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ELECTRONIC FRONTIER FOUNDATION,  
6 PUBLIC CITIZEN LITIGATION GROUP and  
THE AMERICAN CIVIL LIBERTIES UNION  
7

8 UNITED STATES DISTRICT COURT  
9 FOR THE NORTHERN DISTRICT OF CALIFORNIA  
10

11	PRIORITY RECORDS LLC, et al.,	)	Case No. C-04-1136 WDB
12		)	
13		)	<b>DECLARATION OF SETH SCHOEN IN</b>
14	v.	)	<b>SUPPORT OF MOTION FOR LEAVE TO</b>
15	DOES 1 - 8,	)	<b>FILE BRIEF AMICUS CURIAE</b>
16		)	<b>CONCERNING MISCELLANEOUS</b>
17	Defendants.	)	<b>ADMINISTRATIVE REQUEST FOR</b>
		)	<b>LEAVE TO TAKE IMMEDIATE</b>
		)	<b>DISCOVERY PURSUANT TO LOCAL</b>
		)	<b>RULE 7-10(B)</b>

18 I, Seth Schoen, declare as follows:

19 1. I am a Staff Technologist with the Electronic Frontier Foundation (EFF), and make  
20 this declaration on my own personal knowledge.

21 2. The purpose of this declaration is to set forth facts, which were readily available to  
22 the Plaintiffs from free, public Internet sources at and before the time they filed suit, that establish  
23 that all of the unnamed defendants in the above-referenced case (hereinafter "Does") use Internet  
24 connections physically located far from this District and therefore are likely not located in this  
25 District.

26 3. By reviewing the exhibits attached to the Complaint, I compiled a list of the Internet  
27 Protocol (IP) addresses that the plaintiffs attribute to each of the Doe defendants. That list of "Doe  
28 IP Addresses" is attached as Exhibit A.

1           4.       There are many tools freely available to the public that help reveal where a person  
2 using a particular IP address is likely to be physically located.

3           5.       One means of learning about where an IP address is physically located is known as  
4 "reverse domain name service" or "reverse DNS". When an Internet service provider ("ISP")  
5 allocates or prepares to allocate IP addresses to customers, it typically creates and publishes  
6 database records assigning a human-readable "domain name" to each numerical IP address. The  
7 reverse lookup information can be obtained by anyone using a program such as "host", or with  
8 web-based tools such as SamSpade.org's DNS lookup, <<http://samspade.org/t/dns?>>.

9           6.       One of the purposes of reverse DNS service is to help interested parties learn more  
10 about what a computer is used for, what organization's network it is connected to, and, in many  
11 cases, where the computer is physically located. Typically, for home users of dial-up or broadband  
12 connections, such as DSL or cable-model services, a domain name obtained from reverse DNS will  
13 identify the ISP that assigned the IP address.

14           7.       For each of the IP addresses alleged by plaintiffs to belong to the Doe defendants, I  
15 used the "host" program to perform a reverse lookup against the publicly-accessible reverse DNS  
16 service. The list of domain names corresponding to the Doe IP addresses is attached as Exhibit B.

17           8.       Each of the eight Does sued in this action uses, according to reverse DNS records,  
18 Internet services provided by Covad Communications.

19           9.       Each Doe's reverse DNS name assigned by Covad contains a geographic  
20 designation in the form of a four-letter city code followed by a two-letter state code followed by  
21 two other characters. For example, Doe #2's geographic designation is "phlapafg", which means  
22 "Philadelphia, PA" followed by the characters "fg".

23           10.      I further substantiated this pattern by examining several other Covad IP addresses  
24 that are not a part of this complaint. One example is the address 66.167.50.1, which has the reverse  
25 DNS name "h-66-167-50-1.atlngahp.dynamic.covad.net", with the geographic designation  
26 "atlngahp", which means "Atlanta, GA" followed by the characters "hp".

27           11.      Another example is 66.167.60.1, which has the reverse DNS name "h-66-167-60-  
28 1.dllatx37.covad.net", with the geographic designation "dllatx37", which means "Dallas, TX"

1 followed by the characters "37".

2 12. These IP addresses are not a part of this lawsuit, but rather serve to illustrate the  
3 pattern Covad uses in assigning reverse DNS names with geographic designations to its IP  
4 addresses.

