 1211:12 PDF 1156:2,6,9,15</p>	<p>1156:24 peer 1141:13,15 1142:11 1143:2,4 1143:8,9,15,17,21 1149:5 1150:10 peer-to-peer 1124:12,24 1125:16 1126:25 1127:16,25 1128:5 1128:11,20 1132:2 1133:5 1147:11,24 1211:25 peers 1139:15 1141:1,6,20,21 1142:7,25 1148:14 1148:23 1149:13 1150:12,15 pending 1193:7 Pennsylvania 1120:15 1121:9,18 1122:6 people 1125:24 1129:21 1132:11 1132:13,15 1142:7 1142:8 1173:18 1197:11 1209:1 percent 1157:8,10 1157:15 1168:17 1183:5 percentage 1168:16 1169:8 perfect 1150:15 1167:7 perfectly 1175:1 perform 1184:9 1185:1 1186:25 1187:20 period 1155:13 1159:7 1174:7,12 1175:6 periods 1155:3 permanently 1208:3 Permission 1176:20 1188:22 permitting 1213:1 person 1183:11 1203:11 1204:6,9</p>	<p>personal 1177:9 1184:3,9 1185:1,9 1186:20,24 1187:20 personally 1163:17 pertained 1158:19 phrase 1182:3 1195:6 1201:9 physically 1179:17 Picture 1199:21 piece 1124:12 1126:24 1147:21 1165:17,19 pieces 1167:22 pitch 1124:6 place 1138:16 1159:11,13,18 1162:13 1163:4,11 1166:23 1167:16 1176:17 1205:17 1214:6 plan 1135:4 platform 1128:11 1132:2 please 1133:1 1137:9 1172:12 1175:14 1177:1 1188:7 1189:14 1195:14 1202:2 1209:21 plug-in 1128:12 point 1134:2 1145:11,12 1149:9 1149:19 1157:4 1163:5 1200:24 1203:19 points 1154:23 policies 1164:12,14 1165:5 1175:3 1186:21 1187:17 1211:17,21 popular 1147:21 1148:16 1156:10 population 1214:3 port 1172:4 portable 1200:13 portion 1160:14</p>	<p>1189:12 1191:1 posed 1197:19 position 1213:18 possible 1142:10 1148:5,6 1149:24 1156:14 1179:13 1179:17 1201:17 1203:5 postgraduate 1124:19 potential 1157:9 potentially 1154:20 powerful 1148:2 practice 1149:14,18 1150:5,13 practices 1159:13 1167:3,7 1174:6 1174:22 1175:6 1186:12 1211:17 1211:21 precedent 1169:14 precisely 1187:6 prefix 1153:20 premise 1182:5 preparing 1178:19 1178:20 present 1215:3,16 presented 1191:24 presenting 1215:4 president 1123:17 press 1127:5 presumably 1185:4 pretty 1125:19 1127:23 1187:11 prevent 1177:8 1184:8,25 1186:20 1186:24 1187:19 1207:23 previous 1136:13,20 1200:19 previously 1202:25 1214:16 primarily 1123:19 1124:9 primary 1151:18 1167:19 prior 1145:12,24</p>
---	--	--	---	--

<p>1146:14 1171:1 1192:23 1211:4 Privacy 1121:8 probably 1126:10 1127:12 1154:15 1199:1 problem 1144:18 1145:9 procedures 1211:17 1211:21 proceeded 1195:9 proceedings 1162:20 1173:13 1175:15 1183:15 1186:17 1188:25 1194:3,11,15 1195:11 1206:1 1207:19 1209:22 1211:12 process 1127:2 1149:10 Proctor 1194:2 produced 1207:4 product 1131:21 professional 1135:16 1136:3,7 Professor 1172:4 program 1124:25 1126:2 1143:18 1153:6 1183:23,25 1211:24 1213:7,19 programs 1214:5 project 1123:17,18 1128:16 1135:18 1177:17 proofread 1217:21 proposals 1191:24 proposition 1189:2 1190:17,21 1192:9 1193:21 protect 1159:8,8 1160:10 1167:25 1175:7 protected 1167:11 1189:3,4 1190:17 1192:10,15,21 protection 1121:7,8</p>	<p>1167:17,22 1174:25 protocol 1126:16 1130:19 1131:5,5 1147:18 1170:5,6 1170:8,10,11,15 1172:5 protocols 1132:3 provided 1134:4 