

# DS 593: Privacy in Practice

Surveillance

News?





NEWS

## **“This fraud destroyed my life.” Man ends up with criminal record after ID was stolen**

<https://www.malwarebytes.com/blog/news/2025/03/this-fraud-destroyed-my-life-man-ends-up-with-criminal-record-after-id-was-stolen>





PERSONAL

## **Why we're no longer doing April Fools' Day**

<https://www.malwarebytes.com/blog/personal/2025/03/why-were-no-longer-doing-april-fools-day>

# Last time

- How do we use these building blocks for privacy online?

# Today

- Defining Surveillance
- Exploring targeted and mass surveillance by the state

What do we mean by Surveillance?

# Activity

Split up into groups

Take 5 minutes to discuss in your group how you would define surveillance

Add your group's definition to the doc:

[https://docs.google.com/document/d/1ImzjipBi0gD3ljNq3JML\\_JYly1rh9iX3LIMet-\\_zgYk/edit?usp=sharing](https://docs.google.com/document/d/1ImzjipBi0gD3ljNq3JML_JYly1rh9iX3LIMet-_zgYk/edit?usp=sharing)



# Discussion Questions

- Does surveillance have a set starting and end point?
- Does surveillance imply data collection?
- Is surveillance by definition nonconsensual?
- Is the notion of power or consequence embedded in surveillance?

# Colloquial Definition

noun

1. a watch kept over a person, group, etc., especially over a suspect, prisoner, or the like: *The suspects were under police surveillance.*
2. continuous observation of a place, person, group, or ongoing activity in order to gather information: *video cameras used for covert surveillance.* See also [electronic surveillance](#).
3. attentive observation, as to oversee and direct someone or something: *increased surveillance of patients with chronic liver disease.* (dictionary.com)

# Academic Definition

**Surveillance** is the monitoring of behavior, many activities, or information for the purpose of information gathering, influencing, managing or directing.<sup>[1][2]</sup> This can include observation from a distance by means of electronic equipment, such as closed-circuit television (CCTV), or interception of electronically transmitted information like Internet traffic. It can also include simple technical methods, such as human intelligence gathering and postal interception.

1. Lyon, David (2001). *Surveillance Society: Monitoring in Everyday Life*. Philadelphia: Open University Press. ISBN 978-0-335-20546-2.
2. Monahan, Torin; Murakami Wood, David (2018). *Surveillance Studies: A Reader*. New York: Oxford University Press. ISBN 9780190297824.  
(Wikipedia.com)

# Legal Definition

Surveillance is the act of observing another in order to gather evidence. Surveillance is one of the most common methods law enforcement officials use to investigate suspects and gather evidence. It can be accomplished with the knowledge of the person being surveilled (overt surveillance) or without (covert surveillance).  
([law.cornell.edu](http://law.cornell.edu))

# Types of Surveillance

- Targeted Surveillance
- Mass Surveillance



# Collect-it-all

“Rather than look for a single needle in the haystack, his approach was, ‘Let’s collect the whole haystack. Collect it all, tag it, store it... And whatever it is you want, you go searching for it.’”

- General Keith Alexander, former director of the NSA



# Brief History of Surveillance

- Targeted surveillance as a concept dates back to prehistory
  - Tactics have evolved over time
- Mass surveillance is a relatively newer phenomenon
  - As is mass *targeted* surveillance

# City Watches and Patrols



# Papers and Documentation

**IMMIGRANT IDENTIFICATION CARD**  
**UNITED STATES**  
**DEPARTMENT OF LABOR**

SURNAME: **SZEJMAN**  
GIVEN NAME: **Malke**  
COUNTRY OF BIRTH: **Poland** DATE OF BIRTH: **JAN. 2, 1916**  
NATIONALITY: **Polish** COLOR OF EYES: **blue**  
PORT OF ARRIVAL: **NY** STEAMSHIP: **Imperial**  
DATE ADMITTED: **1/10/16** STATUS OF ADMISSION: **Regular**  
IMMIGRANT'S SIGNATURE: *[Signature]*  
IMMIGRANT INSPECTOR: *[Signature]*