5 13. I also found exactly the same pattern in Covad's reverse DNS naming scheme when  
6 I earlier investigated Doe defendants for a declaration I submitted to the United States District  
7 Court for the Northern District of Georgia on February 24, 2004. That declaration is available at  
8 <[http://www.eff.org/IP/P2P/RIAA\\_v\\_ThePeople/JohnDoe/20040224\\_Virgin\\_Schoen\\_Decl.pdf](http://www.eff.org/IP/P2P/RIAA_v_ThePeople/JohnDoe/20040224_Virgin_Schoen_Decl.pdf)>.

9 14. Another means of learning where an IP address is located is to use the "traceroute"  
10 program to see the path taken by information sent over the Internet from one computer to another.  
11 The intermediate steps along this path revealed by the traceroute program are Internet routers  
12 operated by various Internet service providers and typically have their own geographic  
13 designations.

14 15. I used the traceroute program to reveal the path of data sent over the Internet from a  
15 computer in San Francisco, California, to each of the Doe defendant's IP addresses. The output of  
16 this program is attached as Exhibit C.

17 16. The reverse DNS names in Exhibit B and the traceroute information in Exhibit C  
18 generally agree with one another about the locations of particular defendants' Internet connections.  
19 The abbreviation found in each reverse DNS name corresponds to a city in the same geographic  
20 area as the Level3.net router in the matching traceroute output. For example, Doe #2 has the  
21 reverse DNS name "h-66-167-9-107.phlapafg.dynamic.covad.net", which contains the abbreviation  
22 "phlapafg", and a traceroute to Doe #2's IP address passes through "ge-11-  
23 0.hsa1.Philadelphia1.Level3.net".

24 17. Because DSL and cable modem connections are provided from local hubs to users  
25 in a particular geographic region, there is good reason to believe that the geographic location data  
26 obtained by these methods actually reflects the physical location of the Internet connection. In  
27 other words, the geographic designations obtained by these methods likely indicate the locations of  
28 the residences or other venues where the Does use their Internet-connected computers.

1           18.       The traceroute and reverse DNS name evidence indicate that the eight Doe  
2 defendants in this action use computers connected to DSL service as follows:

3           Doe 1: Southfield or Detroit, Michigan (E.D.MI)

4           Doe 2: Philadelphia, Pennsylvania (E.D.Pa.)

5           Doe 3: Southfield or Detroit, Michigan (E.D.MI)

6           Doe 4: McLean, Virginia or Washington, D.C. (E.D.Va. or D.D.C.)

7           Doe 5: Phoenix, Arizona (D.Ariz.)

8           Doe 6: Seattle, Washington (W.D.Wash.)

9           Doe 7: Los Angeles, California (C.D.Cal.)

10          Doe 8: Los Angeles, California (C.D.Cal.)

11          19.       Therefore, it is likely that none of these eight Doe defendants may be found within  
12 this District.

13          20.       In my experience, computer professionals are generally aware of the existence and  
14 function of reverse DNS names and the traceroute software, and would use either or both when  
15 they needed to learn where a given IP address was physically located. These techniques are readily  
16 and easily available to the recording companies and the computer professionals they have  
17 employed to perform the investigations leading to this lawsuit.

18          21.       In addition, other techniques and other publicly-available information can serve to  
19 identify and confirm the general physical location of a particular Internet user. All these techniques  
20 were and are available to the plaintiffs here. Indeed, plaintiffs in this action may have determined  
21 the Internet service provider of the Does identified here by using similar techniques that also tend  
22 to indicate a subscriber's physical location.

23               I declare under penalty of perjury under the laws of the State of California that the  
24 foregoing is true and correct and that this document was executed in San Francisco, California.