1135:24 1162:8 1165:21 1166:25 1167:17,21 provides 1169:3 ProviDyn 1159:14 1165:24 1166:4,15 1166:22 provisions 1173:8 PUBLIC 1119:5 1120:10 punctuation 1217:22 purpose 1129:3 1147:22 1160:9,18 1160:20,21 purposes 1134:20 1134:21 1142:14 1158:3 pursues 1208:21 pursuing 1208:20 push 1146:8 put 1134:13 1138:9 1139:24 1147:15 1147:16 1151:24 1204:6 1214:6 puts 1203:5</p> <hr/> <p style="text-align: center;">Q</p> <hr/> <p>qualification 1211:14 qualifications 1214:18 question 1130:11 1137:1 1148:18 1153:5 1157:22 1160:5 1164:24 1165:4 1166:5 1168:15 1171:11</p>	<p>1177:4 1180:22 1181:1 1182:2,5 1182:15 1184:21 1187:6 1189:17,19 1189:24 1190:3,5 1190:8 1191:2,2,8 1191:12,15,21 1192:1 1193:7 1194:8 1195:16,18 1196:7 1197:4,5 1197:19,19,21 1199:3,13 1201:11 1203:21 1204:4 1206:4 1207:11 1210:19,23 questioning 1135:23 1136:9 1162:12 questions 1168:22 1175:10 1176:11 1190:13 1203:2 1209:24 1210:25 quickly 1127:23 1147:21 1156:10 quirky 1154:5 quite 1133:3 1164:21 quote 1179:5</p> <hr/> <p style="text-align: center;">R</p> <hr/> <p>R 1123:1 1217:1,1,1 1217:1,19,19,19 1217:19 railroad 1130:25 1131:1,19 1132:6 raised 1203:19 randomly 1157:1,11 rare 1148:10,13,22 1149:21 1157:5,5 1183:4 rarest 1149:23 reach 1148:5 1150:7 1150:16 reaching 1149:13 1186:12 1210:17 read 1164:24 1165:1 1165:3 1177:13 1189:15 1190:13</p>	<p>1192:6,20 1195:23 real 1125:18 realize 1141:5 really 1125:7,10 1126:17 1128:10 1129:5 1131:22 1132:3,16 1138:23 1141:15,16,17 1143:1 1147:24 1148:2,10,10,12 1148:13 1150:14 1152:19 1156:20 1157:9 1162:13 1167:8,15,17,18 1167:21 1170:12 1170:16 1174:23 1183:25 1185:11 1199:16 1205:16 1209:18 reason 1168:18 reasonable 1164:15 1165:5 1167:3 1174:6 1175:2,2 1176:7 1177:7 1180:9 reasons 1169:6,7 1214:15,20 rebuttal 1211:18 1212:18 recall 1191:21,23,25 1192:1,3 1202:20 1206:9 recalling 1207:21 receive 1151:10 received 1124:17 1172:8 receiving 1141:11 recess 1168:5,6 1216:3 recognize 1147:1 recollection 1158:14 1162:3 recommendations 1191:4,8,13,15,18 1192:2,3 reconvene 1168:3 1216:2</p>	<p>record 1119:5 1120:10 1123:3,14 1128:23 1139:19 1140:5 1144:13 1157:17 1162:17 1165:3 1168:7 1171:13,15,18 1174:13 1180:1,4 1182:8 1188:1,4 1189:15 1192:14 1193:9 1203:13 1206:6,14 1212:15 1214:12,16 Recording 1199:20 recross 1119:8 1211:1,2 red-lining 1169:15 redirect 1119:8 1208:7,8,11 redundant 1174:25 REED 1121:16 refer 1139:18 1140:3,9 1188:7 reference 1144:10 referenced 1139:8 1188:2 referred 1140:5 referring 1198:7 refers 1189:8 refining 1126:18 regard 1135:14,15 1136:10 1137:6,25 1159:5 1162:4 1198:4 1212:23 1213:11 regarding 1180:2 1188:2 1191:9,16 1196:1,10 regardless 1187:5 1187:12 relate 1183:20 1198:25 1211:23 1212:13,19 related 1169:8 1186:21 1187:17 1197:21 1211:20 1213:12</p>
--	---	---	---	--

