



# Sex Offenders in a Digital World

Facilitator:

Jim Tanner, Ph.D.  
President, KBSolutions Inc.

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## A Note To Clarify Who's Guilty



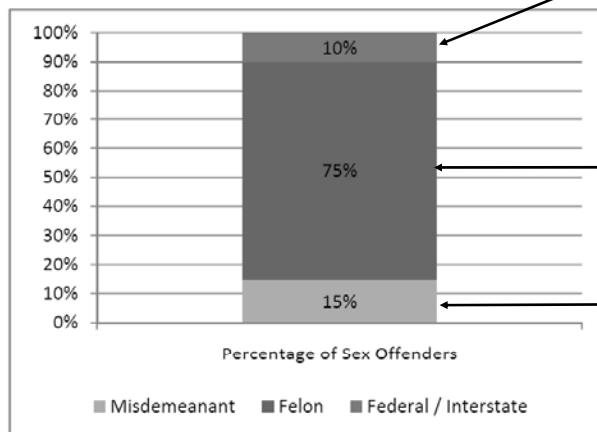
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## A Bit About Me

1. Ph.D. in Cognitive Social Psychology, Criminal Justice, and Evaluation Research.
2. Served on faculty at three universities, taught undergrad and grad classes in Criminal Justice, Corrections, Social Psych, and Statistics.
3. Was the 97<sup>th</sup> person in the world to achieve certification through SANS/GIAC in Computer Security Leadership.
4. Worked with NSA in Berlin during the 1960s hacking Soviet crypto systems.
5. Started as a Probation Officer in August of 1970.
6. Assigned my first Sex Offender in October of 1970.
7. Worked with sex offenders for the past 39 years in almost every capacity within community corrections.
8. Developed the Structured Sex Offender Treatment Review (with Dr. Steve Brake). The SSOTR is in use in numerous states.
9. Sworn staff in Colorado - Cyber Crime Analyst – provide service to Probation/Parole in Colorado – examined over 1,300 sex offenders’ computers.
10. Instructor on field computer forensics for APPA, NLECTC, HTCIA, USDOJ, DOD, ICAC and other “alphabet” agencies in the US and Europe.
11. Designed Field Search, a computer forensic program distributed free to law enforcement. Field Search is in use world-wide.
12. Master Trainer for Field Search Instructors.



## Who am I talking about?



Most severe, cross jurisdiction offenders. Usual subject of federal profiling efforts. The BAD GUYS

State (Tribal) level felon. Often child victims, often from position of trust. Not generally considered in federal profiling efforts.  
**My focus today.**

Misdemeanant offenders. Often “hands off”. Rarely included in federal profiling efforts.

### Why Assess or Manage Digital Elements of a Sex Offender Case?

- The computer is a “**window into the offender’s mind**”.
  - We surf in private – we don’t think others will see what we do.
  - We tend to look at what interests us and ignore what is uninteresting.
  - We send and receive countless emails and SMS/MMS messages.
  - Much of our ‘private’ lives can be detected from our digital use.
- Broader and more definitive than polygraph. Polygraph is **VALUABLE**, however...
  - Polygraph requires we **KNOW** which questions to ask (it is a closed system).
  - Polygraph requires we formulate dichotomous questions (again, closed set).
  - Polygraph requires multiple exams to assess potential areas of concern.
  - Polygraph exams require trained experts; results differ between examiners.
  - Polygraph is not admissible in hearings.
  - Computer review requires no advance knowledge of offender (an open system).
  - Computer review can easily establish base-line in a single exam.
  - Computer review can be done by non-technical officers.
  - Computer review results are less person-dependent.
  - Computer reviews are admissible in hearings.

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### Three Digital Areas to Assess

- **Interests**
  - What interests the offender?
  - Does this align with the presenting charge?
- **Involvement**
  - How involved is the offender with digital sexual content?
    - Frequency
    - Duration
- **Intrusiveness**
  - How intrusive (disruptive) is sexual content in the offender’s life?
  - Is the sexual content integrated into the offender’s life?

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## A Brief Look at Technology

- Computers & Mass Storage
  - Browser based access: Desktops, notebooks, netbooks
  - Other access: game stations, TVweb, Peer to Peer, FTP, Skype, etc.
  - OS concerns: Bootable kernels, pre-boot ROM systems
  - DVR/Tivo systems
  - Removable media (USB, CD, DVD, Blue-Ray)
- Mobile Devices
  - Smart phones
  - E-book readers
  - PDAs, GPS, etc.
  - iPods/mp3 players
- Security / Privacy
  - Antivirus (' TVDI ')
  - Privacy Browsing (most browsers now)
  - Sandboxes (sandboxie.com)
  - Onion Router Networks (more later)
  - Encryption

See <http://www.kbsolutions.com/socompnt.pdf> for a T&C template.