25 DATED: April 1, 2004

Respectfully submitted

26  
27 By   
Seth Schoen

**EXHIBIT A**

IP addresses of Does:

66.167.59.5

66.167.9.107

66.134.108.36

68.167.49.171

66.167.42.131

68.166.14.234

68.165.238.230

68.167.3.23

**EXHIBIT B**

Reverse DNS records for Doe IP addresses:

Name: h-66-167-59-5.sfldmidn.dynamic.covad.net

Address: 66.167.59.5

Name: h-66-167-9-107.phlapafg.dynamic.covad.net

Address: 66.167.9.107

Name: h-66-134-108-36.sfldmidn.dynamic.covad.net

Address: 66.134.108.36

Name: h-68-167-49-171.mclnva23.covad.net

Address: 68.167.49.171

Name: h-66-167-42-131.phndaz91.dynamic.covad.net

Address: 66.167.42.131

Name: h-68-166-14-234.sttnwaho.dynamic.covad.net

Address: 68.166.14.234

Name: h-68-165-238-230.lsanca54.dynamic.covad.net

Address: 68.165.238.230

Name: h-68-167-3-23.lsanca54.dynamic.covad.net

Address: 68.167.3.23

**EXHIBIT C**

Traceroute paths from a computer in San Francisco, CA, to Doe defendants' IP addresses:

66.167.59.5

- 1 er1.sfo1.speakeasy.net (64.81.246.1) 168.493 ms 148.360 ms 49.253 ms
- 2 120.ge-0-0-0.cr2.sfo1.speakeasy.net (69.17.83.185) 15.675 ms 27.984 ms 57.237 ms
- 3 border3.g3-1.speakeasy-47.sje.pnap.net (66.151.145.133) 172.645 ms 44.298 ms 18.953 ms
- 4 core1.ge0-1-bbnet2.sje.pnap.net (66.151.144.65) 19.058 ms 17.693 ms 87.695 ms
- 5 ge-2-0-147.ipcolo1.SanJose1.Level3.net (63.209.15.225) 201.434 ms 292.586 ms 123.625 ms
- 6 unknown.Level3.net (64.159.2.161) 95.532 ms 20.120 ms 16.687 ms
- 7 so-0-0-0.mp1.Detroit1.Level3.net (64.159.0.193) 141.734 ms 126.836 ms 220.671 ms
- 8 ge-10-0.hsa2.Detroit1.Level3.net (64.159.0.206) 96.171 ms 98.059 ms 200.232 ms
- 9 unknown.Level3.net (166.90.203.2) 221.863 ms 234.529 ms 338.211 ms
- 10 192.168.7.102 (192.168.7.102) 400.565 ms 362.160 ms 419.581 ms
- 11 h-66-167-59-5.sfldmidn.dynamic.covad.net (66.167.59.5) 151.949 ms 154.999 ms 318.313 ms
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66.167.9.107

1 er1.sfo1.speakeasy.net (64.81.246.1) 283.172 ms 351.963 ms 317.455 ms  
2 \* 120.ge-0-0-0.cr2.sfo1.speakeasy.net (69.17.83.185) 379.339 ms 340.586 ms  
3 border3.g3-1.speakeasy-47.sje.pnap.net (66.151.145.133) 207.967 ms 294.446 ms 226.016 ms  
4 core1.pc0-0-bbnet1.sje.pnap.net (66.151.144.1) 295.889 ms 269.446 ms 338.358 ms  
5 ge-2-0-147.ipcolo1.SanJose1.Level3.net (63.209.15.225) 301.064 ms 302.946 ms 253.031 ms  
6 unknown.Level3.net (64.159.2.65) 356.431 ms 350.704 ms 226.391 ms  
7 so-0-1-0.mp1.Philadelphia1.Level3.net (64.159.0.141) 233.815 ms 293.241 ms 381.996 ms  
8 ge-11-0.hsa1.Philadelphia1.Level3.net (64.159.0.146) 358.280 ms 312.389 ms 357.159 ms  
9 unknown.Level3.net (63.208.96.14) 252.467 ms 324.755 ms 335.333 ms  
10 192.168.14.102 (192.168.14.102) 398.133 ms 437.689 ms 285.036 ms  
11 h-66-167-9-107.phlapafg.dynamic.covad.net (66.167.9.107) 217.754 ms 118.009 ms 185.337  
ms

