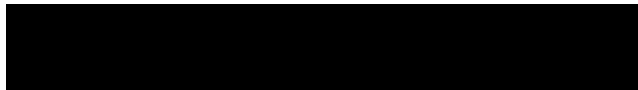
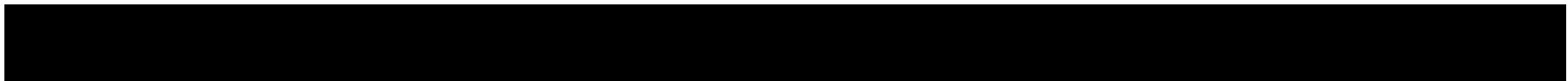




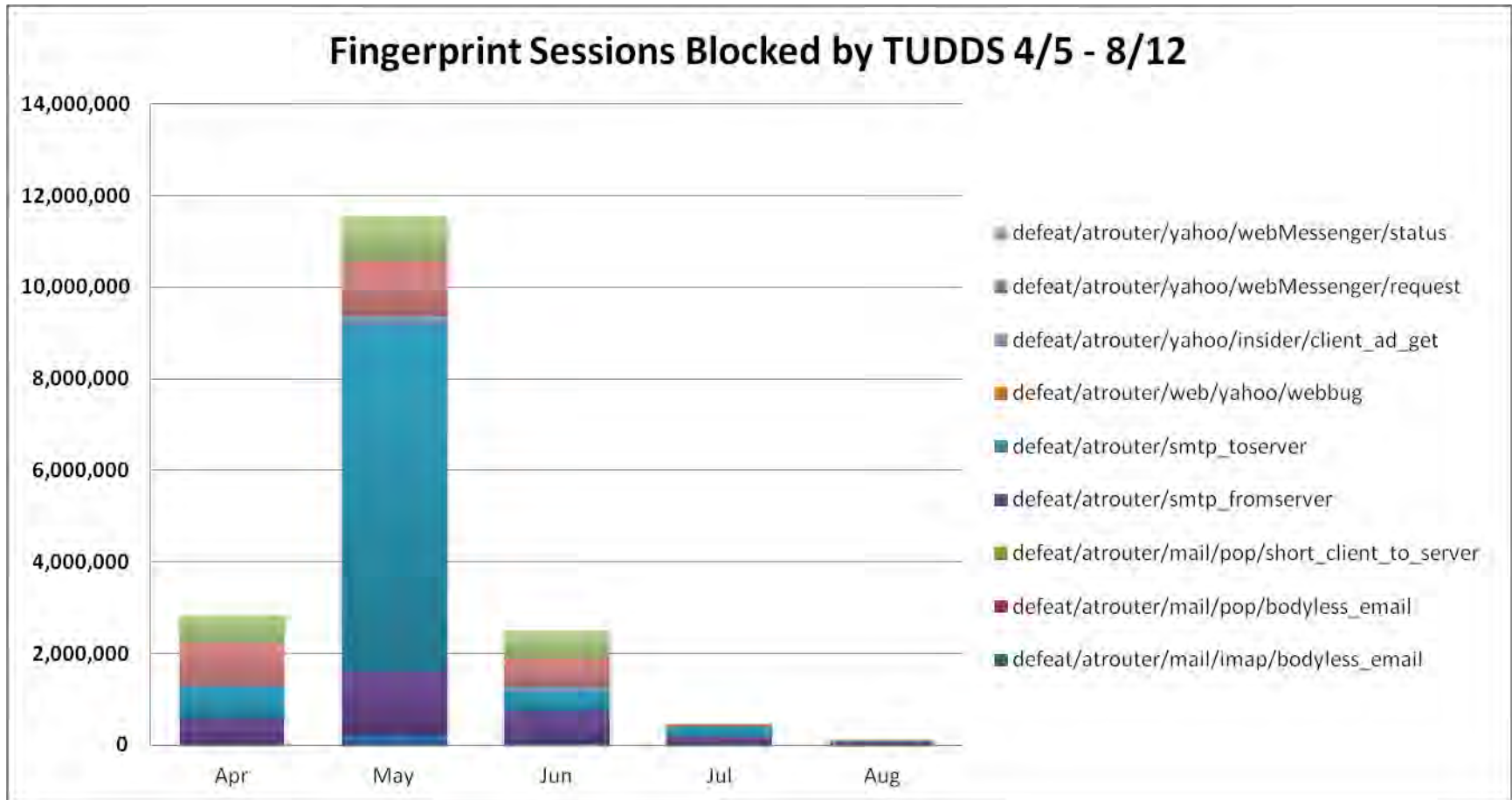
# SSO Collection Optimization

Core SSO Team:



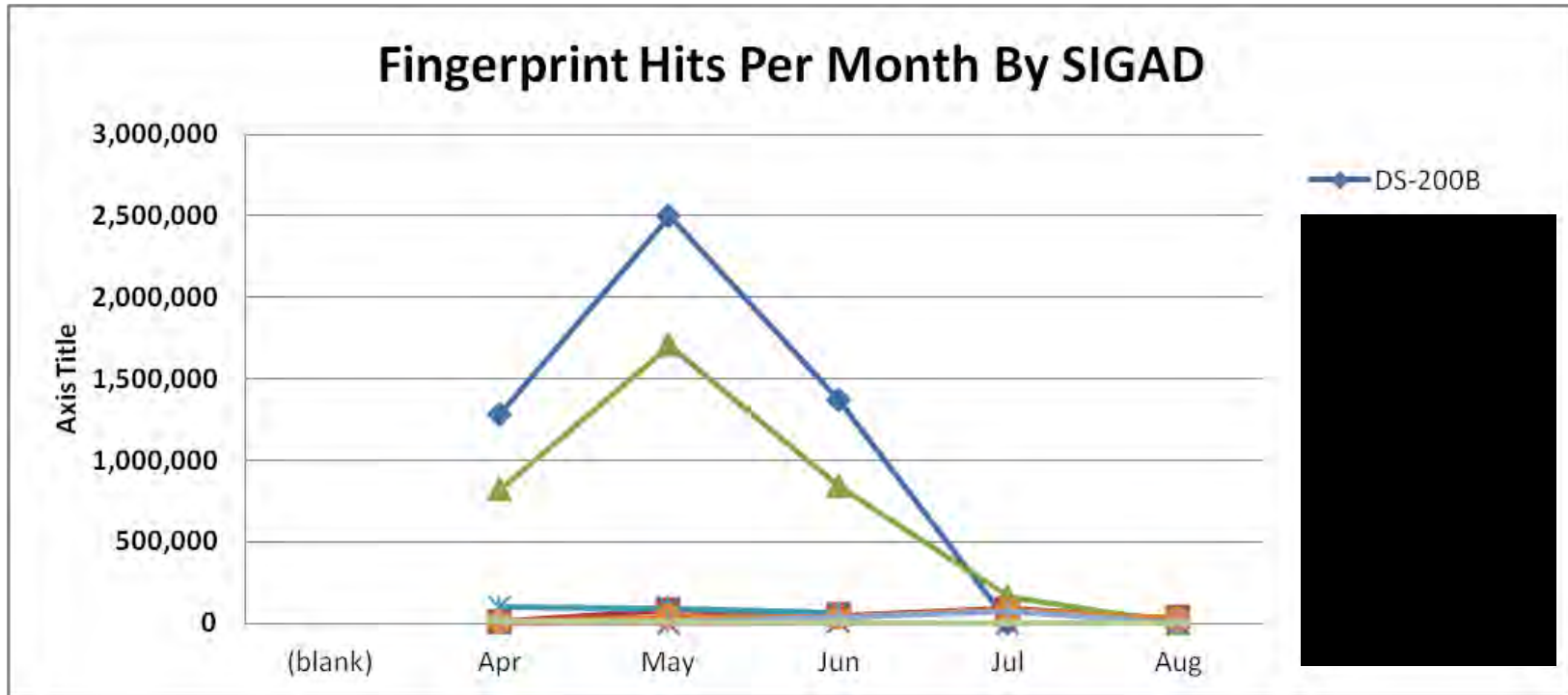


# TUDDS Block





# TUDDS Block





# Current Efforts - Google

- Defeat Fingerprints

defeat/dev/google/adwords

defeat/dev/google/bigtable

defeat/dev/google/blogger\_js

defeat/dev/google/teragoogole



# Serendipity – New Protocols

PWID: [REDACTED]  
 SCID: [REDACTED]  
 TRSID: [REDACTED]  
 Visibility Group: YNKE  
 SIGAD: [REDACTED]  
 PDDG: 9C  
 DTG: 17JL1041Z12  