<p>relates 1136:18 1137:18 1184:17 release 1126:10,12 released 1126:9 relevant 1167:4 1174:7,12 1175:5 1186:14 1199:2 1210:18,22 relied 1167:2 1188:4 relief 1212:7 rely 1214:21 relying 1180:1,4,4,5 remember 1147:16 1174:14 1175:24 1176:2,10 1191:11 1191:19,20 1197:3 remind 1172:11 1173:24 remove 1208:3 renew 1162:6 repeat 1153:5 1185:16 1191:14 1196:7 repeated 1173:7 rephrase 1152:6 1166:11 replicated 1132:12 report 1133:9,13 1134:4,15,22 1135:3 1137:21,23 1138:1 1139:9 1140:1,2,10,20,24 1144:10,15 1151:4 1152:11 1154:25 1155:2 1157:16,19 1158:10,24 1159:14 1161:15 1161:19,25 1162:4 1162:24 1163:10 1164:2 1166:5,7 1168:13 1169:4,10 1169:13 1170:25 1171:16,25 1172:7 1172:12,15,22,25 1173:25 1174:4,16 1178:19 1179:4,15 1179:23 1180:12</p>	<p>1180:14 1181:2,5 1183:17,19,21 1184:2,7,12,22,24 1185:8,13,18 1186:2,3,8,13,23 1187:18,23 1188:5 1188:7 1192:9 1193:1,19 1196:1 1196:9,19 1197:7 1197:22 1201:18 1202:1 1210:14,18 1212:2,5 Reported 1120:19 reporter 1120:19 1123:25 reports 1165:24 1166:2,4,15,19,22 1212:24 repository 1132:12 represent 1140:25 representation 1139:13 represented 1169:1 1215:15 request 1146:1,3,8 requested 1161:21 requests 1161:22 requires 1183:10 reshared 1204:12 1204:14 resharing 1207:24 resilient 1128:2 resistant 1129:7,12 resources 1129:9,9 1129:24 1209:5 respect 1157:14 1169:1 1170:23 1179:24 1191:5 1211:18 1212:9 respondent 1120:5 1121:14 1122:3 1182:10 response 1136:13 1158:2 1162:16 1172:19 1182:6,7 1212:20 1214:12 responsibilities</p>	<p>1125:4 responsible 1190:11 rest 1215:20 restrict 1134:3 restricted 1196:3,5 1196:12 result 1146:3,4 1151:10 1156:25 resulted 1146:3 results 1148:11,12 1149:19 1156:11 1166:3 1198:23 resume 1215:4 retrieve 1171:5 return 1188:1 Returning 1186:19 review 1160:7,14,25 1164:11 1165:10 1166:15,25 1174:3 1182:8 reviewed 1158:21 1158:25 1164:11 1165:24 1166:10 1166:18,22 reviewing 1165:15 Rick 1215:10 right 1126:1 1136:5 1137:1 1143:20 1145:3,5 1149:7 1164:1 1174:15 1175:9 1194:9 1195:5 1204:23,23 1207:16 1215:19 1215:22 1216:1 rigid 1171:20 RIPOSO 1121:4 risk 1194:20 1195:3 RMR 1217:16 Robert 1188:19 1215:9 robust 1127:24 1128:1 robustly 1132:4 Rohrs 1126:4 room 1169:19 1173:19 route 1141:21</p>	<p>router 1163:25 1179:14 routers 1163:3 RUBINSTEIN 1121:16 rudimentary 1126:17 rule 1124:2 1168:19 1169:3,18,19 1173:6 ruling 1171:1 1200:19 rulings 1212:1,22 running 1144:2 1198:18 1203:23 runs 1125:16 1130:18 1131:1,25 RX 1119:16 1134:22 1134:23 1135:11 1135:12 1140:15 1140:18,21 1188:9 1193:20 1202:3 RXD 1139:22 1144:11</p> <hr/> <p style="text-align: center;">S</p> <hr/> <p>S 1123:1 safeguard 1185:9 sailed 1152:7 saved 1203:23 1204:1,10 saw 1142:20 1156:21 saying 1131:17 1143:20 says 1146:8 1147:4 1169:18 1170:12 1198:6,7 scalable 1129:13 scale 1130:6 1214:2 scenario 1138:5,14 1147:9 1183:3,4,6 1183:11 scenarios 1185:21 scheduled 1215:6 scheduling 1173:8 school 1124:24</p>	<p>science 1124:18 screen 1134:14 1137:22 1139:8 1144:21 1206:24 seamless 1127:1 search 1125:7,13,17 1126:18 1139:16 1141:19 1146:1,2 1146:3 1147:18,19 1147:20,22 1148:4 1148:8,12,13,17 1148:23 1149:4,6 1149:8,19,20,24 1149:24 1150:1,17 1151:10,20,20,24 1152:11,12,15 1153:6 1154:6,8 1154:10 1155:10 1155:10,11,13,15 1155:17,24 1156:2 1156:5,8,9,13,15 1156:19 1196:3,11 1198:23 1199:25 1209:7,12 searched 1153:3,9 1154:9 1155:20 searcher 1156:22,24 1157:3,6 1209:7 searchers 1157:9 searches 1147:11,12 1148:16 1152:18 searching 1128:7 1145:17,20 1148:9 1148:20 1149:16 1149:21 1151:25 1152:20 1154:7 1156:11,24 1173:19 second 1140:17 1187:7 1202:23 secure 1137:18 1167:9 1170:6,8 1171:23 1172:4 securing 1129:19 1214:2 security 1129:19 1132:23,23</p>