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66.134.108.36

- 1 er1.sfo1.speakeasy.net (64.81.246.1) 141.700 ms 94.847 ms 165.716 ms
- 2 220.ge-0-1-0.cr2.sfo1.speakeasy.net (69.17.83.177) 366.039 ms 380.329 ms 355.793 ms
- 3 border3.g3-1.speakeasy-47.sje.pnap.net (66.151.145.133) 301.122 ms 224.560 ms 118.272 ms
- 4 core1.ge0-1-bbnet2.sje.pnap.net (66.151.144.65) 79.576 ms 49.242 ms 64.037 ms
- 5 ge-2-0-147.ipcolo1.SanJose1.Level3.net (63.209.15.225) 74.161 ms 59.357 ms 20.156 ms
- 6 unknown.Level3.net (64.159.2.33) 33.732 ms 18.845 ms 16.811 ms
- 7 so-0-1-0.mp2.Detroit1.Level3.net (64.159.0.198) 78.901 ms 125.946 ms 83.128 ms
- 8 ge-11-1.hsa1.Detroit1.Level3.net (64.159.4.194) 88.873 ms 180.876 ms 79.807 ms
- 9 unknown.Level3.net (63.211.20.186) 176.690 ms 77.262 ms 136.183 ms
- 10 192.168.7.150 (192.168.7.150) 100.978 ms 142.985 ms 147.287 ms

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68.167.49.171

- 1 er1.sfo1.speakeasy.net (64.81.246.1) 18.999 ms 17.731 ms 24.491 ms
- 2 120.ge-0-0-0.cr2.sfo1.speakeasy.net (69.17.83.185) 90.159 ms 17.821 ms 15.503 ms
- 3 border3.g3-1.speakeasy-47.sje.pnap.net (66.151.145.133) 16.001 ms 39.776 ms 72.202 ms
- 4 core1.pc0-0-bbnet1.sje.pnap.net (66.151.144.1) 20.176 ms 19.909 ms 163.287 ms
- 5 ge-2-0-147.ipcolo1.SanJose1.Level3.net (63.209.15.225) 114.511 ms 231.623 ms 118.049 ms
- 6 unknown.Level3.net (64.159.2.129) 124.779 ms 71.704 ms 97.873 ms
- 7 so-0-0-0.bbr2.Washington1.Level3.net (64.159.1.158) 87.738 ms 89.909 ms 86.550 ms
- 8 ge-9-1.ipcolo1.Washington1.Level3.net (64.159.18.99) 88.781 ms 88.778 ms 157.398 ms

9 unknown.Level3.net (63.210.41.194) 87.879 ms 89.648 ms 87.629 ms

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66.167.42.131

1 er1.sfo1.speakeasy.net (64.81.246.1) 218.136 ms 48.727 ms 80.457 ms

2 120.ge-0-0-0.cr2.sfo1.speakeasy.net (69.17.83.185) 38.136 ms 31.339 ms 48.251 ms

3 border3.g3-1.speakeasy-47.sje.pnap.net (66.151.145.133) 121.567 ms 18.628 ms 18.965 ms

4 core1.pc0-0-bbnet1.sje.pnap.net (66.151.144.1) 18.057 ms 24.522 ms 76.474 ms

5 ge-2-0-147.ipcolo1.SanJose1.Level3.net (63.209.15.225) 17.966 ms 32.277 ms 33.794 ms  
6 unknown.Level3.net (64.159.2.161) 86.744 ms 71.281 ms 18.300 ms  
7 so-0-1-0.mp1.Phoenix1.Level3.net (64.159.1.121) 37.093 ms 122.108 ms 210.573 ms  
8 ge-10-1.hsa1.Phoenix1.Level3.net (209.247.9.190) 157.211 ms 148.465 ms 184.129 ms  
9 unknown.Level3.net (63.214.160.138) 122.798 ms 79.743 ms 39.486 ms  
10 192.168.15.142 (192.168.15.142) 35.067 ms 81.949 ms 37.314 ms  
11 h-66-167-42-131.phndaz91.dynamic.covad.net (66.167.42.131) 173.909 ms 194.478 ms  
160.834 ms  
12 h-66-167-42-131.phndaz91.dynamic.covad.net (66.167.42.131) 151.839 ms 237.007 ms  
187.869 ms  
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68.166.14.234  
1 er1.sfo1.speakeasy.net (64.81.246.1) 357.950 ms 347.289 ms 301.275 ms  
2 220.ge-0-1-0.cr2.sfo1.speakeasy.net (69.17.83.177) 301.569 ms 116.687 ms 147.411 ms  
3 border3.g3-1.speakeasy-47.sje.pnap.net (66.151.145.133) 83.080 ms 146.866 ms 200.246 ms  
4 core1.pc0-0-bbnet1.sje.pnap.net (66.151.144.1) 209.059 ms 85.341 ms 17.979 ms  
5 ge-2-0-147.ipcolo1.SanJose1.Level3.net (63.209.15.225) 23.597 ms 76.772 ms 125.813 ms  
6 unknown.Level3.net (64.159.2.1) 40.034 ms 18.819 ms 20.344 ms  
7 so-1-0-0.mp1.Seattle1.Level3.net (209.247.10.137) 33.529 ms 36.474 ms 173.737 ms  
8 ge-11-0.hsa2.Seattle1.Level3.net (209.247.9.54) 34.719 ms 94.331 ms 146.293 ms  
9 unknown.Level3.net (209.247.88.202) 155.173 ms 149.363 ms 151.701 ms  
10 192.168.23.102 (192.168.23.102) 98.405 ms 139.825 ms 83.093 ms  
11 h-68-166-14-234.sttnwaho.dynamic.covad.net (68.166.14.234) 53.966 ms 130.761 ms  
197.540 ms  
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14 h-68-166-14-234.sttnwaho.dynamic.covad.net (68.166.14.234) 54.358 ms !H 53.679 ms !H  
53.950 ms !H

