

**Where Does Spyware Come From?**

**“Why”**

**Spyware Revenue Sources**

Benjamin Edelman

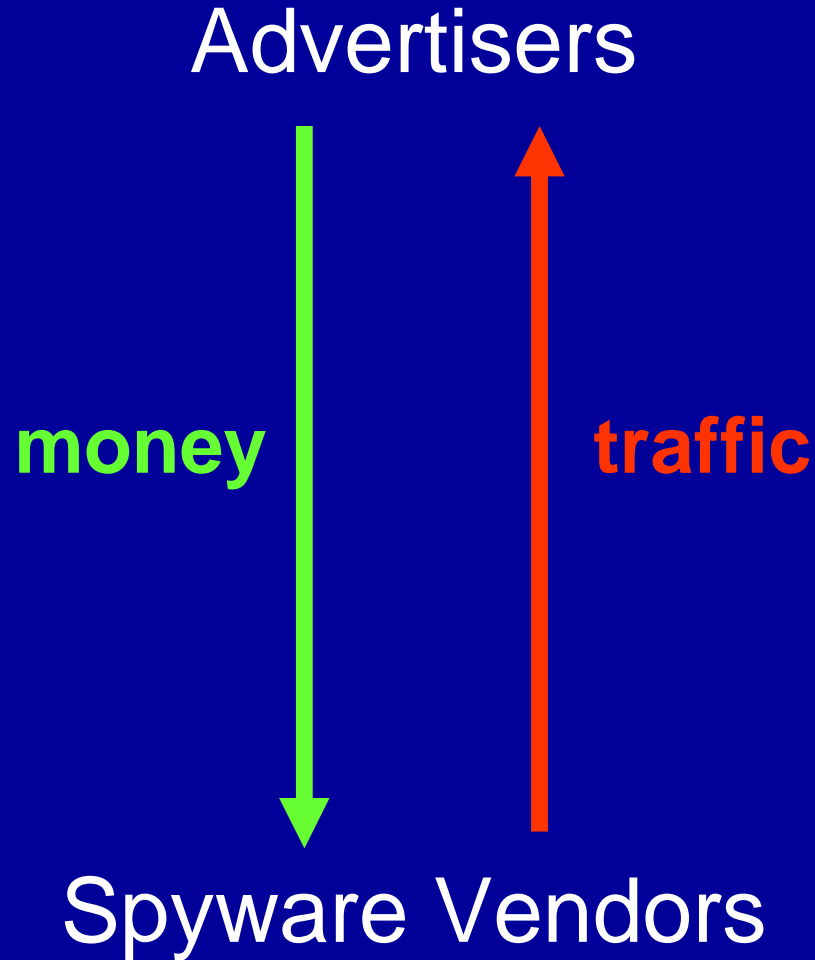
[www.benedelman.org](http://www.benedelman.org)