---	--	---	--	---

1135:19 1136:8,10 1137:7 1158:6,8 1158:19 1159:5,7 1165:22 1167:3 1174:6,22 1175:23 1176:7 1177:8,19 1178:3 1180:9 1183:23,24 1185:14,19,21 1187:25 1210:8,15 1210:19,24 1211:16,20 1212:11,13,18,19 1213:13,17,20 1214:1,6,8 see 1128:5 1130:2 1149:19 1151:8,11 1151:13 1153:18 1154:10 1173:14 1198:8 1200:22 1206:21,22 1207:12,13 1210:4 1210:7,12 seek 1211:22 1213:24 seeking 1212:7 seen 1200:23 1213:9 segregate 1152:17 select 1181:15 send 1146:7 1151:7 1160:21 1161:7 sense 1127:4,4 1130:9 1131:4,4 1139:20 1141:12 1154:6 1155:19 1156:20,21 1161:4 1161:6 1170:17 1184:18 1185:6,20 sent 1146:1 1149:6,8 sentence 1192:14,20 1192:23 separate 1153:16 1154:3,3,21 separation 1142:4 sequence 1205:16 series 1143:6 1183:10	served 1178:6,7,10 server 1173:1 servers 1189:3,4,19 1189:21,25 1190:9 1190:12,18 1192:10,15,21 serves 1135:19 1136:7 Services 1163:25 serving 1160:9 set 1213:20 setting 1187:16 settings 1212:13 SFTP 1170:1,6,16 1170:19,23 1172:2 share 1153:11 1156:10 1208:23 shareable 1204:22 shared 1153:10 1155:15,18 1156:7 1181:22,24 1183:1 1183:8 1199:12,16 1199:18 1200:9,16 1201:19,24 1202:7 1202:11,15 1203:4 1203:6 1204:7,11 1204:11,16,25 1205:3,5,7,7,8,9 1205:13,14 1206:21 1208:4 shares 1152:22 sharing 1151:9,11 1151:14 1152:20 1152:22 1181:16 1194:17,21 1195:4 1203:9 1204:1,3,5 1208:15,25 1209:1 1209:2 shed 1203:20 Sheer 1121:5 1176:11 Sherman 1121:15 1123:5,12 1124:15 1132:18 1133:15 1133:18,21 1134:6 1134:10,19,25 1135:4,9,14	1136:6,15 1137:3 1137:4 1139:21,25 1140:6,8,12,22 1144:14,18,20 1151:2 1152:4,9 1152:10 1157:18 1158:5 1160:3 1161:18 1162:1,2 1162:7,11,22 1164:23 1165:9 1166:8,14 1168:9 1169:1,21,23 1171:3 1172:11,13 1172:18,24 1173:2 1173:10,15,21 1174:1 1175:8,10 1175:22 1179:25 1180:11 1181:25 1188:8 1197:18 1200:6 1208:9,12 1209:21,23 1210:11,25 1211:9 1211:11 1212:21 1214:24 1215:8,13 1215:21 Sherman's 1136:16 1136:24 ship 1152:7 shoddy 1132:6 Shohl 1121:17 short 1168:3 shot 1206:24 show 1149:16 showed 1149:15 1206:25 showing 1138:2,4,12 1138:13 1139:15 1144:7 1145:21 side 1131:23 1152:20,21,22 1154:6,7 1173:19 sides 1152:19 1153:9 signed 1169:4 significant 1170:17 similar 1129:19 1214:1	similarities 1129:20 1130:1 Similarly 1201:3 simply 1127:23,23 1138:2,4,12 1139:15 1141:2,10 1141:11 1161:20 1163:16,16 sir 1136:15 1162:1 1174:19 1208:9 1211:6 sister 1144:24 sit 1137:12 1176:14 sits 1135:17 sitting 1138:25 1143:19 1145:11 six 1142:4 1154:15 size 1167:25 skill 1165:16 slash 1154:17 slide 1139:24,25 slightly 1155:2,12 slow 1124:4 slowly 1123:23 small 