 Case Notation: CTWBDP050000000  
 Authorization Category: EO12958  
 Selector: [REDACTED]@gmail.com<google>

- Internal server-to-server authentication, based on hard selector
- Valid user agent string, not populated into Marina (yet!)

PINWALE

Contents (1)

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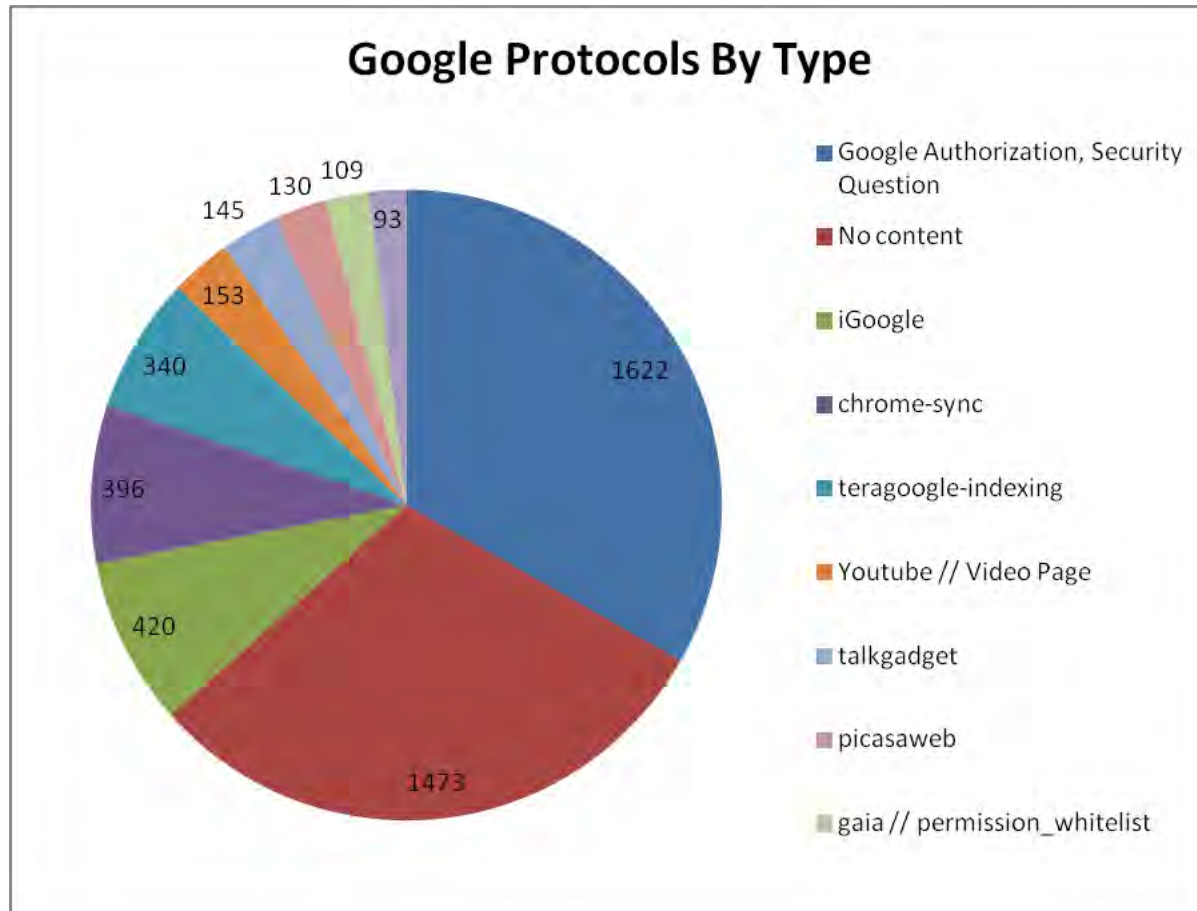
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```





