

# National Security After 9/11: Technology & the Law

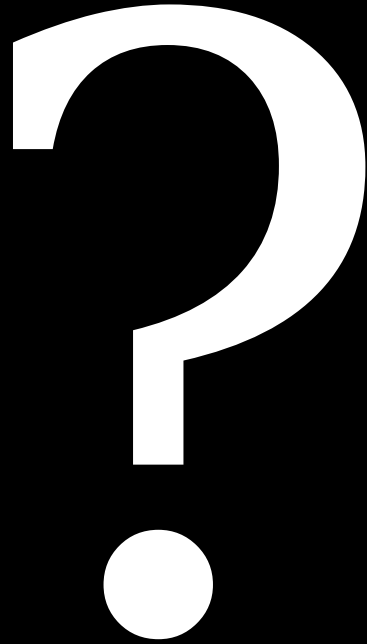
Ladue Chapel Presbyterian Church

R. Scott Granneman

Denise Lieberman

© 2006-2010 R. Scott Granneman  
Last updated 20101106

You are free to use this work, with certain restrictions.  
For full licensing information, please see the last slide/page.



Scott Granneman  
scott@granneman.com  
314-780-0489



# Washington University in St. Louis

Search

Directory

Calendar

Quicklinks



[Prospective Students](#)  
[Students](#)  
[Faculty & Staff](#)  
[Alumni, Parents, & Friends](#)

[Academics & Research](#)  
[Admissions](#)  
[Medicine & Health Care](#)  
[Libraries](#)  
[WUSTL & the Community](#)  
[Athletics](#)  
[Arts & Culture](#)

## News

- TV crime drama compound highlights immune cells' misdeeds
- Teach For America founder Wendy Kopp to deliver Washington University's 148th Commencement address
- Men repeat as Div. III champs, women fall short
- View all news stories/news media resources



Technique measures heat transport in the Earth's crust

## Events & Announcements

- Energy, Environment & Sustainability
- McDonnell International Scholars Academy
- Danforth University Center
- [Where to Go in Emergencies](#)
- [Follow WUSTL on Twitter](#)



 [Local Highway Construction Update](#)



Technology in Our Changing Society

Technology for Managers

Web Site Management

Web Design & Advanced Web Design

From Blogs to Wikis:  
Building Community  
in a Virtual Environment

Practical Security

Technology & the Law

Scott Granneman

ESSENTIAL CODE  
AND COMMANDS

# Linux<sup>®</sup>

PHRASEBOOK



NEGUS SOFTWARE SOLUTIONS SERIES

# Google™ Apps

D E C I P H E R E D

Compute in the Cloud to Streamline Your Desktop

Scott Granneman



PRACTICE SOFTWARE FREEDOM

Mac and iPhone book for  
users and developers



# Mac OS X Snow Leopard for Power Users

Advanced Capabilities and Techniques

Scott Granneman

Apress®



Denise Lieberman  
denise@deniseliieberman.com  
314-780-1833



Legal Director of ACLU-EM  
1997-2005



Courts & Civil Liberties

National Security, Civil Liberties  
& the Law

Gender & Law

Sexuality & Law

Technology & the Law



Missouri Voter Protection Coordinator



Technology  
never gets worse.  
It only gets better.

Bruce Schneier



Law  
is like  
cement

# Civil Liberties & Crisis

Throughout history,  
conflicts have coincided  
with curbs on civil liberties



1861

President Lincoln  
suspends Habeas Corpus

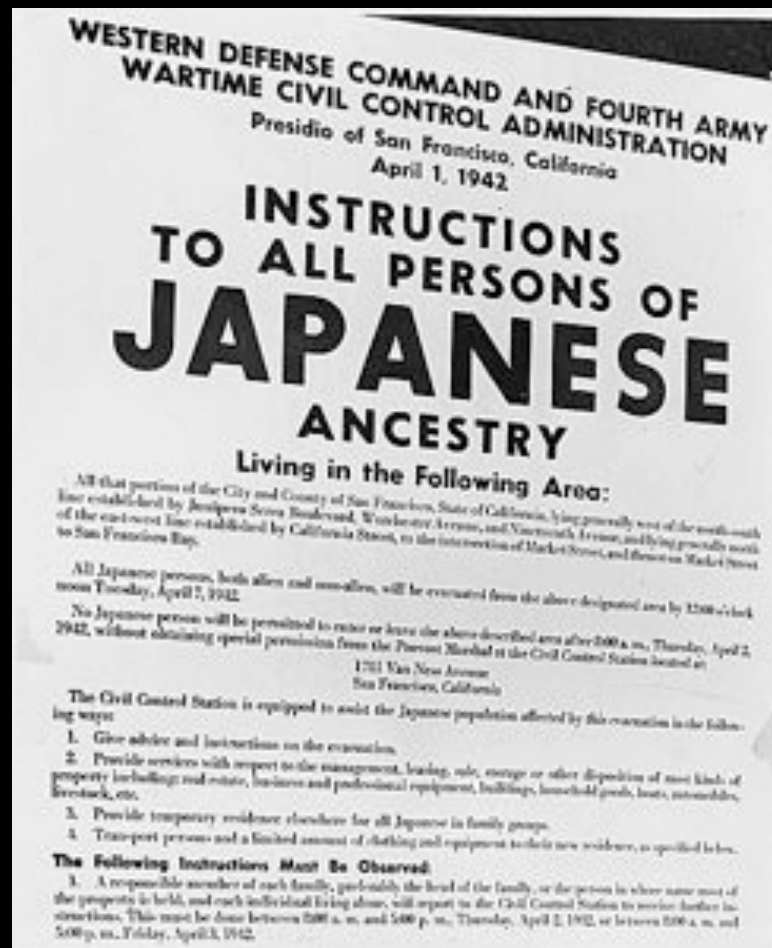


# World War I Espionage Act Restrictions on German & Russian immigrants



# WWII

## Internment of Japanese Americans Military Tribunals



# Cold War

Surveillance & investigation  
of political groups

House Un-American  
Activities Committee



# Vietnam War & Civil Rights Movements

Targeting of protesters

Expansion of FBI powers



9/11



How is  
9/11  
different?