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## Victim Access

- Finding jobs which put offender close to potential victims.
- Structuring time with potential victims. Internet help this along.
- **Family members or trusted others. (<10% web**
- "Grooms" environment as well as victim.
  - This is why an Internet predator is "beyond the curve".
- Thickness of file indication of difficulty of case.
- Always an exposed potential victim.
- Offenders tell me they "watch the parents". On Internet, they watch the postings – IF the offender is strategic.



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## Grooming Children

1. Forming a special bond.
  - A. Making child feel special.
    - 1) Showing particular interest (fake)
    - 2) Keeping secrets with child.
    - 3) Gifts – links, software, etc.
  - B. Engaging in peer-like involvement.
    - 1) Treating child emotionally like a peer
    - 2) Sharing intimate details about sex life.
    - 3) Making child a confidant.



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## Grooming Children (cont.)

2. Creating an emotional reliance.
  - A. Increased positive attention.
  - B. Isolate child from others – web help
3. Attenuate natural resistances.
  - A. Gradual sexualization of relationship
  - B. Progression of physical contact.
  - C. Acts which decrease boundaries (hugs, wrestling, etc.).

Missing on the Internet, so must lure in other ways – often with images. (Collections are sometimes “tools”.)



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## Grooming Children (cont.)

4. Actions which intimidate/threaten.
  - A. Blaming and induction of guilt.
  - B. Grooming others so child won't be believed.
  - C. Threats (veiled and direct).



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## Theoretically Informed Targets for Sex Offender Management

### Finkelhor's Thresholds

Motivation Toward Sexual Deviance	SO must have deviant interests and motivation. Often result of character disorder.	Limited potential for impact. Arousal patterns can be changed somewhat but require willing participant.
Inhibition of Resistance to Cultural Taboos	SO must overcome own socialization. Usually through substance abuse or cognitive distortions.	Good potential for impact. Our best target for treatment. <b>This is where the internet comes into play</b>
Structured Access to Potential Victims	SO must gain private access to victims for sufficient time.	Medium potential for impact. A good target for monitoring. Unfortunately, we have no way to identify the next victim.
Overcoming Victim's Resistance	SO must overcome victim's resistance. Usually done by coercion or manipulation.	Limited potential for impact. Willing SO reduces behavior, unwilling SO learns new skills.

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## **Eight Ways To Access Sex On The Internet**

1. Visit A Web Site (don't forget phones & PDAs)
2. Blogs (actually web sites, but I consider them separately.)
3. Download From A Usegroup
4. Join An IRC Channel (Chat Room)
5. Email Contact
6. Peer to Peer (P2P)
7. Web 2.0 (e.g. SecondLife)
8. Gaming

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## **A Simplified Taxonomy of Site Types**

1. Broker Site
2. Content Site
  1. User participation sites
    1. User submission sites
    2. Interactive web cam sites
    3. Erotic literature
    4. "Matchmaking"
    5. Resource identification
  2. Passive user sites
    1. Point of purchase site
    2. Marketing site
3. Recruitment sites

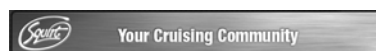
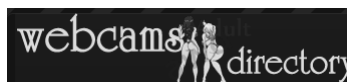
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## Pichunter Categories on 4/13/10

Amateur	Chubby	Latinas	Petite
Anal	Closeups	Leg	Pornstars
Anime	Cops	Lesbians	Public
Asian	Cumshot	Lingerie	Pussy
Ass	Dildo	Live Web Cams	Redheads
Babe	Fetish	Machines	Schoolgirls
Beach	FFM	Masturbation	Shower
BDSM	Finger/Fist	Maids & Kitchen	Shemale
Beautiful	Gangbangs	Mature	Smoking
Bikini	Gay	Nipples	Spy
Bizarre	Grannies	Nurse	Stockings
Black & Ebony	Hairy Chicks	Office	Teen
Blond	Hardcore	Oral	Tit
Blowjob	Housewives	Outdoor	Upskirt
Brunettes	Interracial	Panty	Young
Celebrities	Indian	Pee	
Cheerleaders	Japanese	Penis	

## Content Sites

- User Participation
  - Members send in content
    - [www.voyeurweb.com](http://www.voyeurweb.com) - oldest and largest
  - Interactive Web Cams
    - chat based - [www.honez.com](http://www.honez.com)
    - iFriends "campilot"
  - Erotic Literature
    - [www.literotica.com](http://www.literotica.com) and [www.asstr.org](http://www.asstr.org)
  - Matchmaking
    - [www.adultfriendfinder.net](http://www.adultfriendfinder.net)
    - [www.alt.com](http://www.alt.com)
  - Resource identification
    - [www.squirt.org](http://www.squirt.org)



[ [literotica.com](http://literotica.com) ]



Alt.Sex.Stories Text Repository  
 ...because the best things in life truly are free.