**ORIGINAL**



**UNITED STATES OF AMERICA**

To all to whom these Presents shall come, Greeting

DESCRIPTION  
Age 48 Years  
Height 5 ft 10 in  
Weight 175 lbs  
Complexion Fair  
Hair Brown  
Eyes Blue  
Mouth Large  
Nose Straight  
Ears Small  
Teeth Good  
Signature of the Immigrant: *[Signature]*

Given under my hand and the seal of the Department of State, at the City of Washington this 22 day of October, A.D. 1916.  
In witness whereof, I have hereunto set my hand and the seal of the Department of State.  
Robert Lansing  
Secretary of State





# Red Scare and COINTELPRO



## COINTELPRO

The FBI's Covert Action Programs Against American Citizens

Church Committee: Book III, Vol. 1



# The PATRIOT act



# PRISM





# The Snowden Revelations

- Given this history, why were these revelations such a big deal?



facebook



Hotmail

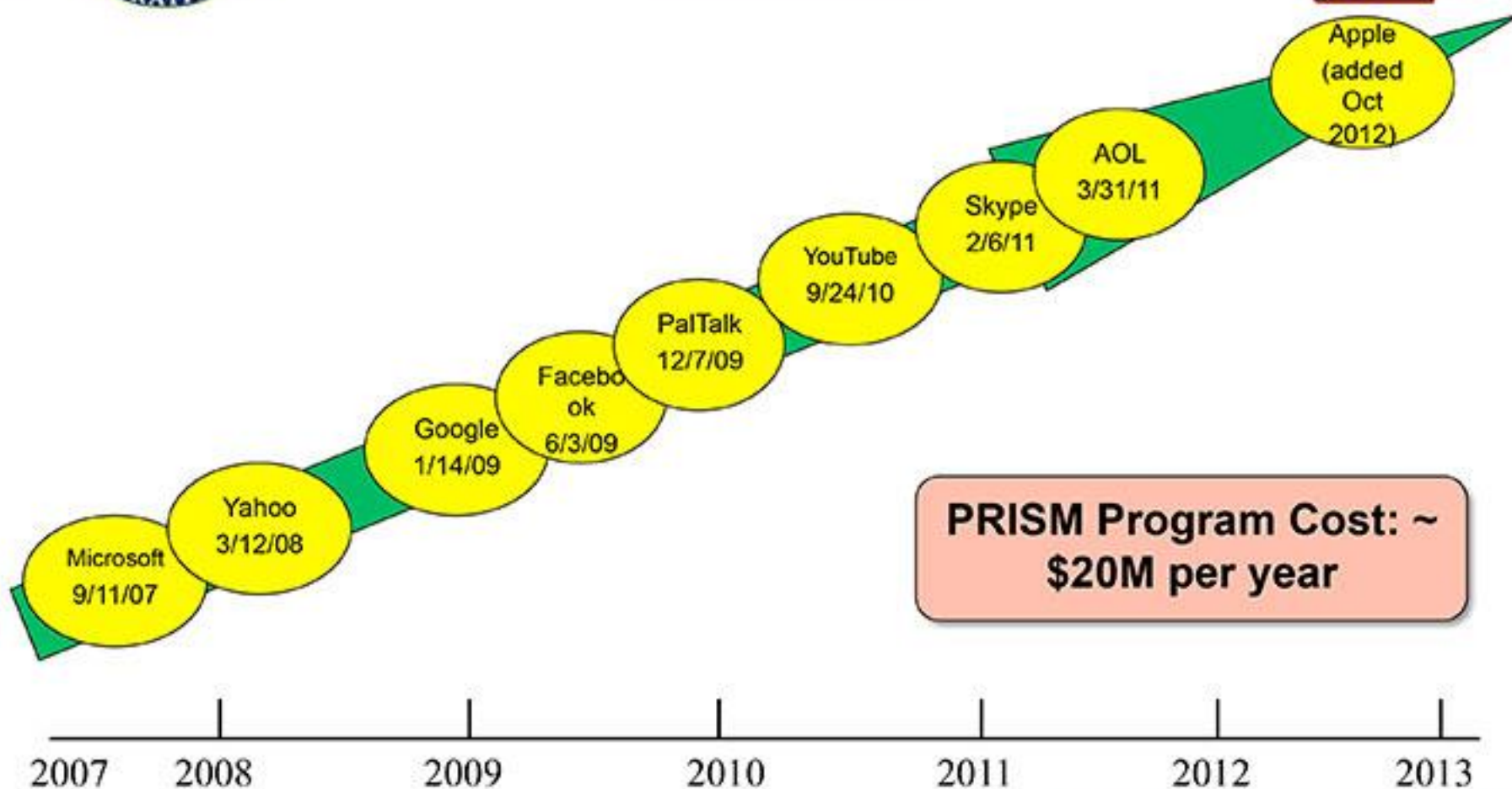
YAHOO!