Technology...  
changes how threats operate  
changes how governments respond



Nature of threats different

Non-state-sponsored

Less hierarchical

Dispersed

Anonymous

Our response is different  
Near-constant surveillance

Year	Incident	Deaths
1983	Beirut barracks	242
1985	Air India Flight 182	329
1993	World Trade Center	6
1995	Oklahoma City	168
1998	U.S. embassies in Kenya & Tanzania	224
1998	Lockerbie Bombing	270
2001	9/11	3000

# Operation Aurora

# Cyber attacks

## 2<sup>nd</sup> half of 2009

***NORTHROP GRUMMAN***

**Google**



**YAHOO!**



Google's programming code stolen  
Gmail accounts of dissidents hacked

Attackers used  
*zero-day vulnerabilities*  
in Internet Explorer

Microsoft later admitted  
it had known about the holes  
since September 2009









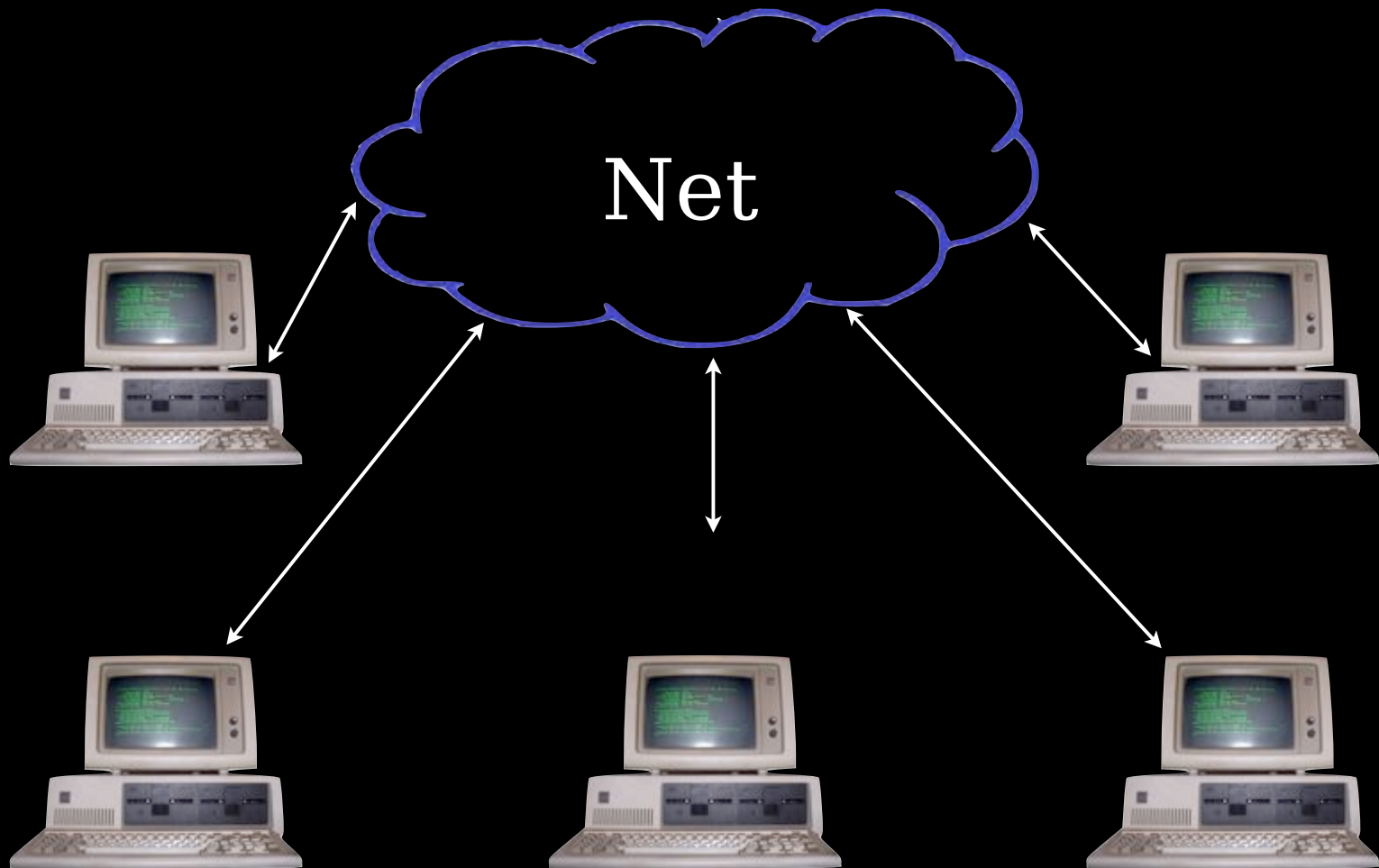


# Botnets

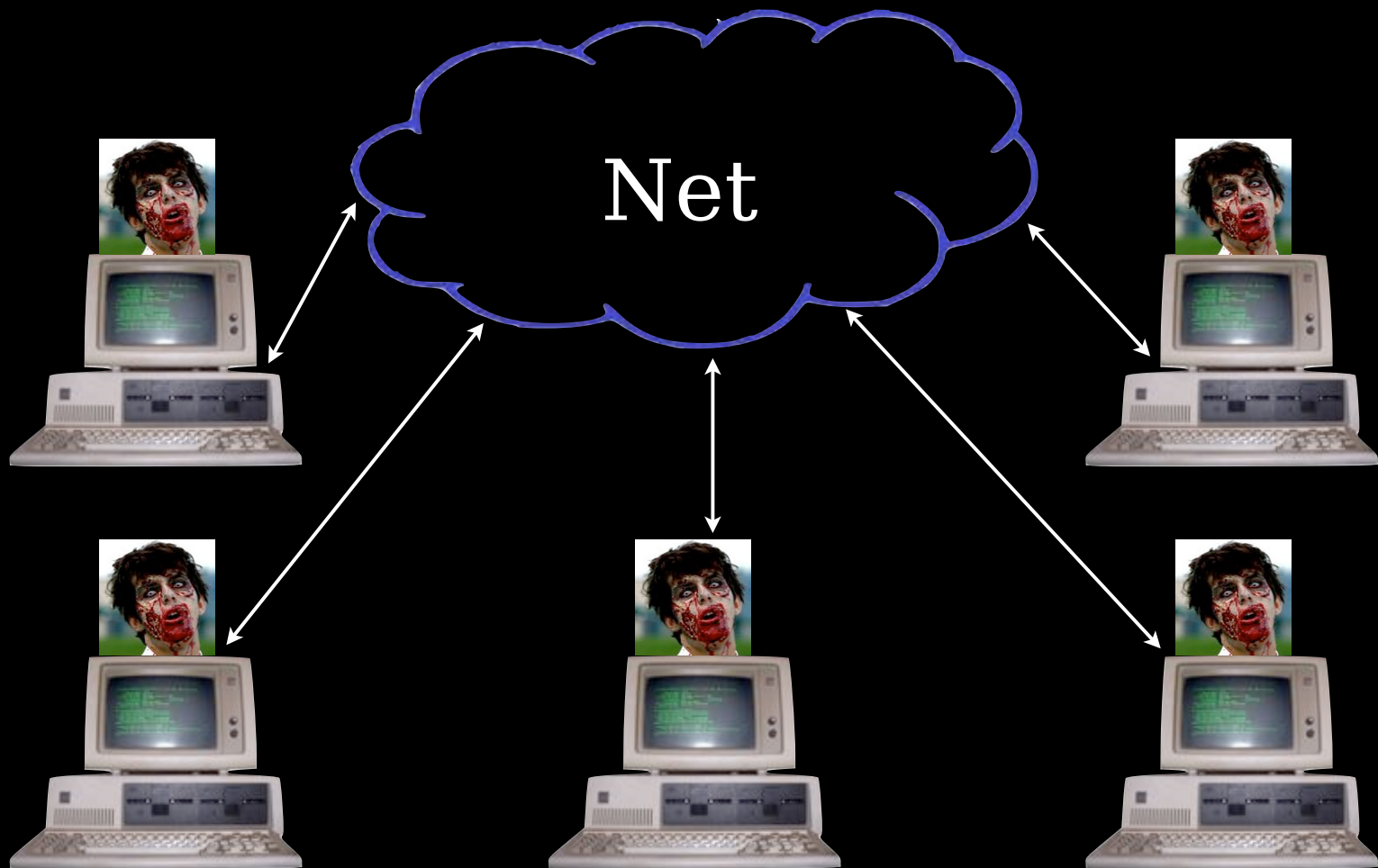
June 2007

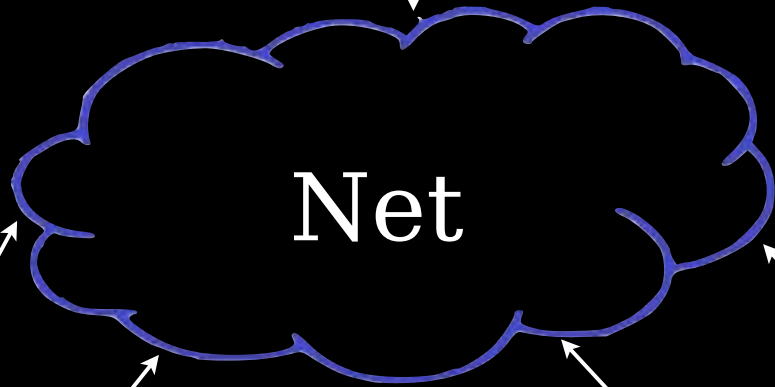
FBI announces botnet  
containing  
over 1 million Windows PCs

# What Botnets Are









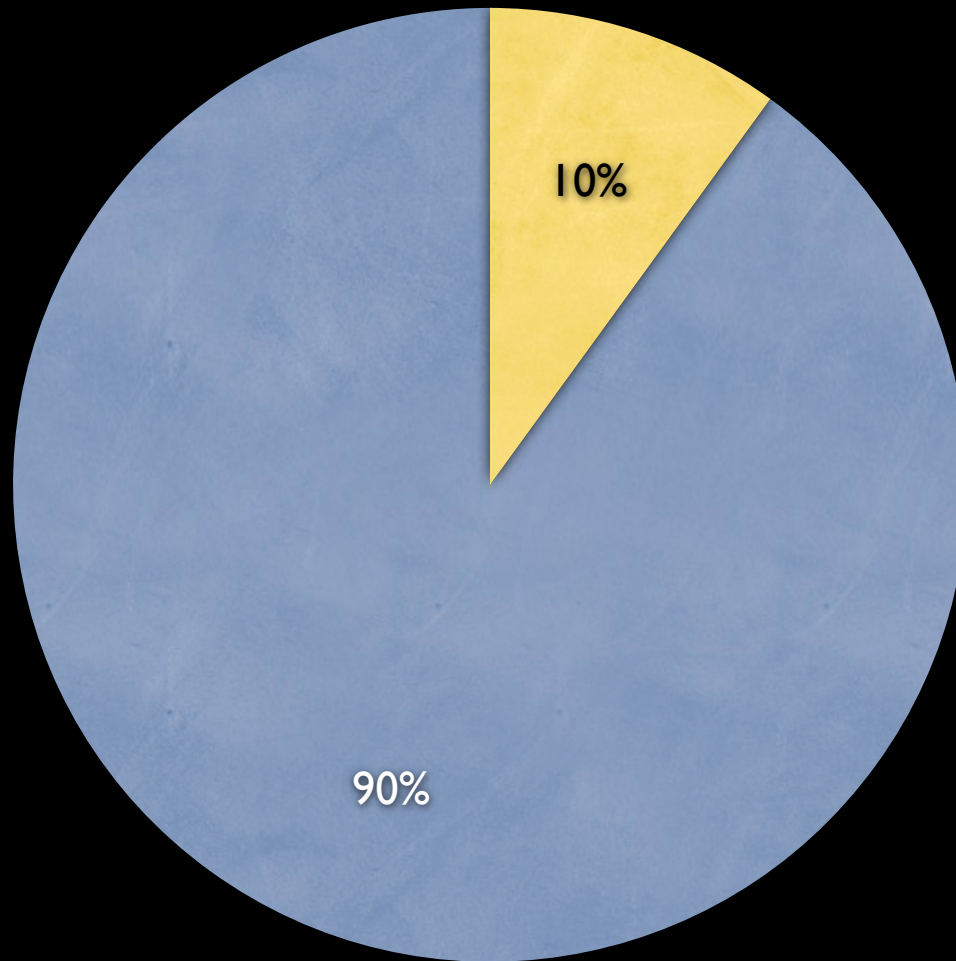
# How Botnets Spread

Google researchers examined  
4,500,000 web pages

<http://www.networkworld.com/community/?q=node/15121>  
[http://www.usenix.org/events/hotbots07/tech/full\\_papers/provos/provos.pdf](http://www.usenix.org/events/hotbots07/tech/full_papers/provos/provos.pdf)