1123:19 1126:23 1128:18 1130:3 1167:19 1168:15 1198:20 1214:8,9 Social 1177:19 1178:3 societal 1209:3 software 1123:17,18 1124:12 1125:6,12 1126:24 1127:13 1133:5 1143:22 1165:11,20 1166:23 1174:20 1175:7 1177:16 1184:17,19 1185:3 1185:5,7 1186:22 1187:18 1196:14 1196:18 1211:17 1211:21 1212:14 1213:19 sophisticated 1129:22 1196:17	1196:23,24 1198:3 1198:6,8 1199:1 1199:25 sophisticated-type 1198:1 sophistication 1199:24 sorry 1126:8 1127:17,17,22 1130:16 1133:7 1139:22 1140:15 1154:19 1164:21 1185:16 1191:14 1191:16 1196:7 1201:21 sort 1126:15,17 1127:1 1128:18 1129:8,22 1131:7 1131:15,20 1132:4 1132:5 1137:16 1142:4 1150:14 1154:5 1155:16 1157:11 1163:8 1167:10 1175:2 1183:10 1186:6 source 1130:18 1132:12 1202:20 1206:8 1208:2 Spanish 1135:21 speak 1123:22 1172:23 1179:1 speaking 1147:11 specific 1152:14 1153:1 1155:11 1161:1,3 1191:19 specifically 1168:13 1180:17 1184:13 1186:13 1187:22 1192:4 1193:14 1195:9 1197:22 1201:25 1210:3,20 1211:15 1213:17 1213:20 specify 1181:2 speed 1143:11 spelling 1217:22 spilled 1192:5
--	--	---	--	---

<p>spinner 1149:16 spiral 1169:17 staff 1191:19 stance 1212:25 stand 1170:3 standards 1212:10 stands 1170:5,6 start 1134:15 1143:5 1169:15 start-up 1127:6 1133:4 started 1124:22 1125:3 1126:3,6 1126:23 1128:17 1128:18 state 1123:20 1201:25 stated 1129:3 1158:13 1214:16 statement 1157:20 1169:5 states 1120:1 1136:7 1161:20 1201:18 1201:21 1214:9 statistics 1206:20 status 1132:8 steps 1183:10 1198:22 stick 1169:19 1172:12 stop 1147:20 1152:25 stopping 1147:22 storage 1200:13 straight 1145:25 stretch 1167:8 stricken 1157:17 1171:17 STRICKEN/REJ... 1119:12 strike 1124:3 1133:10 1182:23 1184:23 1187:24 1197:15 strip 1153:23 strongly 1215:13 stuff 1127:5</p>	<p>stumble 1157:11 stupid 1197:1 subject 1170:25 1208:7 subjects 1162:10 1183:18,19 submitted 1212:24 subset 1198:20 successful 1127:4 suggests 1164:18 Suite 1121:19 1122:7 summer 1125:2 support 1180:2 1189:2 1190:16 1192:8,14 1193:9 supposed 1141:9 1159:23 sure 1143:13 1164:18 1166:6 1171:6 1174:12 1199:7 1202:24 surprised 1167:11 1168:20 sustained 1134:9 1136:21 1157:25 1162:16 1166:12 1172:17 1210:10 switches 1163:3,6 sworn 1123:10 system 1143:12,25 1174:24 systems 1185:24 1186:9 1189:24 1190:5,9</p> <hr/> <p style="text-align: center;">T</p> <hr/> <p>T 1217:1,1,1,19,19 take 1143:12 1152:15,23,23 1153:17,19 1165:14 1168:3 1198:2,22 1204:21 1205:17 1213:4 taken 1217:9 takes 1185:23 1205:11</p>	<p>talk 1142:5 1151:3 1152:11 1178:14 1178:17,21,24 1184:15 1187:22 1187:23 talked 1194:17 talking 1133:12,16 1133:18 1137:5 1171:7 1207:21 target 1148:10 technical 1135:17 1135:19 1136:8 1196:24 technically 1129:16 technology 1127:15 1127:16 1133:5 1137:14 1211:23 1213:12,13 term 1151:24 1152:1 1155:20 terms 1129:18 1139:4 1145:6 1147:12 1152:11 1152:12 1154:8 1174:24 1213:5 testified 1123:10 1182:8 1213:19 testifying 1178:6,7 1203:12 testimony 1133:10 1133:23 1134:3 1135:16 1155:9 1157:15 1166:6,24 1168:24 1171:14 1171:17 1172:3,7 1172:10 