# The Spyware Business Model

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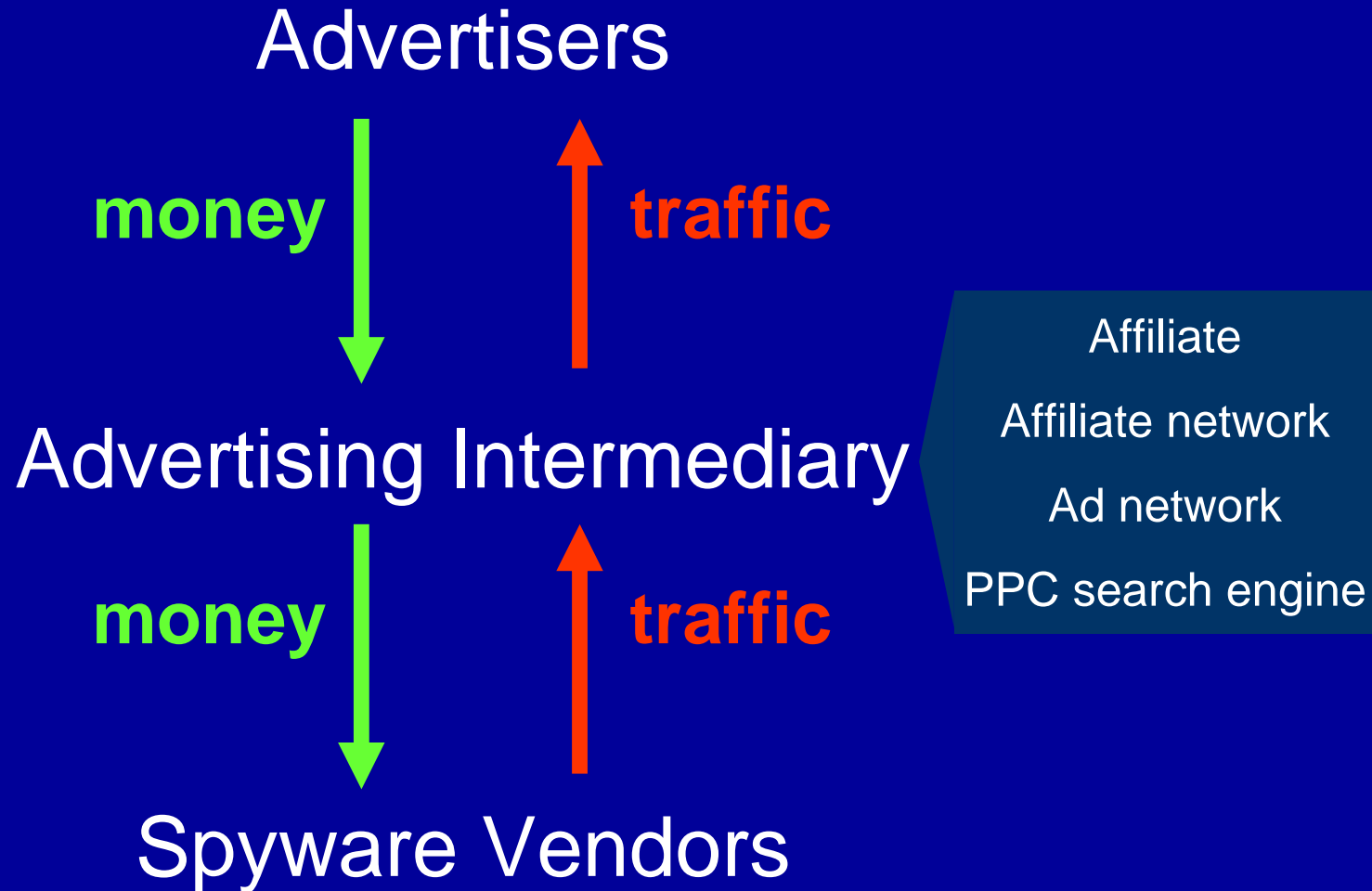
# Revenue Sources

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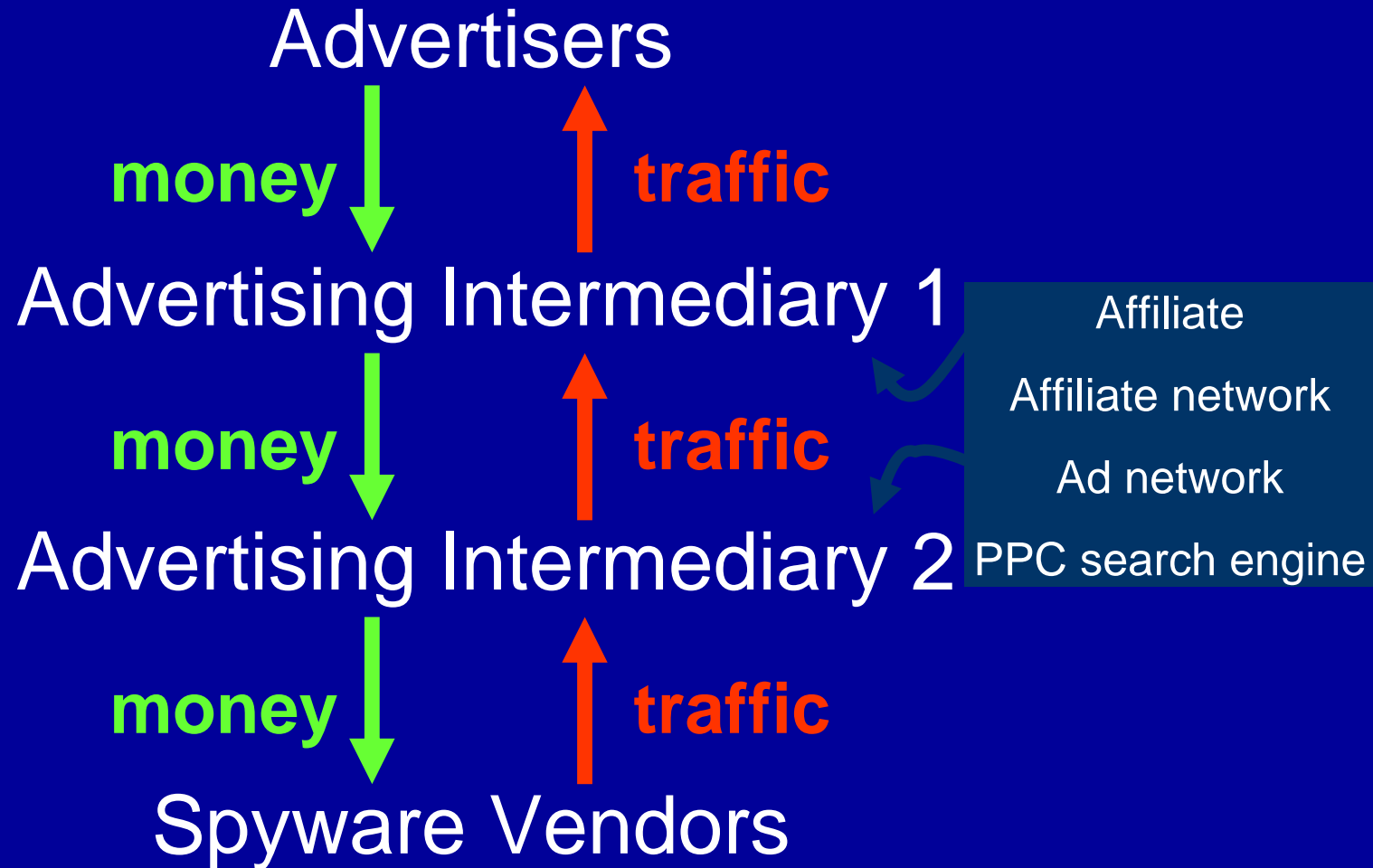
# Revenue Sources