**Literotica Top Twelve Categories on 3/9/10 by Number of Stories**

Category	03/10	12/09	12/08	12/07	12/06	12/05
1. "Erotic Couplings – Wild consensual 1 on 1 sex"	29631	28776	24840	22785	19732	16418
2. "Incest – Keeping it in the family"	21047	20399	17243	15285	12935	10394
3. "BDSM – Bondage, D/s, and other power games"	16317	15740	13460	11992	10098	8029
4. "Loving Wives – Adventurous married women & mates"	15686	15163	12919	11563	9922	7855
5. "Group Sex – Orgies, swingers, and others"	12589	12238	10837	9752	8379	6954
6. "Non-Consent/Reluctance – Fantasies of control"	9509	9163	7543	6801	5704	4540
7. "Exhibitionist & Voyeur – Watching and being watched"	9414	9026	7726	6892	5934	4808
8. "Romance – Candlelight, wine and a soft kiss"	9128	8823	7567	6677	5535	4181
9. "Lesbian Sex – Women who love other women"	7967	7766	6791	6045	5164	4088
10. "Gay Male – Men loving men"	6451	6194	-	-	-	-
11. "Mature – May/December lust and love affairs"	6124	5919	5215	4556	3831	2981
12. "Fetish – Feet, panties, transsexual love and other kinky things"	6037	5797	5000	4317	3601	2929

"Gay Male" replaced "Celebrities" in early 2009

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**Taxonomy of Pornography**

Adapted from Taylor & Quayle, 2003 Child Pornography: An Internet Crime

LEVEL	TYPE	PICTURE QUALITIES
1	Indicative	Non-erotic & non-sexualized clothed individuals. Commercial images inappropriately organized.
2	Nudist	Naked or semi-naked individuals from commercial sources in non-sexual situations or positions.
3	Erotica	Posed or unposed images of individuals clothed or naked, which suggests sexual interest. NOTE: may not be sexual to the casual observer.
4	Explicit	Naked or partially clothed individuals posed such that most casual observers would imply sexual content. Focus is generally on genitals in these images.
5	Explicit Sex Acts	Individuals engaging in explicit sexual activity.
6	Non-Compliance	Images which suggest non-compliant victims.
7	Sadistic/Beastiality	BDSM or sexual activity with an animal.

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## Types of Internet Offenders

Adapted from earlier work by Tony Krone, 2004 and Jim Tanner, 2002

Type	Description / Criteria	Victim Contact	Security
<b>Reactive</b>	Incidental porn use. Stumbles upon porn or responds to pop-ups. <1 hr/mo	No	No
<b>Active Seeker</b>	Actively seeks porn via web sites or Use Groups. < 10 hrs/mo, porn cached.	No	No
<b>Collector</b>	Catalogues any amount of porn. File sharing, < 30 hrs/mo, porn saved.	No	Yes
<b>Engager</b>	Solicits or grooms victims online. > 30 hrs/mo	Yes	Yes
<b>Abuser</b>	Engages in sexual contact with victim met online. >30 hrs/mo	Yes	Yes
<b>Promoter</b>	Produces or distributes pornography. > 40 hrs/mo	Yes	Yes

**Security** = May attempt to hide some or all material on drive.

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## Some Quick Definitions

Patterned Internet Pornography Use

- **NONE:** No use, casual or incidental use. Limited exploratory surfing.
- **LOW:** No disruption of personal life. Regular use less than 20 hours a month. Binge usage – up to 5 hours at a time but less than 10 hours a month.
- **MED:** Some disruption of personal life as a result of pornography use. Regular use more than 20 hours a month but less than 40 hours a month. Binge usage of more than 5 hours at a time, but less than 20 hours a month.
- **HIGH:** Significant disruption of personal life as a result of pornography use. Regular use of more than 40 hours a month. Binge usage of more than 5 hours at a time and totaling more than 20 hours a month.

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### Past Sex Offending History

- **NONE** No previous offending behavior.
- **LOW** Single incidence of “Hands Off” offending.
- **MED** Multiple incidences of “Hands Off” offending.
- **HIGH** Any “Hands On” offending behavior. Any offending behavior which involves coercion or threat. Any behavior involving victim who is “vulnerable” (e.g. child or person in trust).

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### A Working Model of Risk

OFFENDING	High	HIGH	HIGH	VERY HIGH	VERY HIGH
	Med	MED	HIGH	HIGH	VERY HIGH
	Low	LOW	MED	HIGH	HIGH
	None	NONE	LOW	MED	HIGH
		None	Low	Med	High
		ADDICTION			

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Meta Analysis of 74 studies, 12,912 subjects primarily in the U.S. and Canada

1. For persons reporting exposure to pornography,
  - 28% increase in sexual deviancy
  - 21% increase in sexual perpetration
  - 21% increase in problems with intimate relationships
  - 26% increase in acceptance of the rape myth.
2. Most factors were found to not mediate the effect of exposure to pornography on the four identified outcomes.