1175:24 1176:3,5 1203:7 1211:18 1212:3,6 1212:23 1213:25 tests 1160:23 thank 1132:17 1134:8 1137:2,3 1137:20 1139:21 1140:8,16 1144:19 1150:25 1152:9 1158:1,4 1160:2 1162:18 1164:20</p>	<p>1166:13 1168:9 1169:21,22 1172:18,21 1173:21 1175:16 1177:15 1180:19 1180:20,25 1181:3 1182:16 1194:13 1195:25 1198:10 1199:3 1201:11 1205:23,24 1207:16 1211:6,8 1214:10,14 1215:25 thanks 1147:4 1162:18 theoretically 1156:14 theory 1125:17 therefor 1169:6 thing 1131:21 1132:14 1142:5 1149:2 1150:5 1156:6 1157:23 1199:1 1201:9 1210:20 things 1128:11,13 1131:16 1141:19 1143:6,10 1148:4 1160:23 1178:2 1185:23 1195:1 1210:3,20,21 think 1124:23 1125:3 1129:21 1131:2 1132:5 1137:15 1141:23 1142:3 1143:8 1144:3,13 1150:23 1157:18 1158:23 1160:4 1163:5 1171:1,3 1172:14 1179:16 1182:11 1184:12 1194:25 1195:6 1196:13 1197:4,18,23 1201:9 1203:7,20 1207:10 1208:20 1208:21 1210:22</p>	<p>1213:11 1214:6 third 1140:19 thought 1127:6 1128:4 1132:4 1133:12 1155:3 1157:19 threat 1167:19 three 1131:16 1153:24 three-strike 1124:2 thumb 1200:14 time 1125:8,18 1126:14 1131:8 1135:8 1141:19 1143:24 1147:13 1147:14 1148:18 1148:24 1149:8 1150:2,4 1154:5 1159:6 1162:15 1165:12,18 1167:5 1174:7,12 1175:5 1179:22 1181:12 1184:21 1195:1 1201:21 1208:6,20 1211:3,13 times 1137:11 1206:22 1207:13 1214:16 TITLE 1217:4 Tiversa 1215:9,10 today 1132:9 1157:4 1168:24 1178:8,11 1180:1 1188:8 told 1205:2 tomorrow 1129:14 1215:3 tool 1124:11 1127:18 1177:17 Tools 1135:18 top 1174:14 topics 1211:15,18 1212:6,10 topology 1139:13 1142:24 1149:12 1150:9,15,19 totally 1143:25 touched 1125:9</p>
---	---	--	--	--

track 1132:6 1206:19	two 1128:10 1138:3 1148:22 1152:19	unshare 1204:25	1198:21 1205:13	1132:24 1143:14
tracks 1131:7,8,17 1131:18	1153:8 1167:16	unsophisticated 1209:18	1208:23,24	1143:15 1163:3
Trade 1119:1	1181:12 1188:15	unsuccessfully 1209:19	1209:12	1198:22
1120:1,14 1121:3	1188:18 1189:6	unwanted 1160:11	uses 1126:16 1128:3	various 1212:13
1121:6 1217:10	1192:13 1193:8	updated 1186:9	1132:3	vendors 1179:1
traffic 1129:15	1203:2 1211:14	uploaded 1206:23	utilized 1162:25	venture 1127:11
1141:2,21,22	type 1128:7 1142:5	uploads 1207:1	utilizing 1169:25	1128:15
1146:18 1147:25	1156:10 1164:15	urge 1212:25 1213:3	<hr/>	versus 1169:25
1189:5 1190:19	1165:5	USAID 1123:20	V	1171:23
1192:11,16,22	types 1198:7	use 1128:13 1129:14	vacate 1136:20	vicariously 1145:14
train 1131:1,7,8,16	typical 1130:2,3	1132:16 1143:21	Vaguely 1176:13	view 1133:22
trained 1185:9	1161:5 1196:4,5	1145:25 1151:24	VANDRUFF	1181:23 1182:25
training 1185:11	1196:12	1153:13 1155:5	1121:4 1133:6,14	1183:7
transcript 1176:25	typically 1142:18	1161:5 1181:23	1133:17,24 1134:8	visibility 1143:23
1217:7,8,21	1148:15,17	1182:22,25 1183:7	1135:10 1136:1,16	visual 1139:12
transcripts 1169:16	1160:22	1194:24 1196:17	1136:23 1137:2	voice 1128:3 1132:3
transfer 1170:5,6,8	<hr/>	1196:25 1198:1,4	1144:12,19	VOIR 1119:8
1170:10,11	U	1198:6 1199:24	1150:22,25	VOLUME 1119:4