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68.165.238.230

- 1 er1.sfo1.speakeasy.net (64.81.246.1) 17.039 ms 21.157 ms 36.030 ms
- 2 220.ge-0-1-0.cr2.sfo1.speakeasy.net (69.17.83.177) 17.777 ms 15.640 ms 79.851 ms
- 3 border3.g3-1.speakeasy-47.sje.pnap.net (66.151.145.133) 18.176 ms 20.553 ms 16.973 ms
- 4 core1.ge0-1-bbnet2.sje.pnap.net (66.151.144.65) 19.050 ms 16.571 ms 19.017 ms
- 5 ge-2-0-147.ipcolo1.SanJose1.Level3.net (63.209.15.225) 17.971 ms 18.863 ms 17.960 ms
- 6 unknown.Level3.net (64.159.2.129) 154.231 ms 76.289 ms 16.787 ms
- 7 so-1-0-0.bbr1.LosAngeles1.Level3.net (209.247.9.113) 24.759 ms 56.410 ms 143.422 ms
- 8 so-10-0.ipcolo1.LosAngeles1.Level3.net (4.68.113.154) 153.958 ms 298.662 ms 372.701 ms
- 9 unknown.Level3.net (209.247.191.146) 164.530 ms 186.257 ms 147.216 ms
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68.167.3.23

- 1 er1.sfo1.speakeasy.net (64.81.246.1) 308.512 ms 299.047 ms 331.784 ms
- 2 120.ge-0-0-0.cr2.sfo1.speakeasy.net (69.17.83.185) 299.191 ms 118.146 ms 121.168 ms
- 3 border3.g3-1.speakeasy-47.sje.pnap.net (66.151.145.133) 258.594 ms 196.647 ms 206.894 ms
- 4 core1.ge0-1-bbnet2.sje.pnap.net (66.151.144.65) 138.324 ms 22.379 ms 52.741 ms
- 5 ge-2-0-147.ipcolo1.SanJose1.Level3.net (63.209.15.225) 19.092 ms 18.686 ms 19.744 ms
- 6 unknown.Level3.net (64.159.2.33) 17.274 ms 20.135 ms 20.039 ms
- 7 so-0-0-0.bbr2.LosAngeles1.Level3.net (209.247.9.181) 24.654 ms 25.677 ms 25.909 ms
- 8 so-10-0.ipcolo2.LosAngeles1.Level3.net (4.68.113.162) 25.790 ms 26.946 ms 26.938 ms
- 9 unknown.Level3.net (63.215.86.254) 27.082 ms 27.622 ms 25.741 ms
- 10 192.168.10.6 (192.168.10.6) 42.756 ms 28.123 ms 31.540 ms
- 11 h-68-167-3-23.lsanca54.dynamic.covad.net (68.167.3.23) 44.948 ms 45.984 ms 44.969 ms
- 12 h-68-167-3-23.lsanca54.dynamic.covad.net (68.167.3.23) 51.786 ms 51.550 ms 51.606 ms