**The Effects of Pornography on Attitudes and Behaviours in Sexual and Intimate Relationships**

Elizabeth Oddone Paolucci and Mark L. Genuis  
National Foundation for Family Research and Education, Calgary, Alberta  
Claudio Violato, University of Calgary  
National Foundation for Family Research and Education, Calgary, Alberta  
nffre@nffre.com

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## What We Can Learn From Computer Use

1. Use patterns - The TRAPS
  1. **T**hemes – the content or interest areas of porn usage. What proportion was spent on which types of material.
  2. **R**atio – the proportion of porn surfing to total Internet/computer usage.
  3. **A**mount – the total amount of time spent surfing porn sites.
  4. **P**ace – the speed with which one moves from site to site and image to image.
  5. **S**ession – the length of average sessions, frequency of surfing, how deeply into the site did the offender go?

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14 things that make them "Not-Low-Risk"  
(i.e. increased investment in sexual content)

1. Surfing more than 10 hours a week of sexual content.
2. High ratio of sexual sites to general surfing.
3. Saved versus cached material.
4. Any cataloguing of sexual content.
5. Low ratio of "Splash Page" to "Inside Site" materials.
6. Membership in adult sites.
7. Nude pictures of offender.
8. Nude pictures taken by, created by, or altered by the offender.
9. Erotic literature written by the offender.
10. Trophy materials.
11. Usegroup or Peer to Peer activity seeking sexual content.
12. Red Flag themes which have a significant number of images/files:  
Bestiality, Non-Consensual, Snuff, Minors, Exhibitionism
13. Internet grooming of minors.
14. Use of technology for sexual content which indicates a more heavily invested approach:  
IRC/IM, SMS/MMS, Virtual Web 2.0 (e.g. Second Life)

This list is available at: [www.kbsolutions.com/KBS14factors.pdf](http://www.kbsolutions.com/KBS14factors.pdf)

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Need For Computer Monitoring While Under Supervision

B e h a v i o r	<b>VERY-HIGH</b>	<b>HIGH</b>	<b>HIGH</b>	<b>HIGH</b>	<b>HIGH</b>	<b>HIGH</b>
	<b>HIGH</b>	<b>HIGH</b>	<b>HIGH</b>	<b>HIGH</b>	<b>HIGH</b>	<b>HIGH</b>
	<b>MOD-HIGH</b>	<b>MOD/HIGH</b>	<b>MOD/HIGH</b>	<b>HIGH</b>	<b>HIGH</b>	<b>HIGH</b>
	<b>MODERATE</b>	<b>MODERATE</b>	<b>MODERATE</b>	<b>MOD/HIGH</b>	<b>HIGH</b>	<b>HIGH</b>
	<b>LOW-MOD</b>	<b>LOW/MOD</b>	<b>LOW/MOD</b>	<b>MODERATE</b>	<b>MOD/HIGH</b>	<b>HIGH</b>
	<b>LOW</b>	<b>LOW</b>	<b>LOW</b>	<b>LOW/MOD</b>	<b>MODERATE</b>	<b>MOD/HIGH</b>
	<b>LOW</b>	<b>LOW/MOD</b>	<b>MODERATE</b>	<b>MOD/HIGH</b>	<b>HIGH</b>	

Actuarial Risk of Contact Offense

LOW: Reactive type of user: Incidental use, downloads small amounts when prompted. – OR – Less than 1 hour per month spent viewing porn.  
 LOW-MOD: Active user of porn: Actively seeks images via web pages. – OR – More than 1 hour per month but less than 10 hours a month spent viewing porn.  
 MODERATE: Collector behavior: Actively seeks through file sharing or catalogues material. – OR – More than 10 hours a month but less than 30 hours a month viewing porn.  
 MOD-HIGH: Engager behavior: Solicits or grooms children on-line.  
 HIGH: Abuser behavior: Engages in sex with child met on-line. – OR – More than 30 hours per month viewing porn.  
 VERY HIGH: Promoter or commercial behavior: Produces or distributes child porn.

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It is difficult to unwind “normal” chat conversation from grooming conversation. In a preliminary study, KBSolutions examined the chat logs and threads of 50 individuals **CONVICTED** of soliciting children in chat/SMS.

Weeding out words which might appear in “normal” chat, we came up with the following list of terms that were used by a high percentage of offenders in their solicitation chat.

While these words could also appear in “normal” chat, they **MAY** help identify those attempting to groom children.

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Of the 50 offenders convicted for on-line solicitation:

**100% of offenders used these terms:**

call car come done ex girl house make old pic

**96% of offenders used these terms:**

ask bf dress ever far feel home show

**90% of offenders used these terms:**

ace age ass cam du live meet mom pics suck

**82% of offenders used these terms:**

act alone bed bod bring never nything sex times watch

Underlined words are the one's I'd probably add to searches based on my reading of the chat logs.