● Malware or Malware Installs

● Safe



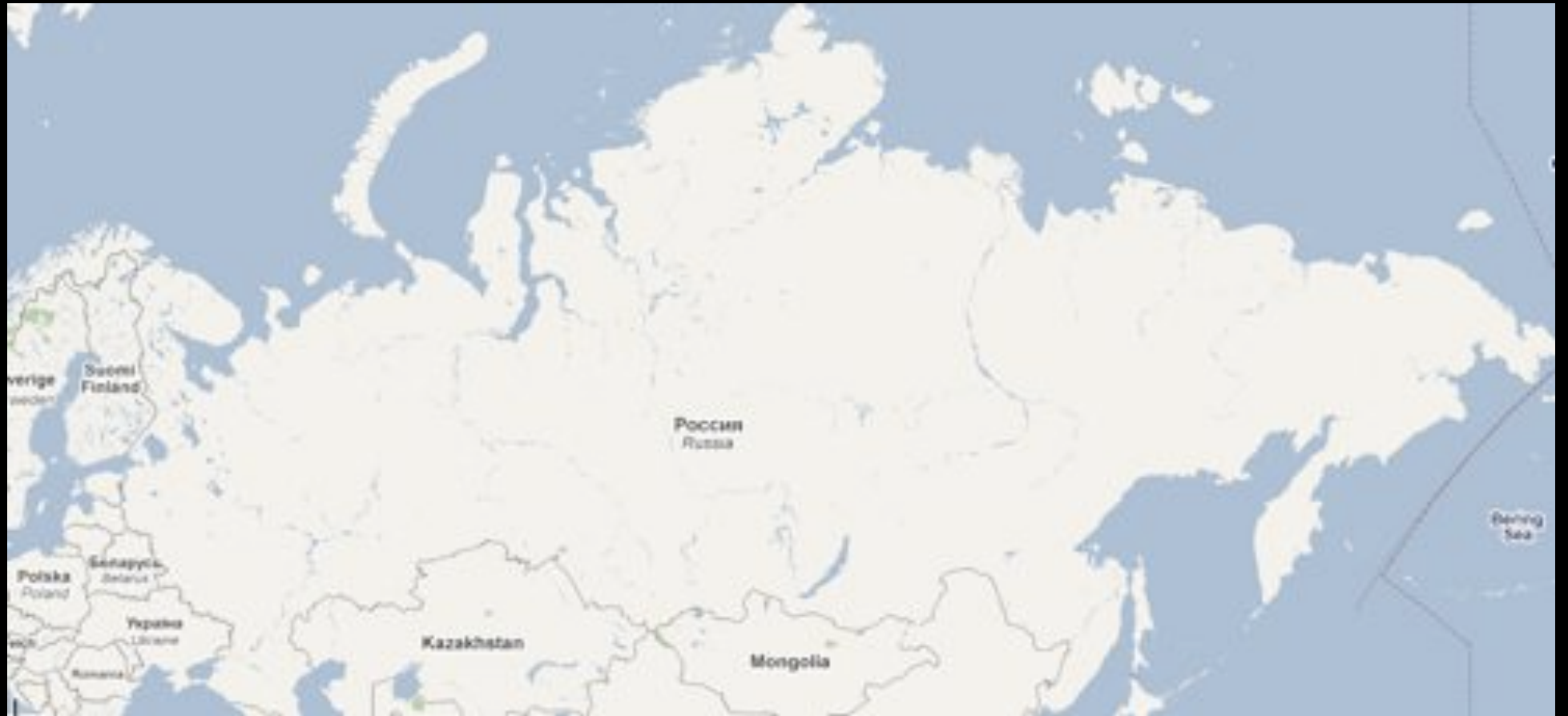




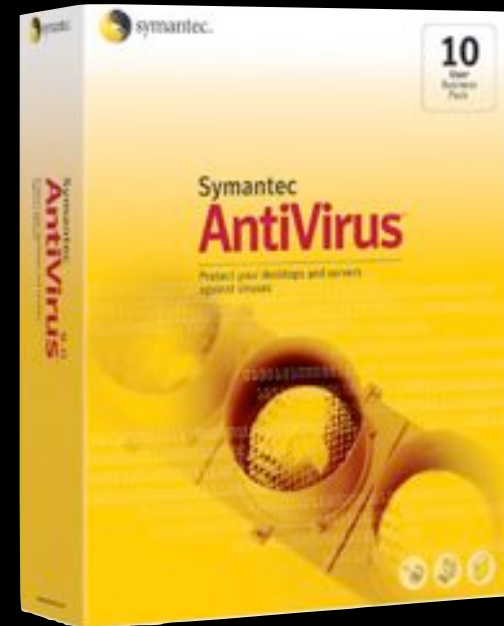
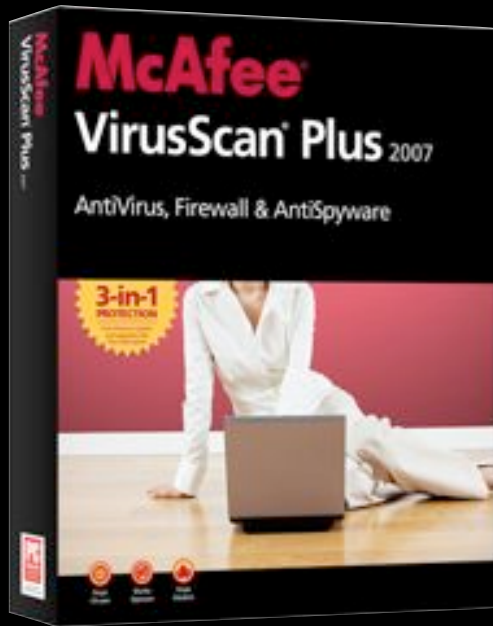
# Storm

