

Big Brother is Watching

The State of Global Communication
Surveillance

Outline

- **NSA Practices**
- Legality
- Foreign Spying Agencies
- Responses

NSA Practices



NSA Mission: The National Security Agency/Central Security Service (NSA/CSS) leads the U.S. Government in cryptology that encompasses both Signals Intelligence (SIGINT) and Information Assurance (IA) products and services, and enables Computer Network Operations (CNO) in order to gain a decision advantage for the Nation and our allies under all circumstances.

NSA Practices

A close-up photograph of Barack Obama on the left side of the frame, looking slightly to the right. He is holding a mobile phone to his ear with his right hand. He is wearing a gold ring on his ring finger. The background is dark and out of focus.

THE "SHARE EVERYTHING" PLAN

Verizon, ATT, Sprint, and other major telecommunications companies give the intelligence agencies the metadata on the telephone records of their customers

NSA Practices




PRISM: Major American tech companies give the NSA access to their servers and user data within them

NSA Practices

TOP SECRET //COMINT//REL TO USA, AUS, CAN, GBR, NZL

HTTP Activity Client-to-Server



```
GET /search?tab=urdu&order=sortboth&q=musharraf&start=3&scope=urdu&link=next HTTP/1.1
Accept: */*
Referer: http://search.bbc.co.uk/search?tab=urdu&order=sortboth&q=musharraf&start=2&scope=urdu
Accept-Language: en-us
Accept-Encoding: gzip, deflate
User-Agent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1)
Host: search.bbc.co.uk
Cookie: BBC-UID=b479a5f4ad230a53063d513630203acb22684634a0e0b164c45f96efc054cf950Mozilla%2f4%2e0%20%28cc
Cache-Control: max-stale=0
Connection: Keep-Alive
X-BlueCoat-Vis: 66808702E9A98546
```

Search term:
Musharraf

Search on BBC

Host	URL Path	URL Args
search.bbc.co.uk	/search	tab=urdu&order=sortboth&q=musharraf&start=3&scope=urdu&link=next

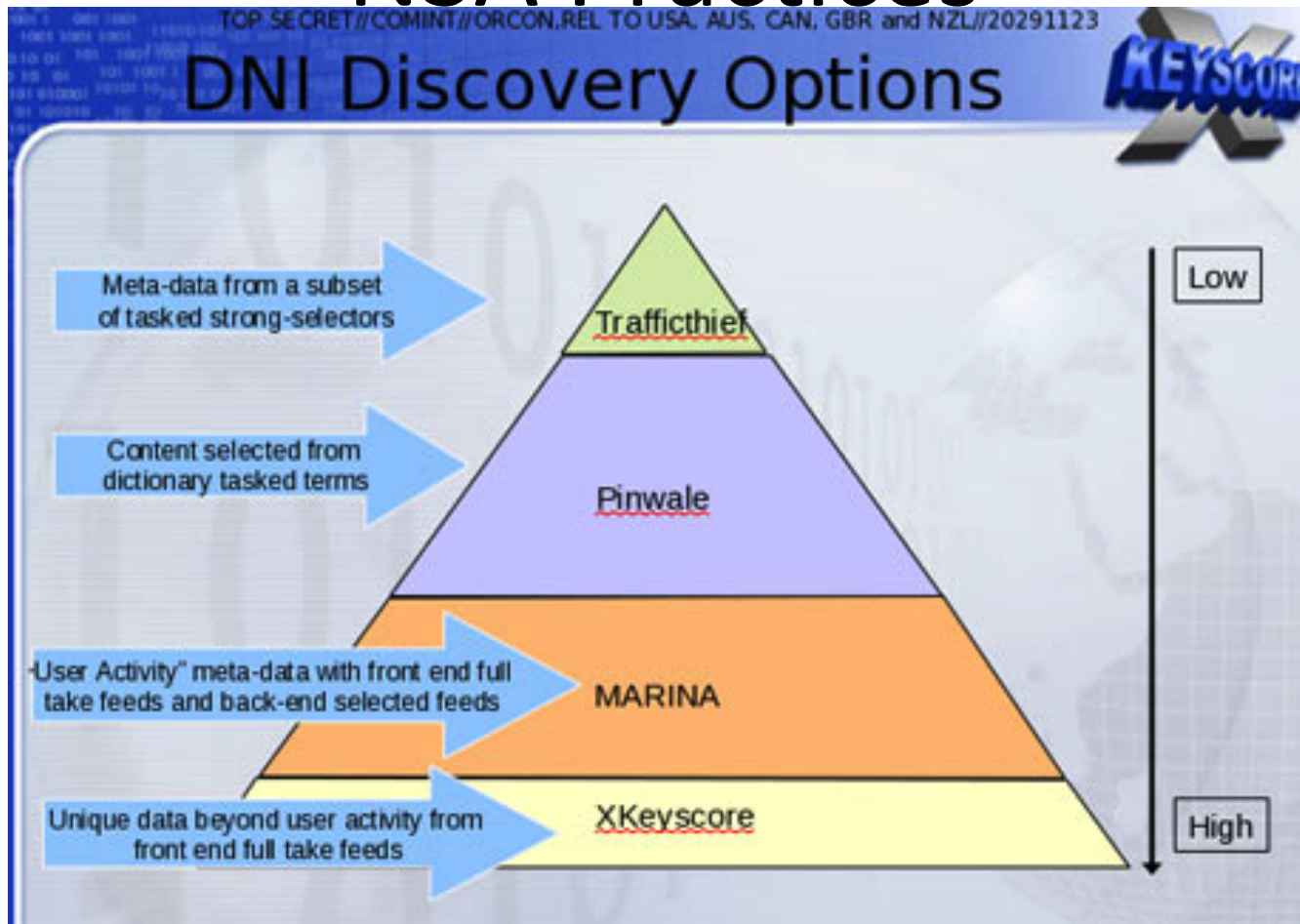
Search Terms	Language	Browser	Via
musharraf	en	Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1)	66808702E9A98546