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## Where Did Field Search Come From?

Designed by Jim Tanner



Dr. Tanner recognized the need for a tool that could be used in the field by non-technical officers. KBSolutions developed the initial specifications for Field Search.

Developed by Jim Persinger



KBSolutions contracted with a leading forensic examiner/programmer to develop the tool. PM Investigations provided development time at substantially reduced rates.

Funded and Distributed by NLECTC



Joe Russo, a visionary at NLECTC-RM, saw the need for the tool and convinced NLECTC to fund its development and provide funding for training professional staff across the country.

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## Other Tools I Use In The Field

Tool	URL	What it does
ERUNT	<a href="http://www.larshederer.homepage.t-online.de/erunt/">www.larshederer.homepage.t-online.de/erunt/</a>	Extracts the User's registry.
USBDeview	<a href="http://www.nirsoft.net">www.nirsoft.net</a>	Lists ALL USB devices EVER plugged into the computer.
WinAudit	<a href="http://www.pxserver.com/WinAudit.htm">www.pxserver.com/WinAudit.htm</a>	Provides useful information about the computer and installed software.
Autoruns	<a href="http://www.sysinternals.com">www.sysinternals.com</a>	Lists everything that the system runs at boot-up.
UserProfilesView	<a href="http://www.nirsoft.net">www.nirsoft.net</a>	A "quick and dirty" listing of all Users on the computer.
Windows File Analyzer	<a href="http://www.mitec.cz">www.mitec.cz</a>	"Geeky" tool which allows one to analyze several special file types.
Windows Registry Recovery	<a href="http://www.mitec.cz">www.mitec.cz</a>	"Geeky" tool which allows one to review registry contents in a "readable" format.

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### Comparison of Levels of Management / Monitoring

	Remote	Alert	Report	Review
<b>Focus</b>	24/7 access to offender activity through secure web portal	Officer is alerted when offender engages in key activities.	Officer receives periodic report on offender activity.	Officer goes to offender's computer and reviews activity captures by application OR uses Field Search.
<b>Strengths</b>	<ol style="list-style-type: none"> <li>1. "Real Time"</li> <li>2. Officer does not have to set a priori criterion.</li> <li>3. Can monitor from office</li> </ol>	<ol style="list-style-type: none"> <li>1. Least amount of work for officer.</li> <li>2. Reactive, but not passive.</li> <li>3. Can monitor from office.</li> </ol>	<ol style="list-style-type: none"> <li>1. Less work for officer than Remote, but more than Alert.</li> <li>2. Reactive, and more passive than Alert.</li> <li>3. Can monitor from office.</li> </ol>	<ol style="list-style-type: none"> <li>1. Officer is present in offender's environment.</li> <li>2. Officer can take immediate action if violation found.</li> <li>3. Passive approach.</li> </ol>
<b>Issues</b>	<ol style="list-style-type: none"> <li>1. Increased work load for officer.</li> <li>2. Establishing expectation of 24/7 monitoring.</li> <li>3. Officer must review benign behavior.</li> </ol>	<ol style="list-style-type: none"> <li>1. Officer must set a priori criterion OR use vendor established criterion.</li> <li>2. Officer may not check for behaviors outside the criterion.</li> </ol>	<ol style="list-style-type: none"> <li>1. Officer must set a priori criterion – OR – use application established criterion.</li> <li>2. Officer may not check for behaviors outside the criterion.</li> <li>3. Officer must review benign behavior.</li> </ol>	<ol style="list-style-type: none"> <li>1. Officer must travel to offender location.</li> <li>2. Officer must review benign behavior.</li> </ol>

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### Popular Management Software Comparison