# Serendipity – New Protocols



# What Yahoo and Google did not think the NSA could see

6 Pages - Contributed by Matt DeLong, Washington Post - Oct 31, 2013

Special Source Operations (p. 1)

TOP SECRET//SI//NOFORN



Special Source Operations

## SSO Collection Optimization

Core SSO Team:



TOP SECRET//SI//NOFORN

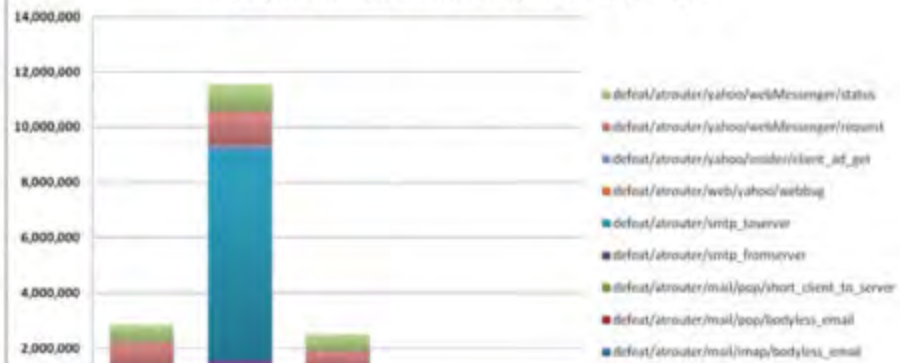
Yahoo data formats (p. 2)

TOP SECRET//SI//NOFORN



## TUDDS Block

Fingerprint Sessions Blocked by TUDDS 4/5 - 8/12





TOP SECRET//SI//NOFORN

What is NSA blocking with these "defeats"? (p. 4)

TOP SECRET//SI//NOFORN



## Current Efforts - Google

- Defeat Fingerprints

defeat/dev/google/adwords  
 defeat/dev/google/bigtable  
 defeat/dev/google/blogger\_js  
 defeat/dev/google/teragoogle

Inside Google's network (p. 5)

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## Serendipity – New Protocols

PWID: [REDACTED]  
 SCID: [REDACTED]  
 TRSID: [REDACTED]  
 Visibility Group: YRKE  
 SIGAD: [REDACTED]  
 PDDG: 9C  
 DTG: 17A1041Z12  
 Case Notation: CTWSDP030000000  
 Authorization Category: 0010003  
 Selector: [REDACTED]@google>

- Internal server-to-server authentication, based on hard selector
- Valid user agent string, not populated into Marina (yet!)

FINWALE

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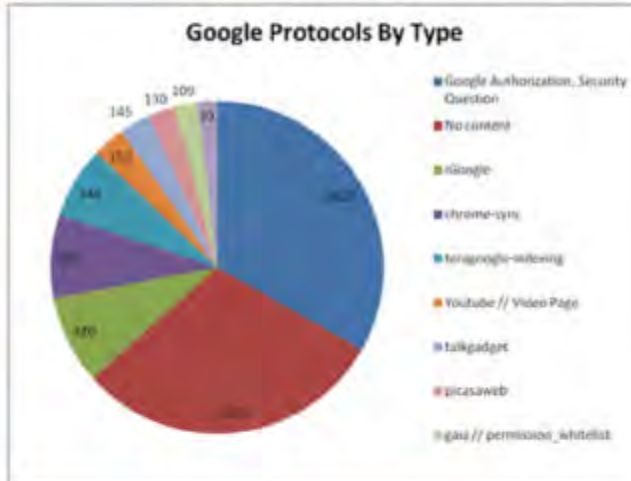


Google's internal traffic (p. 6)

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## Serendipity – New Protocols



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