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# Revenue Sources

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PERSONAL

BUSINESS

MY ACCOUNT

PRODUCTS | PLANS | GET IT NOW®

SUPPORT

## Enter your location

Please enter the **location for the area where you plan to use your phone the most** so we can give you accurate information about wireless pricing, coverage, customer service, and offers near you. Click submit to continue.

### Choose location by zip code

Enter Zip Code

### Or, choose location by city/state

Select a state

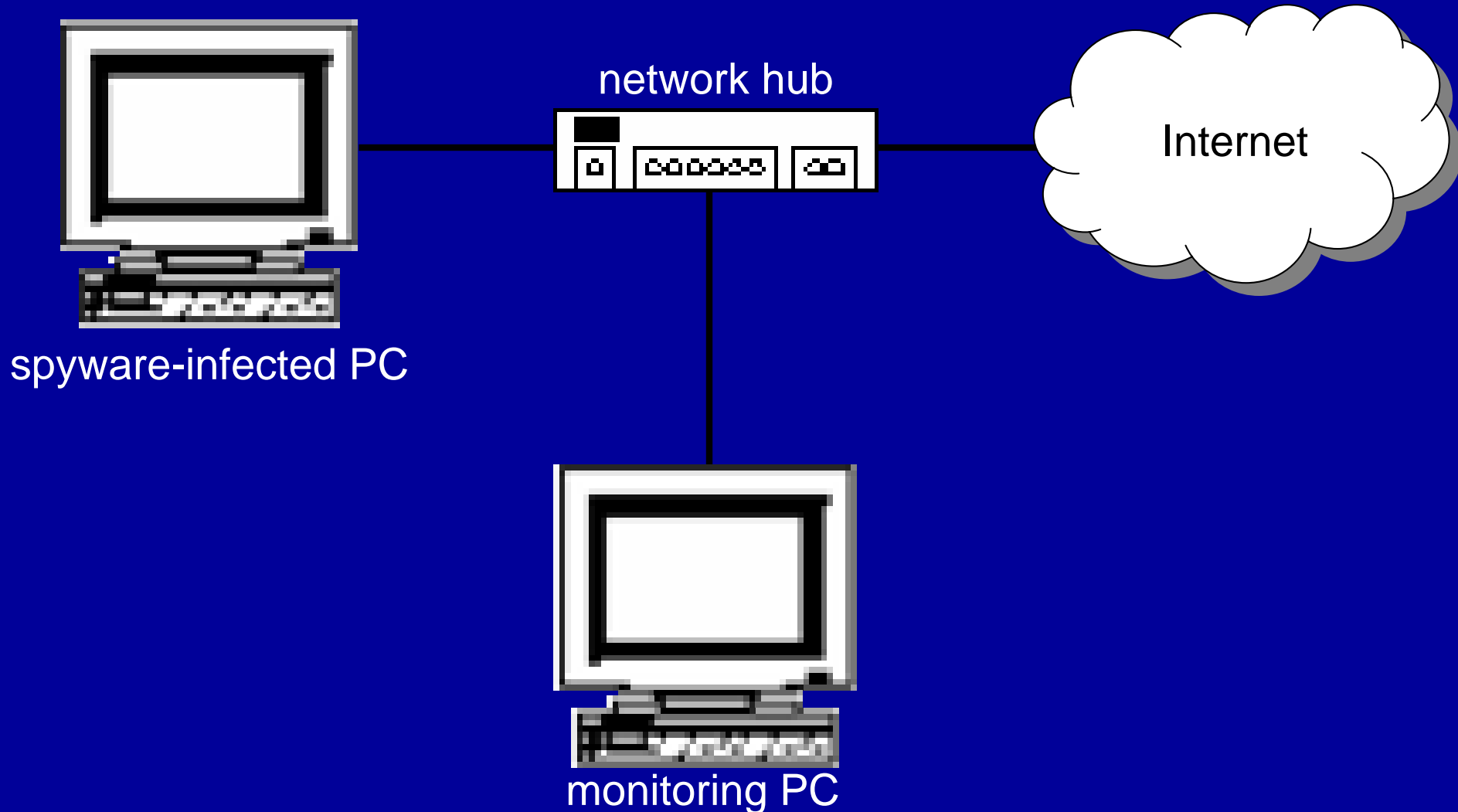
Select State ▾

Search for cities

May 2006

# Investigator's Tools: Packet Sniffer

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# Understanding the Chain of Redirects - Verizon

→ GET /imp/servlet/ImpServe?urlContext=http://www.tipany.com...  
&transponderID={8D0526ED-F7CB-4005-9191-6C9A9D0F557B} 1  
Host: xadsj.offeroptimizer.com

← HTTP/1.1 200 OK ...  
url="http://gdlckjoe.com/clk.aspx?l=3984&c=2319&s=WirelessFM";  
width=800;  
height=600; ...

→ GET /clk.aspx?l=3984&c=2319&s=WirelessFM HTTP/1.1 ...  
Host: gdlckjoe.com

← HTTP/1.1 301 Moved Permanently 2  
Location: http://clickserve.cc-dt.com/link/click?lid=  
41000000009135925

→ GET /link/click?lid=41000000009135925&mid=MOCAR HTTP/1.1 ...  
Host: clickserve.cc-dt.com ... 3

← HTTP/1.1 302 Found ...  
Location: http://www.verizonwireless.com/b2c/affiliate?...



# Direct Revenue Promoting Verizon



# Walmart Promoted by Direct Revenue via Targetsaver, Easilyfound, and LinkShare

Search results for rollbacks - Wal-mart - Microsoft I

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search

Address [&ico=0&ics=20&ref=+500501.500682&search\\_constraint=0&search\\_query=rollbacks&sourceid=19081171230847785823](#) Go Links >>



[Home](#) | [Your Account](#) | [Cart](#) | [Track Order](#) | [Help](#)

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Search  for:

## 803 items found for "rollbacks"

### Narrow Your Results

#### Departments

##### For the Home

- [Air Conditioners & Filtration](#)
- [Appliances & Housewares](#)