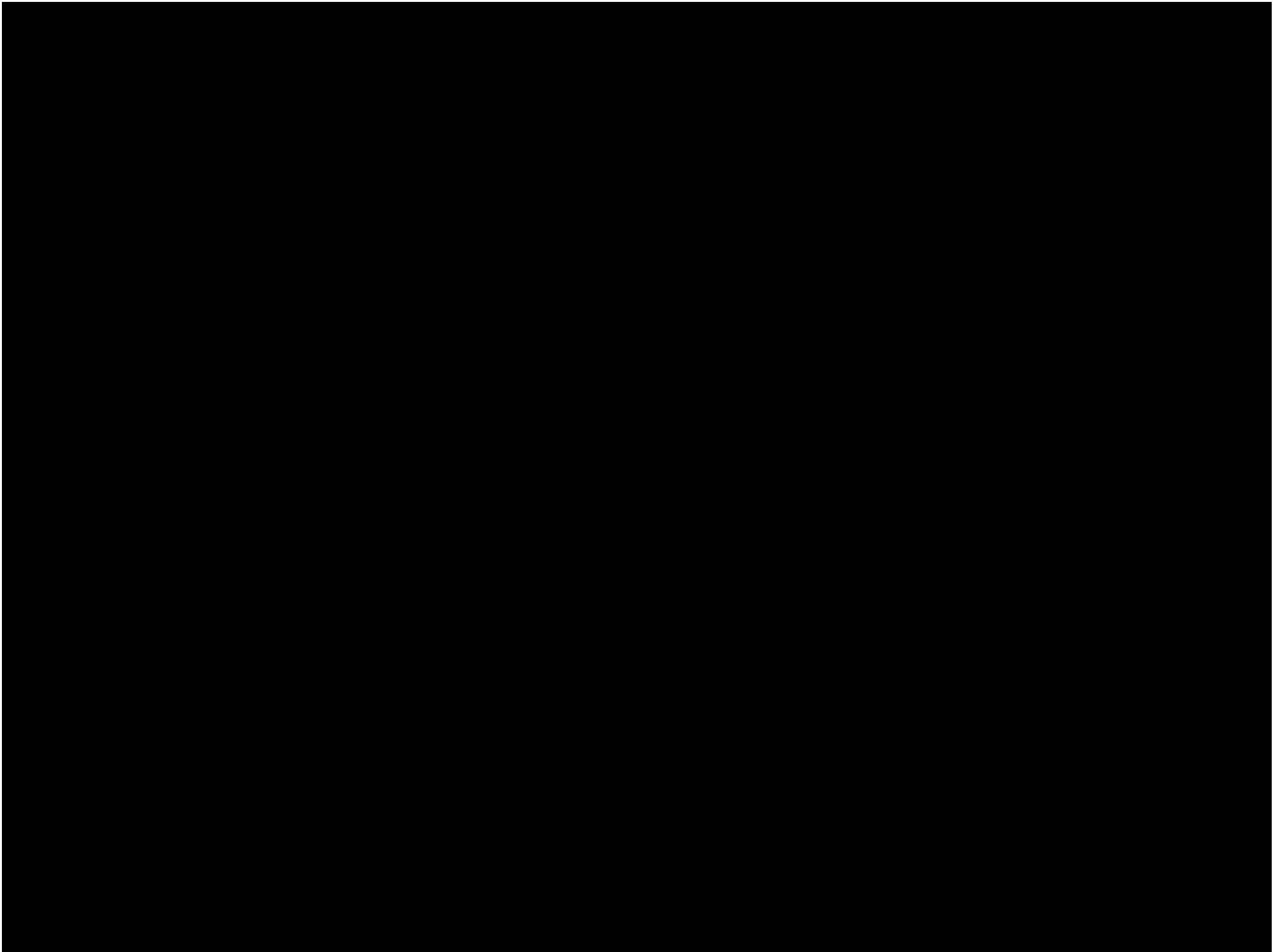


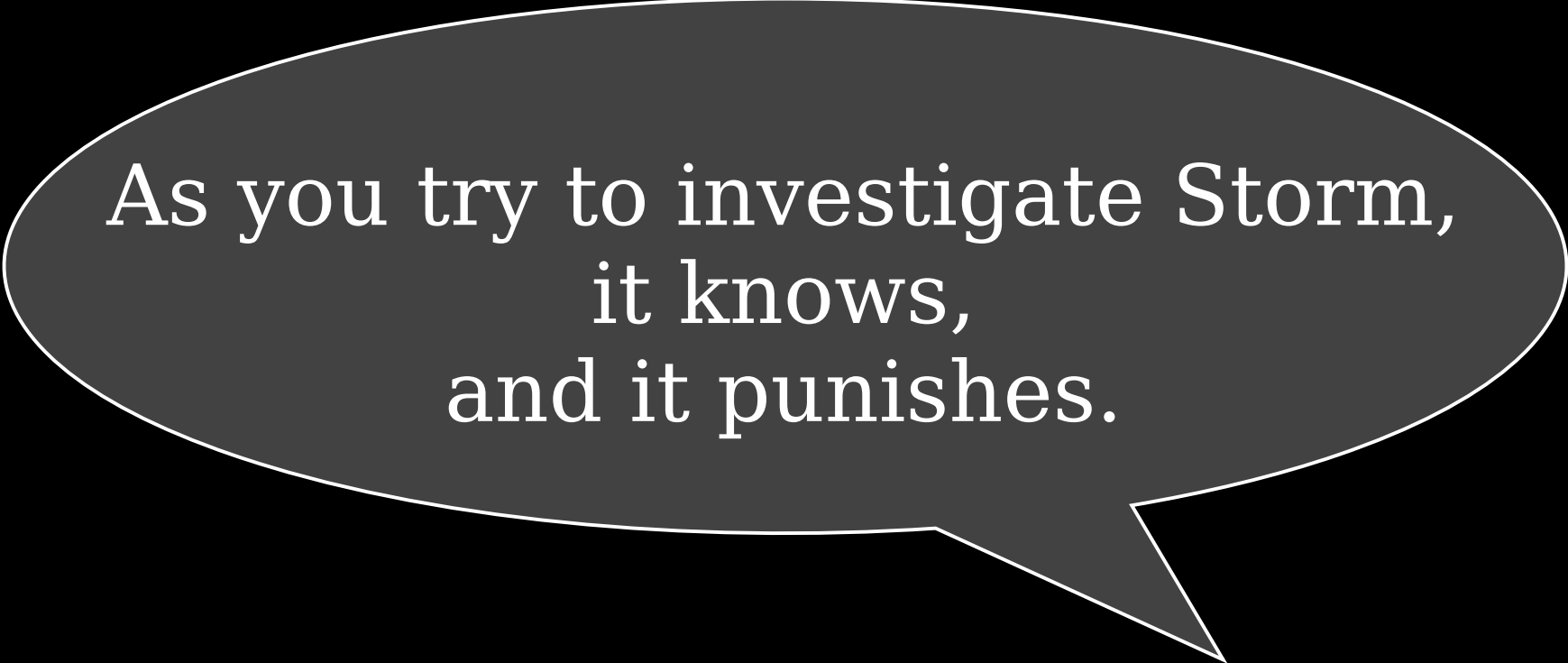
“Professionalized crimeware”



Works like peer-to-peer network  
No central location  
& no one command point to take out  
Communications encrypted







As you try to investigate Storm,  
it knows,  
and it punishes.