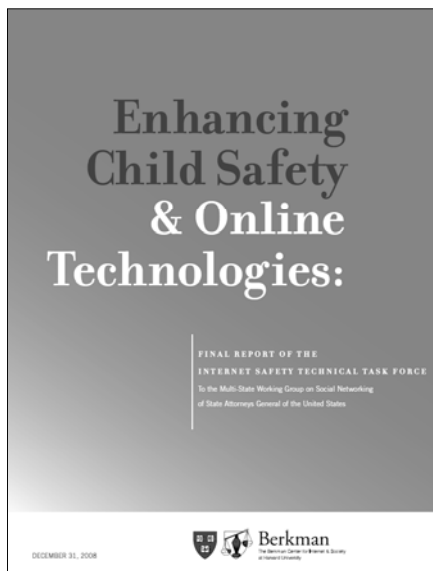
Application	Advantages	Drawbacks	Cost
Cyber Sentinel® Securitysoft.com	Blocks Captures Violations Time Controls Email Alerts	Proprietary Lists Must go onsite to review	\$40 One-time fee
CSWeb® Securitysoft.com	Remote Control Blocks/Captures Viols Time Controls Email Alerts	Proprietary Lists (can exclude terms however)	\$40 first year \$12 all other years
Spector Pro® Spectorsoft.com	Captures Robustly Time Controls Email Alerts	Must go onsite to review	\$100 One-time fee
E-Blaster® Spectorsoft.com	Captures Email Reports/Alerts Remote Adjustments	Reports daily Captures limited Additional fee for remote installation	\$100 One-time fee
Impulse Control® Impulsecontrol.net	Remote Control Captures/Alerts/Reports Bio-ID Time Controls	Cost	Agency: \$10/mo Offender: \$25/mo
Remote-Com ® Remote-com.com	Remote Control Captures/Alerts/Reports No Agency Staff Time	Cost Authority Questions	Agency: \$ 0 Offender: \$35 a month
SureView® www.raytheon.com/oakley	Remote Control Captures/Alerts "Video Replay"	Cost	Agency: \$ 0 ?? Offender: \$25 a month

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What do we know about risk?

The report issued 12/31/08 reveals many conceptions held by the public are not substantiated by research.



Source: <http://cyber.law.harvard.edu/pubrelease/isttf/>

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1. 13% of youth received sexual solicitations on-line
2. 81% of these youth were aged 14-17
3. Less than 10% of solicitations come from individuals over 21 or of an unknown age. Most come from adolescents (cc 45%) or 18-21 yr olds (cc 25%).
4. Less than 2% of youth deem the solicitations distressing – most ignore or deflect them.
5. Chat and IM are the primary venues for solicitations (77%).

 Berkman  
The Harvard Center for Internet & Society

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6. Only 5% of adult sex offenders who youth subsequently met off-line lied about their age. The youth knew they were meeting an adult.
7. 73% of youth who met an offender off-line did so more than once.
8. Females aged 14-17 receive the bulk of solicitations.

## 9. The most significant factor in off-line sexual encounter is discussing sex on-line.

10. Youth who are at risk on-line tend to be at risk off line as well.

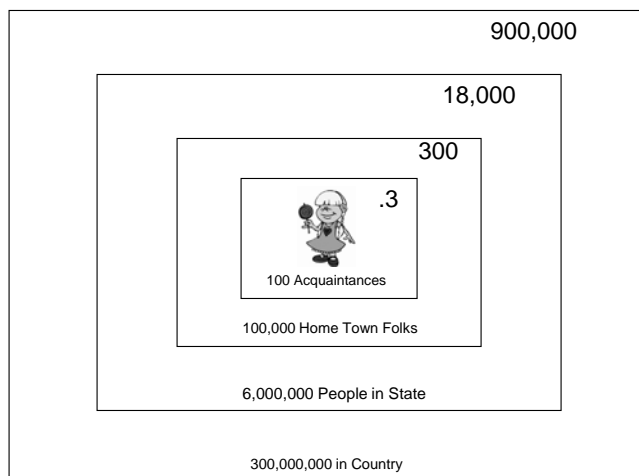


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KNOWLEDGE BASED SOLUTIONS

Assuming 0.3 % Rate for  
Convicted Sex Offenders

## Understanding The Real Web Risk



227,190,989 USA Internet Users = 681,573 Offenders

[www.internetworldstats.com/stats2.htm#north](http://www.internetworldstats.com/stats2.htm#north) - 3/31/09

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## Becoming Invisible

Let's start with the web. Search yourself:

Google.com (etc.)	Brbpub.com
Zabasearch.com	Pipl.com
Zoominfo.com	Archive.com (wayback)
Birthdatabase.com	Thepaperboy.com
Searchsystems.net	Intelius.com
Melissadata.com	Publicrecordsonlinerecords.com
Myfamily.com	Ancestry.com

Knowledge is power. Know what is out there on you.

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If you find information about yourself, you need to "Opt Out". This is time consuming and almost impossible to keep up with. Data is imported from public records on a regular basis.

### Neo-Public Records

- Property & Utility
- Telephones
- Voter registration
- Vehicles & DLs
- Lawsuits
- Judgments
- Warranty cards
- Credit cards
- Cell phones
- Websites & media captures
- Photographs
- Liens/Loans

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1. Open a Post Office Box. Have **ALL** correspondence and bills sent there. Fill out change of address forms with everyone!
2. Unlist (not in book) and Unpublish (not in databases) your phone number.
3. Consider using [www.inumbr.com](http://www.inumbr.com) or [www.tossabledigits.com](http://www.tossabledigits.com) as an intermediary.
4. READ privacy policies before filling out **ANY** applications or forms.
5. **OPT OUT** with all major information dealers (e.g. Intelius). Check back frequently – they update.
6. Incorporate and conduct as much business as you can through the corporation. Utilities are the most difficult and “leaky”.