transfers 1170:12	U.S 1124:18	1209:8,13,19,19	1157:12,14 1158:1	1120:9
transport 1177:24	Uh-huh 1143:3	1213:24	1158:4 1159:25	vulnerabilities
transports 1178:1	1152:13 1210:1	useful 1144:13	1160:2 1161:14	1159:15 1166:18
TRIAL 1119:4	ultimately 1159:4	user 1125:9 1150:4	1162:6,18 1164:17	1185:24
1120:9	ultra 1139:15	1151:9,11,13,19	1164:20 1166:3,13	vulnerability 1186:6
tricky 1149:2	1141:1,6,13,15,20	1152:22 1164:12	1168:25 1169:22	<hr/>
tries 1127:23	1142:7,11,25	1164:14 1165:4	1170:22 1171:9,15	W
1129:11,11	1143:2,4,8,9,15,17	1179:5,7 1181:15	1171:22 1172:3,21	Wallace 1215:10
true 1172:9 1202:10	1143:21 1150:10	1181:21,23	1175:13,19	want 1124:2,6
1210:7	1150:12	1182:20,22,25	1176:20,23	1125:20 1126:21
Truett 1188:19	unauthorized	1183:3,6 1198:18	1180:13,19,25	1139:19 1142:4,5
1190:22 1193:21	1177:9	1199:1 1202:14	1181:3,4 1182:7	1146:4,9 1164:24
1215:14	unavailable 1204:18	1203:3,5,22	1182:16,18	1166:6 1169:16
Truett's 1192:19	1154:16 1155:7	1204:5 1205:2,11	1183:13,16	1199:1 1200:18
1193:18	understand 1143:1	1205:12 1206:16	1186:15,18 1187:9	1202:24
truth 1202:25	1172:13 1173:10	1207:12,23	1187:15 1188:22	wanted 1151:11
try 1143:6 1148:11	1199:13 1201:1	1208:24	1189:1 1193:5,11	wants 1146:20
1197:2	1206:24 1212:1	user's 1202:15,19	1193:16,25 1194:4	1152:6
trying 1130:9	understanding	1203:4,23 1204:1	1194:7,13,16	Washington
1139:4 1145:19	1174:11	1206:7 1207:25	1197:15,21	1120:16 1121:10
1200:19 1203:12	understood 1136:1	users 1129:14	1198:10,11	1121:20 1122:8
Tuesday 1215:16	1138:25	1137:19 1181:12	1200:10 1201:1,2	wasn't 1126:9
turn 1158:10,23	undoubtedly	1181:17 1183:5	1203:1,14,17	1127:6,8 1209:25
1162:23 1172:23	1138:25	1187:2 1196:2,4,5	1205:23 1206:2	way 1125:19 1127:1
1174:16 1177:1	United 1120:1	1196:10,12,13,16	1207:2,17,20	1129:7,7,12,13
1181:11 1193:17	1214:9	1196:16,17,23	1208:6 1210:9	1131:2 1132:22
1213:13	University 1124:17	1197:10 1198:1,6	1211:2,11 1214:14	1140:4 1142:3,18
	unpopular 1147:20		1215:24	1145:20 1147:12
			variety 1124:8	1151:18,18

<p>1156:19,19 1160:12 1180:21 1180:21 1182:2 1194:23 1195:6,19 1197:1,19 1199:10 1199:12,15 1200:3 1200:9,17 1201:13 1201:17 1202:19 1206:8,11,17 1207:23 1208:2,22 1208:23 1209:9 ways 1129:21 1197:12 1200:15 we'll 1126:21 1134:6 1168:3 1169:19 1173:16 1180:7 we're 1123:19 1133:18 1138:25 1139:18 1140:7,23 1150:18,18 1168:2 1168:5,7 1173:22 1202:24 1205:10 1216:3 we've 1135:5 1203:7 1205:2 Web 1161:5 weeks 1124:23 1126:5 weigh 1212:3 weighing 1215:17 weight 1133:22 1212:7,8 1213:2 1213:14 1214:18 well-qualified 1214:7 well-rounded 1133:22 Whalen 1120:19 1217:16 whatnot 1163:7 white 1173:7 wiggle 1169:18 WILLIAM 1121:15 william.sherman... 