Security  
researcher

Who?



**MGM/UA**  
ENTERTAINMENT CO.

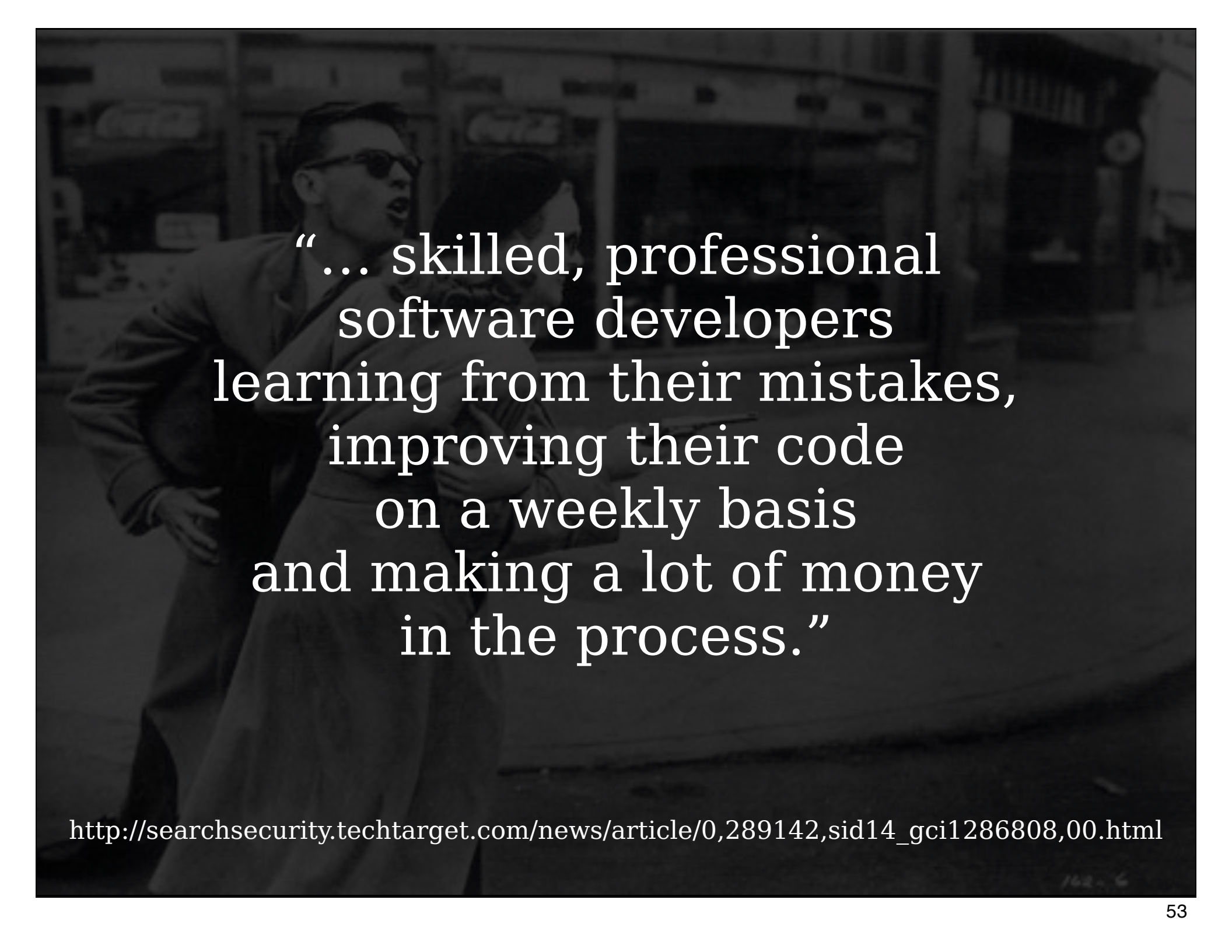
**WAR GAMES**

**UIP**









“... skilled, professional software developers learning from their mistakes, improving their code on a weekly basis and making a lot of money in the process.”

[http://searchsecurity.techtarget.com/news/article/0,289142,sid14\\_gci1286808,00.html](http://searchsecurity.techtarget.com/news/article/0,289142,sid14_gci1286808,00.html)

Why?





Spam

Keylogging

Phishing

Porn

DDoS

Infiltration



$\frac{\$100}{\text{day}}$	DDoS attacks
\$1000	10,000 bots for spam

\$1	Credit card & CVV
\$10	Credit card, CVV, & SSN
\$50	Full bank account



# Surveillance



You have zero privacy anyway.  
Get over it.