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- [Furniture](#)
- [Luggage](#)
- [Massage Spa &](#)

### ★ TOP SELLERS

These top sellers were found in your search results.



[Keys Ovation Serenade 7-Person Hot Tub Spa Package](#)  
**ROLLBACK**

**\$2,998.00**



[Polaroid 7" Dual-Screen Car DVD Player w/ Game Controller & Built-in Games](#)  
**ROLLBACK**

**\$499.00**



[Bounce 'Round 5-in-1 Ultimate Sports Arena](#)  
**ROLLBACK**

**\$174.88**  
**Was: \$296.62**

April 2006

Done

Start C:\Documents and Set... Buy.com - Flash Cards... Search results for r... Untitled - Windows Me... 5:25 PM

# Understanding the Chain of Redirects - Walmart

→ GET <http://a.target saver.com/adshow> ...  
http://www.buy.com/retail/specialty\_store\_1.asp?loc=14575...

1

← HTTP/1.1 200 OK  
http://www.target saver.com/redirect.php?clientID=113.167



→ GET </redirect.php?clientID=113.16777729.1804289383&finalURL=...>  
← HTTP/1.1 302 Found  
Location: http://target saver.com/redirect1.php?clientID=113...

2

← http://www.easilyfound.com/a/2.php?cid=1029

3

→ GET </a/2.php?cid=1029>

4

← <script><!-- function clicktoit() {  
document.forms[0].submit();} --></script> ...  
<body onload="Javascript:clicktoit()">  
<form action="/a/3.php" method="get"> ...



→ GET </a/3.php?cid=1029>

5

← Location: http://click.linksynergy.com/fs-bin/click?id=MCVDO..



← http://click.linksynergy.com/fs-bin/swat?lsnsig=I020ToJJ8rI&..

6

← http://www.walmart.com/reflect.gsp?sourceid=2301369222076574...

7



# Targetsaver Promoting Walmart




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Yahoo (Overture)

money ↓ ↑ traffic

81.201.104.136

money ↓ ↑ traffic

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money ↓ ↑ traffic

SideFind

# Other Funding Sources

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- Affiliate networks
  - Commission Junction, LinkShare, Performics
- Pay-per-click advertising
  - Click fraud, syndication fraud
  - Yahoo, Google (XML partners, AdSense), FindWhat, Kanoodle, LookSmart, Marchex, etc.
- Banner ad networks
  - Ad farms