Referer
http://search.bbc.co.uk/search?tab=urdu&order=sortboth&q=musharraf&start=2&scope=urdu

Cookie
BBC-UID=b479a5f4ad230a53063d513630203acb22684634a0e0b164c45f96efc054cf950Mozilla%2f4%2e0%20%28cc

X-Keyscore: Allows analysts to search through databases of emails, online chats, and browsing histories of millions of people

NSA Practices



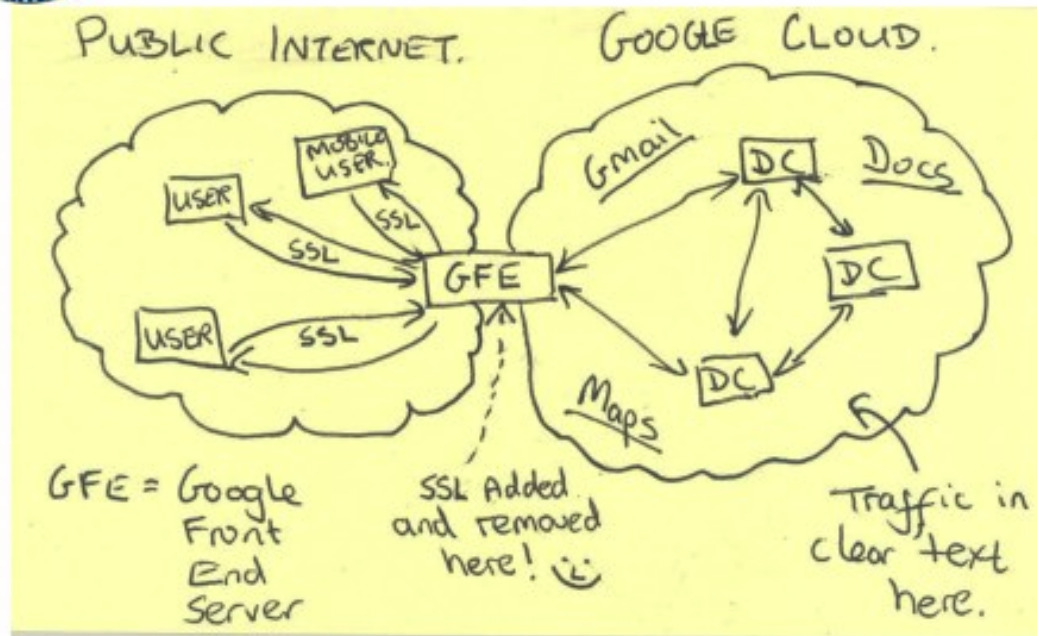
X-Keyscore: So much data is stored by the NSA that it cannot be maintained on a consistent basis. Important information is flagged and saved to other services where it can be stored for years

NSA Practices

TOP SECRET//SI//NOFORN



Current Efforts - Google



TOP SECRET//SI//NOFORN

MUSCULAR: Reads information sent among datacenters owned by Google and Yahoo

Outline

- NSA Practices
- **Legality**
- Foreign Spying Agencies
- Responses

Legality



3rd Party Doctrine: Alice has no expectation of privacy when she sends her communication to Bob through a 3rd party

Legality



Foreign Intelligence Surveillance Court: Gave the NSA its charter and rules on the legality of its actions

Legality



Foreign Intelligence Surveillance Court: Gave the NSA its charter and rules on the legality of its actions

Legality



Regulation of Investigatory Powers Act (Ripa) : Allows British government to view communications of British citizens so long as one end of the communication takes place abroad

Outline

- NSA Practices
- Legality
- **Foreign Spying Agencies**
- Responses

Foreign Spying Agencies



GCHQ: British equivalent of NSA. Manages Tempora, a sister program of X-Keyscore

Foreign Spying Agencies



European Intelligence Agencies: Germany - BND, France - DGSE, Spain - CNI, Sweden - Saepo

Outline

- NSA Practices
- Legality
- Foreign Spying Agencies
- **Responses**

Responses



United Nations: Condemns spying on international organizations and the UK's threatening of the free press

Responses



American tech companies are projected to lose \$35 billion to \$180 billion in revenue over the next few years from lost business with foreign clients

Responses



American tech companies want to reveal more about how much information they give the federal government but the Department of Justice does not allow this

Responses



Congress has yet to make a significant change to the legislation that governs the NSA

Responses



Thank you for listening. What do you think?