YouTube

AOL mail

(TS//SI//NF) Dates When PRISM Collection  
Began For Each Provider



PRISM Program Cost: ~  
\$20M per year

# Aggregation and Analysis

- Machine Learning!
  - XKEYSCORE
  - Dataminr
  - Palatir
  - EMBERS

# Surveillance Tools and Tactics

- Street-level or physical surveillance tools
- Surveillance of digital communications

# Stingrays



# Drones





# Recording Devices



# Automated License Plate Readers



# Gunshot Detection



# Warrants and Gag orders

The FBI  
has not  
been here

*(watch very closely for the removal of this sign)*

## Zero Day Attack



A successful exploit using zero-day vulnerability to damage the system

## Zero Day Exploit



Technique used by hackers/crackers to escalate privileges using zero-day vulnerability

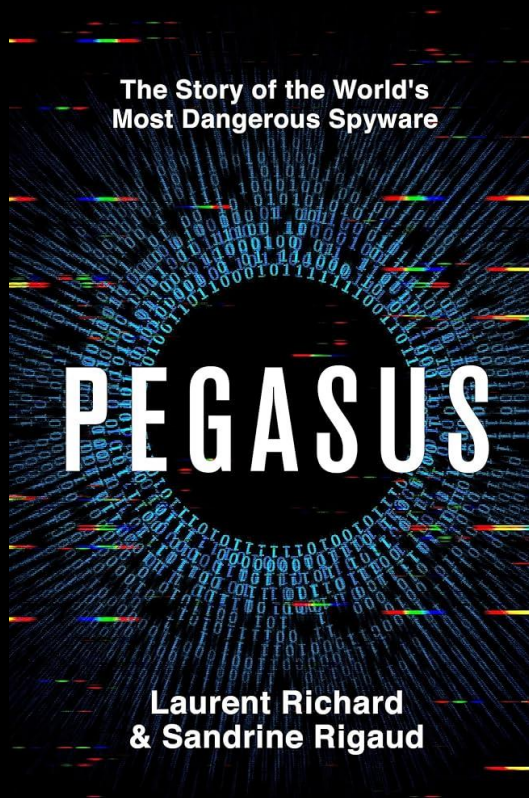
## Zero Day Vulnerability



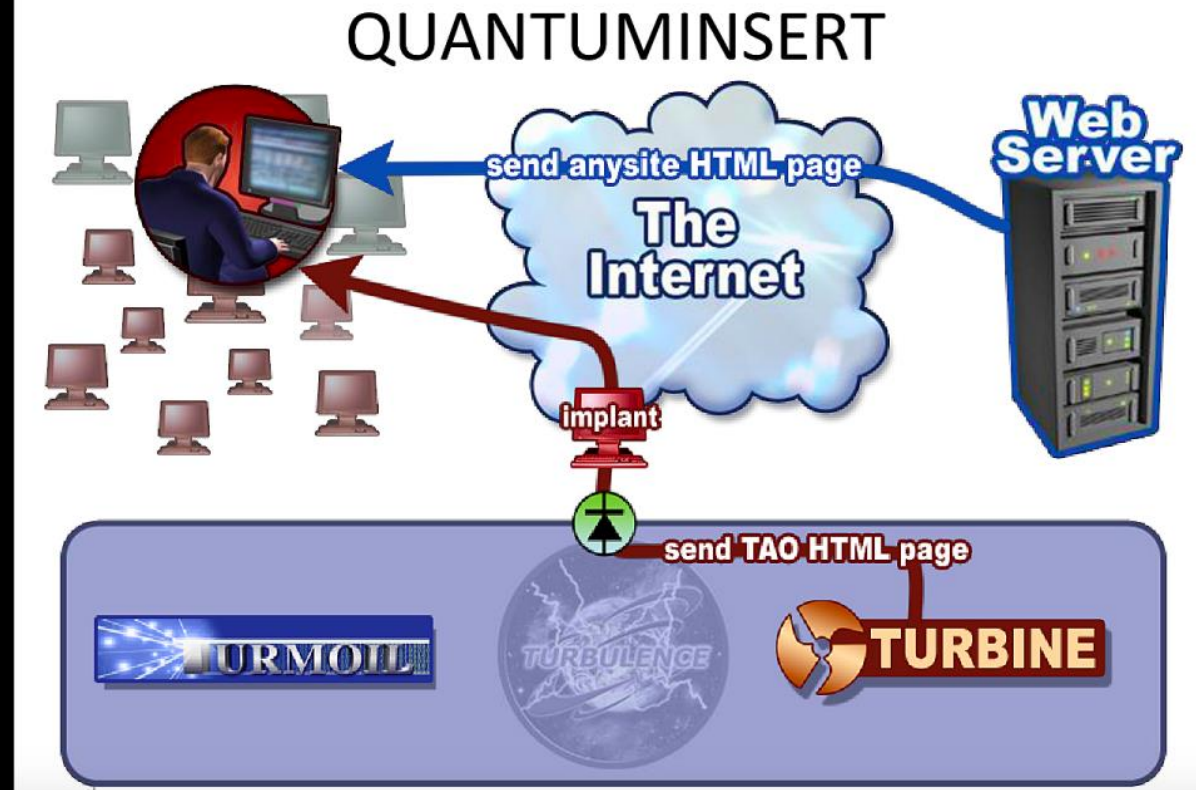
A software bug unknown to the vendor or parties interested in fixing it



# Spyware



TS//REL





# Extraction tools



# Downgrade attacks



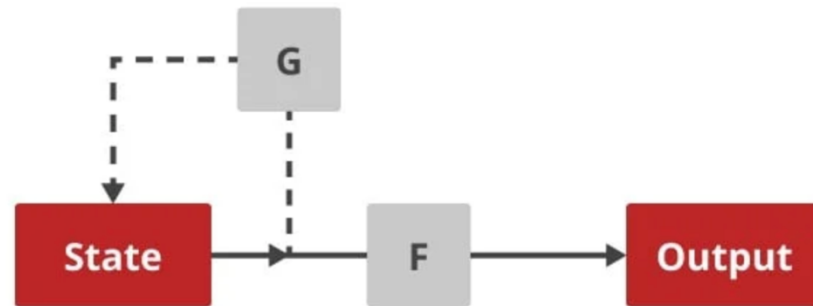
# How the NSA (may have) put a backdoor in RSA's cryptography: A technical primer

2014-01-06



Nick Sullivan

9 min read



<https://blog.cloudflare.com/how-the-nsa-may-have-put-a-backdoor-in-rsas-cryptography-a-technical-primer/>

# Next Time

Corporate and Private Surveillance