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What's the catch?

1. It's almost impossible to completely disappear.
2. Doing all of this can really screw up your credit rating.

## Door #2

Do what is reasonable, and recognize you are findable.

Take a hint from computer security experts:

**“Security through obscurity is no security at all.”**

Make yourself more difficult to find, but assume you are findable. Set up good “perimeter defense” and use “defense in depth”.

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## Identity Theft

The credit reporting agencies:

**[www.transunion.com](http://www.transunion.com)**

**[www.experian.com](http://www.experian.com)**

**[www.equifax.com](http://www.equifax.com)**

All three allow you to place security freezes on line. It takes about 5 minutes each. Remember – BOTH spouses should do it. It may cost some fee to place. It **always** costs to temporarily remove.

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## Finding You



(303) 123-5673 x 223



24.88.176.107



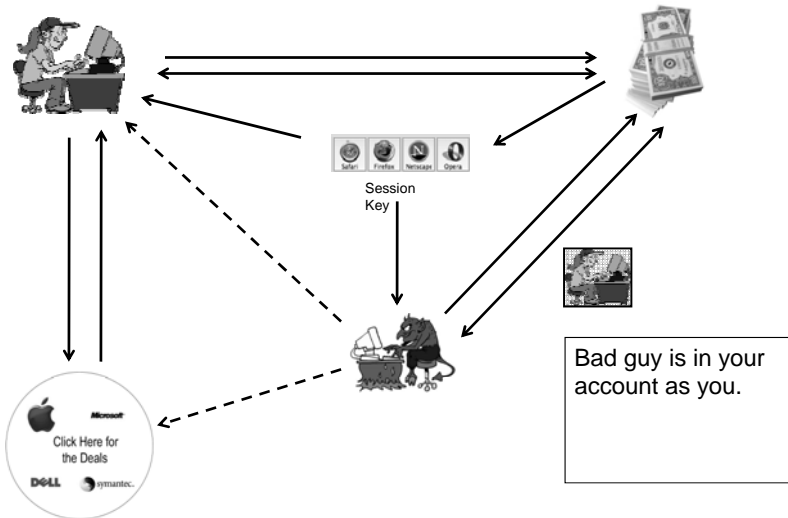
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## Economics of Cyber Crime

Model	Cost	Proceeds
Social Network Hook	Nil	\$1.25 per install (\$ 2 million)
Phishing Business (Canadian Pharmacy)	\$ 63	\$ 2,500 to \$25,000
Phishing Offshore Account	\$ 9,800	\$100,000
M-Pack Hostile web pages which create zombies	\$10,000	Spam \$300,000 Adware \$32,000 per month
Web 2.0 Spamvertising	\$ 720 a month	\$ 135,000 per month

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## Cross Site Scripting



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# Do I need a router?

**Cable**  
**Power**  
**USB**  
**Ethernet**

**BAD**

**GOOD**

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# Do I need a router?

192.168.x.x  
OR  
10.x.x.x

```
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Jim>ipconfig /all

IP Configuration

Host Name . . . . . : JimsXPS
Primary Dns Suffix . . . . . : 
Mode Type . . . . . : Unknown
IP Routing Enabled . . . . . : No
WINS Proxy Enabled . . . . . : No
DNS Suffix Search List . . . . . : hsd1.co.comcast.net.

adapter Local Area Connection 2:

Connection-specific DNS Suffix . : hsd1.co.comcast.net.
Description . . . . . : NVIDIA nForce Networking Controller
Physical address . . . . . : 00-1E-C9-38-97-BC
DHCP Enabled . . . . . : Yes
Autoconfiguration Enabled . . . . . : Yes
IP address . . . . . : 192.168.1.104
Subnet mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.100
DHCP Server . . . . . : 192.168.1.100
DNS Servers . . . . . : 68.87.85.98
                        68.87.69.145
                        68.87.78.130
Lease Obtained . . . . . : Thursday, April 16, 2009 9:06:45 AM
Lease Expires . . . . . : Friday, April 17, 2009 9:06:45 AM

C:\Documents and Settings\Jim>
```

Run

Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.

Open: cmd

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## Safe Surfing

1. Install a good anti-virus package, keep your definitions up to date.
2. Install a good anti-spyware package, scan your system weekly.
3. Install a good firewall – (Window's isn't a good one). [Vista – turn on bi-directional, it's off by default]
4. Install a router if you are running cable modem and don't have a 192.168.x.x or 10.x.x.x IP address. ("ipconfig /all")
5. Wireless: Its **ALL** a postcard ! More on that in a minute.
6. Use good passwords on your computer (12+ mixed characters). For example "300Plus400=700" is a good password!.
7. NEVER link to a site from an email, even from a trusted source.
8. NEVER browse to unknown sites when logged on as an administrator.