1121:22 Windows 1189:22</p>	<p>1189:24 1190:5 wished 1145:2 wishes 1211:3 withdraw 1136:21 1136:23 1162:11 1194:8 withdrawing 1169:11 witness 1119:8 1123:4,9 1124:7 1130:13,16 1131:2 1131:12,15,22 1132:10 1133:20 1134:21 1135:1 1137:21,23 1150:23 1151:1 1161:24 1164:21 1165:8 1171:4 1172:15,22 1173:2 1173:11 1178:8 1180:17,22 1187:11 1193:3,12 1197:16 1200:8 1204:19,23 1205:6 1205:15,21 1206:19 1207:15 1211:4,8,9 1214:20,22 1215:15 witnesses 1171:7,10 1171:11 1215:2,4 1215:12 wondering 1206:13 Woodson's 1206:25 word 1152:18 worded 1180:22 1182:3 work 1123:20 1124:8 1126:19 1145:21 1147:9 1148:4 1176:1 1181:8 1213:16 1214:4 worked 1124:11 1125:25 1133:3 1144:23 1154:6 1156:20</p>	<p>working 1124:22,24 1126:3,5 1128:17 1130:5 works 1134:12 workstation 1161:5 1161:21 workstations 1161:1 1161:3,6 1163:4 world 1127:19 1129:6,23 wouldn't 1129:16 1194:23 1195:6 wrap 1130:21 write 1125:25 writing 1214:5 wrote 1125:9,10 1126:24 1147:18</p> <hr/> <p style="text-align: center;">X</p> <p>X 1119:2</p> <hr/> <p style="text-align: center;">Y</p> <p>yeah 1123:16 1124:7 1125:2 1126:14,14 1127:2 1127:14,20,22 1128:17 1129:2,2 1130:8,13,16 1131:12 1132:24 1133:2,20 1137:11 1138:2 1139:12 1143:5,22 1144:7 1145:3,3,8,16,24 1148:9,25,25 1149:23,23 1151:20 1154:25 1155:3,8 1163:2 1163:12,16,19 1165:1,19 1167:6 1174:17 1183:25 1184:1 1187:11 1189:18 1196:13 1196:18 1199:7 1200:15 1201:17 1204:3,9 1205:21 1207:15 1209:10 1210:14</p>	<p>year 1125:1 1129:25 1176:11,18 1195:9 yes-or-no 1197:5 yesterday 1215:1</p> <hr/> <p style="text-align: center;">Z</p> <p>Zealand 1133:4 1135:20 1136:12 1137:8 1176:2 zero 1124:20 1206:25 ZyWALL 1163:13 1163:15,19,22 1167:21 1179:8,10 1180:3,6 1188:3 1188:12 1192:24 1193:13,22</p> <hr/> <p style="text-align: center;">0</p> <p>0719 1189:10 0731 1190:24 0930 1216:2</p> <hr/> <p style="text-align: center;">1</p> <p>1:21 1216:5 10 1202:6 10:37 1120:8 11 1177:1 1208:14 1123 1119:9 1134 1119:17 1135 1119:17 1175 1119:9 12 1202:3 12:00 1168:4 1208 1119:9 14 1139:9 1140:21 1140:24 1144:11 15 1193:19 16 1162:23 1189:6,8 17 1188:10,11 1189:6 1193:19 1718 1196:2,11,20 1196:25 1197:8,11 1198:12,19 1199:5 1199:10 1200:4,12 1201:4,14,19,23 1202:7,11,18</p>	<p>1206:7 1213:9 1841 1163:13,25 1164:9 1167:21 188 1195:10,15 1208:13 1919 1122:6</p> <hr/> <p style="text-align: center;">2</p> <p>2 1140:14 200 1148:11,12 1156:11 2000 1125:2,2,3 20004 1121:20 20006 1122:8 2005 1174:17 2010 1174:18 1180:10 2014 1119:6 1120:7 1176:25 1217:5,13 202 1121:11,21 1122:9 20580 1121:10 22 1176:18,25 1195:9 28 1119:6 1120:7 1161:19 1217:5</p> <hr/> <p style="text-align: center;">3</p> <p>3 1140:16 1158:10 1158:11 1161:23 1174:16 1217:13 3.31(a) 1169:3 30 1150:11,11 300,000 1148:14 1150:8 326-2999 1121:11 36 1135:16 37 1158:23 372-9100 1121:21</p> <hr/> <p style="text-align: center;">4</p> <p>41 1191:1 42 1192:5 499-2426 1122:9</p> <hr/> <p style="text-align: center;">5</p> <p>5 1157:10 1163:13</p>
--	---	---	---	---

1163:15,19
1167:21 1168:17
1180:6 1183:5
1192:24 1193:13
1193:22
533 1134:22,23
1135:11,12
1140:15,15,18,21
1188:9 1193:20
1202:3
58 1192:18

6

6 1119:4 1120:9
1140:21,23 1154:9
1177:4
6.05.071 1155:10
600 1120:15 1121:9
610 1121:19
650 1122:7

7

8

8 1137:23 1140:1,14
1140:18
801 1121:18

9

9 1195:15
91 1189:12,16
1190:14,16
9357 1120:4 1217:3
95 1157:8,15