References

What the NSA does:

- Overview: <http://www.theguardian.com/world/interactive/2013/nov/01/snowden-nsa-files-surveillance-revelations-decoded#section/1>
- Carrier metadata (Verizon, BT, Vodafone, AT&T)- <http://www.guardian.co.uk/world/interactive/2013/jun/06/verizon-telephone-data-court-order> (renewed - <http://arstechnica.com/tech-policy/2013/07/snowden-be-damned-government-renews-us-call-record-order/>) (all telcos - <http://www.forbes.com/sites/robertlenzner/2013/09/23/attverizonsprint-are-paid-cash-by-nsa-for-your-private-communications/>) (not challenged by Telecommunication Companies - <http://www.wired.com/threatlevel/2013/09/telcos-metada-orders/>)
- Cooperation with multinational software companies (PRISM): <http://arstechnica.com/tech-policy/2013/06/new-leak-feds-can-access-anything-in-your-google-facebook-and-more/> (source - <http://www.documentcloud.org/documents/784159-sigintenabling-clean-1.html#document/>)
- Reads most traffic on the internet (X-Keyscore): <http://arstechnica.com/tech-policy/2013/07/new-snowden-leak-details-widest-reaching-nsa-digital-surveillance-program/> (how X-Keyscore works: <http://arstechnica.com/information-technology/2013/08/the-1-6-percent-of-the-internet-that-nsa-touches-is-bigger-than-it-seems/>)
- Reads data sent between Google/Yahoo datacenters (MUSCULAR): <http://www.washingtonpost.com/blogs/the-switch/wp/2013/11/04/how-we-know-the-nsa-had-access-to-internal-google-and-yahoo-cloud-data/>
- Procedures used by NSA to target non-US persons - <http://www.documentcloud.org/documents/716633-exhibit-a.html#document/>
- Spies on its lovers (LOVEINT) - <http://blogs.wsj.com/washwire/2013/08/23/nsa-officers-sometimes-spy-on-love-interests/>
- Collecting Address Books and Contacts: <http://arstechnica.com/tech-policy/2013/10/yep-the-nsa-is-grabbing-your-address-book-contact-lists-too/>

Legality:

- 3rd party doctrine: <http://arstechnica.com/tech-policy/2012/08/federal-court-rules-cops-can-warrantlessly-track-suspects-via-cellphone/> (being challenged - <http://arstechnica.com/tech-policy/2013/07/cops-need-warrants-to-track-cell-phones-says-nj-supreme-court/>)
- Regulation of Investigatory Powers Act loophole - <http://www.theguardian.com/uk/2013/jun/21/gchq-cables-secret-world-communications-nsa?uni=Article:in%20body%20link>
- Supreme Court Not Ruling - <http://www.nytimes.com/2013/11/19/us/justices-reject-challenge-to-nsa-program.html?src=>
- James Clapper, Director of National Intelligence, perjured:

What other countries do

- Five Eyes: <http://rt.com/news/nsa-australian-embassies-asia-intelligence-998/>
- GCHQ: <http://www.theguardian.com/uk-news/2013/nov/01/gchq-europe-spy-agencies-mass-surveillance-snowden>
- GCHQ spys for the NSA for money: <http://www.theguardian.com/uk-news/2013/aug/01/nsa-paid-gchq-spying-edward-snowden>
- Reading most traffic on the internet (GCHQ - Tempora) - <http://www.theguardian.com/uk/2013/jun/21/gchq-cables-secret-world-communications-nsa?uni=Article:in%20body%20link>
- European Intelligence Collective (Germany - BND, France - DGSE, Spain - CNI, Sweden - Saepo), United Kingdom - GCHQ): <http://www.theguardian.com/uk-news/2013/nov/01/gchq-europe-spy-agencies-mass-surveillance-snowden>
- Australia spying on Indonesia: <http://www.news.com.au/national/jakarta-recalls-ambassador-as-diplomatic-tensions-rise-over-spying-claims/story-fncynjr2-1226762823093>
- Germany (BND can read your email and email provider cannot alert you to this): <http://arstechnica.com/tech-policy/2013/10/europe-wont-save-you-why-e-mail-is-probably-safer-in-the-us/>

Brazil (old fashioned spying): http://www.nytimes.com/2013/11/05/world/americas/brazil-acknowledges-spying-on-diplomats-from-us.html?mid=tw-share&_r=0