## Safe Surfing 2

9. Avoid P2P and IRC file shares with anyone you don't know well. Better yet, don't do them at all.
10. Don't give out personal or financial information unless you are SURE who you are talking to.
11. Use your ISP's anti-spam filters on your email.
12. Don't download ANY software without KNOWING exactly what it is and does.
13. NEVER click on an email attachment without first scanning it with an anti-virus application.
14. TURN OFF your preview pane in your email client.

## Safe Surfing 3

15. Keep your system patched and up to date.
16. Make sure others using your computer follow these rules.
17. Make FREQUENT backup copies of anything you can't afford to lose.

It's not a matter of IF your computer will experience problems, it's a matter of WHEN it will experience problems.



Wireless – It's all a postcard !

1. Turn on WPA (WEP if you can't use WPA). Use STRONG passphrases.
2. Change default password on AP/Router.
3. Change default SSID (name of device).
4. Turn OFF SSID Broadcast.
5. Enable MAC Address Filtering.
6. Put firewalls on EACH computer.
7. Make sure other Routers/Hubs have firewall enabled.
8. Turn OFF AP/Router when gone for extended periods of time.
9. Buy your nearest neighbor a wireless router and install it as an open network.



1. It's still a postcard, actually more like a billboard.
2. Even "secure http" isn't – you are using a proxy.
3. **DELETE your cache after using public WiFi.**
4. Don't give out personal info over WiFi.
5. Don't log into secure sites using public WiFi.
6. Assume your computer has been "pwnd".

## Running a Mac?

85% of what I just covered still applies to you !

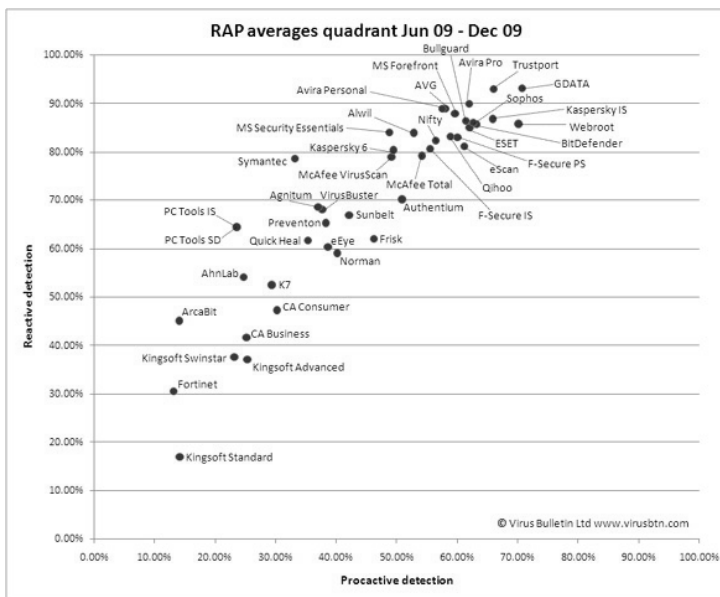


## Running Linux?

Unless you REALLY know what you are doing, 90% of what I just covered applies to you. Why do you think hackers use Linux ?



### What Is The Best Protection?



Source: /www.virusbtn.com/vb100/rap-index.xml  
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## Defense In Depth – My System

Or, what a computer security professional's computer looks like.

- |  |  |
|--|--|
| 1. Cable Modem with firmware firewall.       |  |
| 2. Fully patched OS (Windows XP Pro)         |  |
| 3. Router & (Wireless AP running WPA-2)      | <a href="http://www.linksys.com">www.linksys.com</a>                                   |
| 4. Firewall – Zonelabs' Security Suite 2009  | <a href="http://www.zonelabs.com">www.zonelabs.com</a>                                 |
| 5. Antivirus – Zonelabs' Security Suite 2009 | <a href="http://www.zonelabs.com">www.zonelabs.com</a>                                 |
| 6. IDS – PrevX Edge                          | <a href="http://www.prevx.com">www.prevx.com</a>                                       |
| 7. Firefox v 3.5 – NoScript running          | <a href="http://www.firefox.com">www.firefox.com</a>                                   |
| 8. Good Sync to external USB Daily           | <a href="http://www.goodsync.com">www.goodsync.com</a>                                 |
| 9. Image routinely TrueImage Home 2010       | <a href="http://www.acronis.com">www.acronis.com</a>                                   |
| 10. ERUNT running in background.             | <a href="http://www.snapfiles.com/get/erunt.html">www.snapfiles.com/get/erunt.html</a> |
| 11. Sandboxie                                | <a href="http://www.sandboxie.com">www.sandboxie.com</a>                               |

I am exploring a new anti-virus program called "Vipre".  
I will continue to use Zone Alarm as my firewall, but  
MAY switch to Vipre for my system protection.