Scott McNealy,  
Sun, 1999



Better & Better











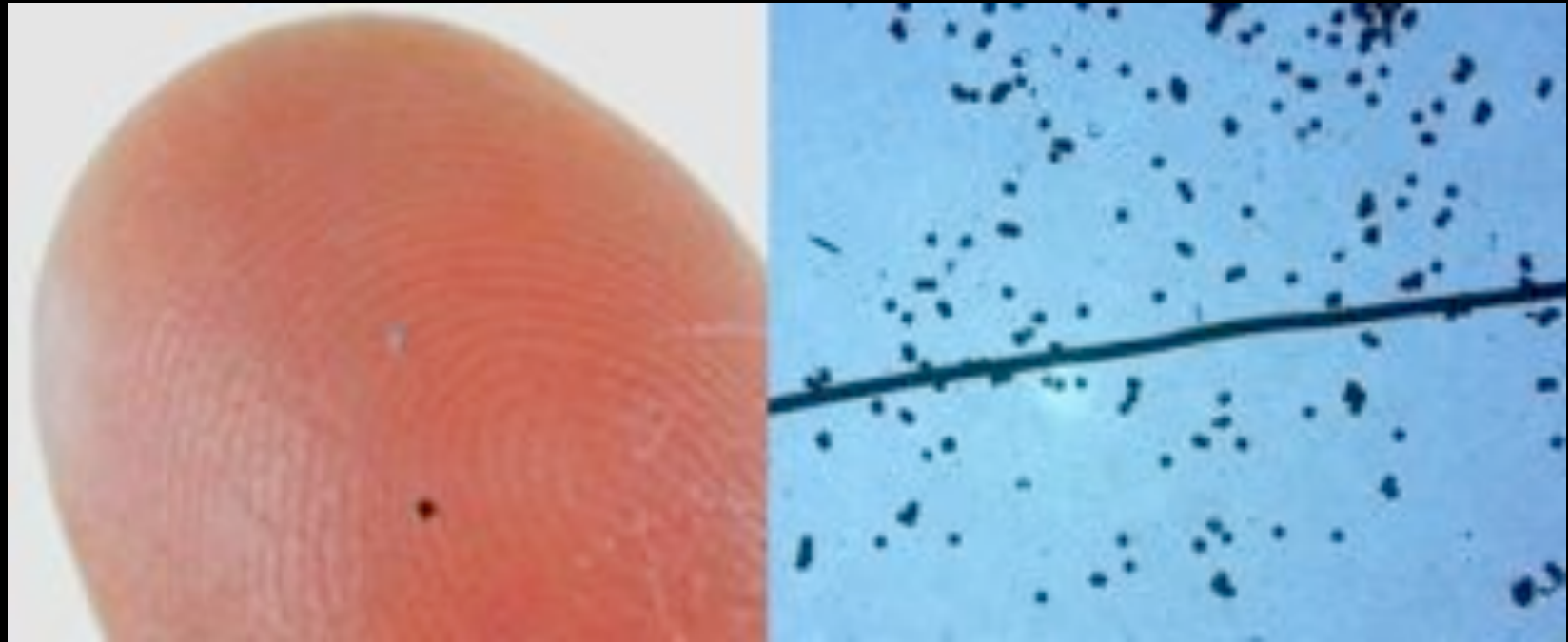


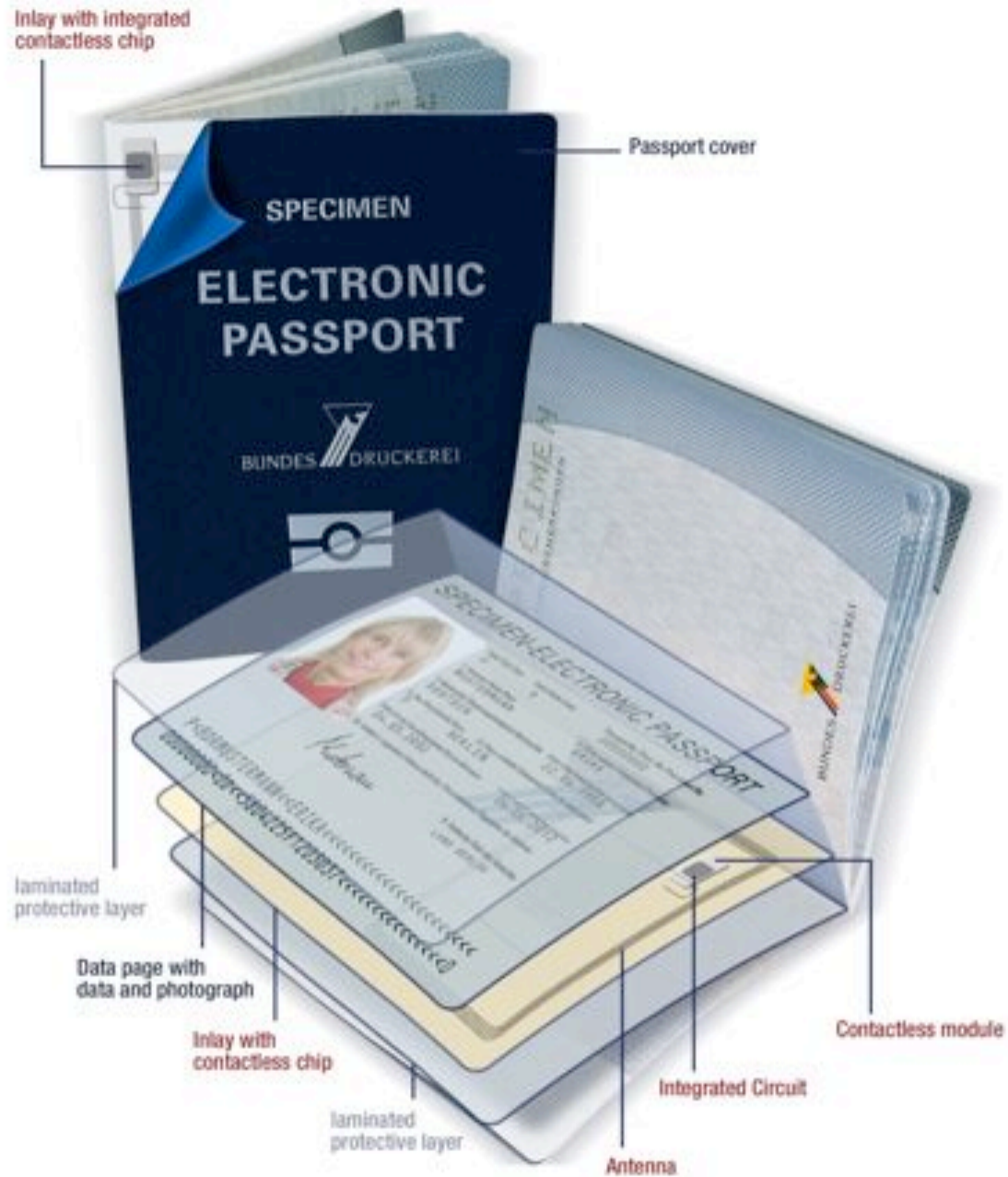








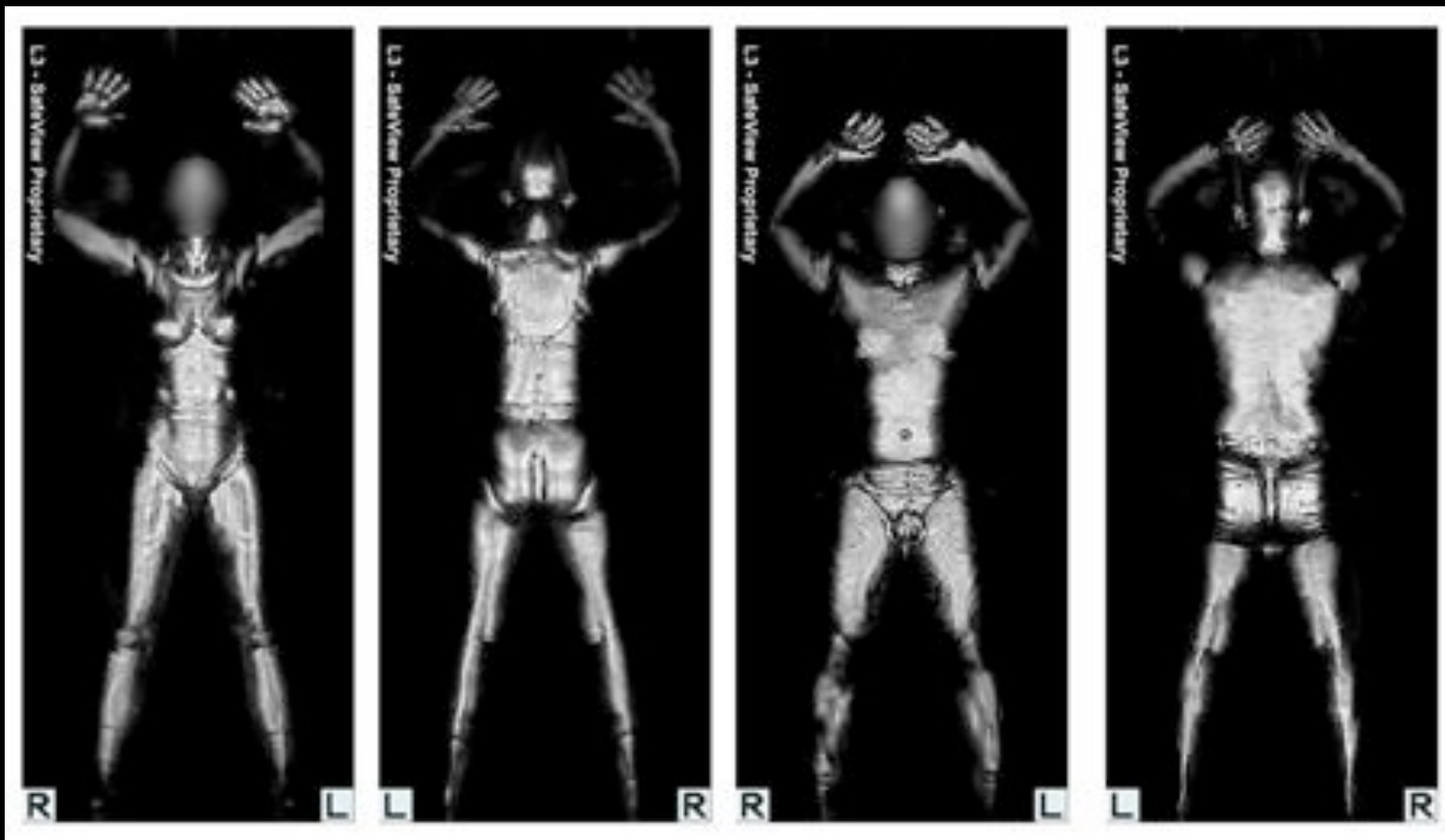




Source: Bundesdruckerei, Umbreit

► The contactless chip can be integrated into either the cover page or the data page.

# Virtual strip searches?



# Virtual strip searches?



# Virtual strip searches?



2009

TSA claims  
“scanned images  
cannot be stored or recorded.”

2010

US Marshals saved 10s of 1000s  
of images

TSA requires all scanners  
to be able  
to store & transmit images



Heathrow Airport,  
March 2010

Airport worker  
photographs woman's image  
as she goes through a scanner

*The Miami Herald*  
7 May 2010

“Miami airport screener  
accused of attack  
after jeers at genitals”

*The Daily Mail*  
October 18, 2009

“Child porn fears  
scupper airport ‘nude X-ray’ scans”

# US Government's Response

# PATRIOT Act

Expanded government access  
without probable cause of a crime

- ✓ Business documents
- ✓ 3rd party documents
- ✓ Electronic communications

FBI given greater latitude  
to go on “fishing expeditions”

NSA wiretapping  
of all international phone calls

No,  
*all* domestic phones calls  
& emails!

# Objections



Will bad guys  
“take down the Internet”?

“If you’re not doing anything wrong,  
then you won’t object  
if the government watches you.”

2 maxims about power

2 maxims about power

Power corrupts,  
& absolute power  
corrupts absolutely

2 maxims about power

Power corrupts,  
& absolute power  
corrupts absolutely

*Quis custodiet custodes ipsos?*  
(Who will watch the watchers?)

Cardinal Richelieu:

“If one would give me six lines  
written by the hand  
of the most honest man,  
I would find something in them  
to have him hanged.”

*Malo periculosam libertatem  
quam quietum servitium*

(I prefer liberty with danger  
to peace with servitude.)





# Thank you!

Email: [scott@granneman.com](mailto:scott@granneman.com)

Web: [www.granneman.com](http://www.granneman.com)

Publications: [www.granneman.com/pubs](http://www.granneman.com/pubs)

Blog: [blog.granneman.com](http://blog.granneman.com)

Twitter: [scottgranneman](https://twitter.com/scottgranneman)

# National Security After 9/11: Technology & the Law

Ladue Chapel Presbyterian Church

R. Scott Granneman

Denise Lieberman

© 2006-2010 R. Scott Granneman  
Last updated 20101106

You are free to use this work, with certain restrictions.  
For full licensing information, please see the last slide/page.

# Licensing of this work

This work is licensed under the Creative Commons Attribution-ShareAlike License.

To view a copy of this license, visit

<http://creativecommons.org/licenses/by-sa/1.0>

or send a letter to Creative Commons, 559 Nathan Abbott Way, Stanford, California 94305, USA.

In addition to the rights and restrictions common to all Creative Commons licenses, the Attribution-ShareAlike License features the following key conditions:

**Attribution.** The licensor permits others to copy, distribute, display, and perform the work. In return, licensees must give the original author credit.

**Share Alike.** The licensor permits others to distribute derivative works under a license identical to the one that governs the licensor's work.

Questions? Email [scott@granneman.com](mailto:scott@granneman.com)