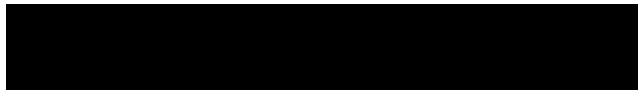




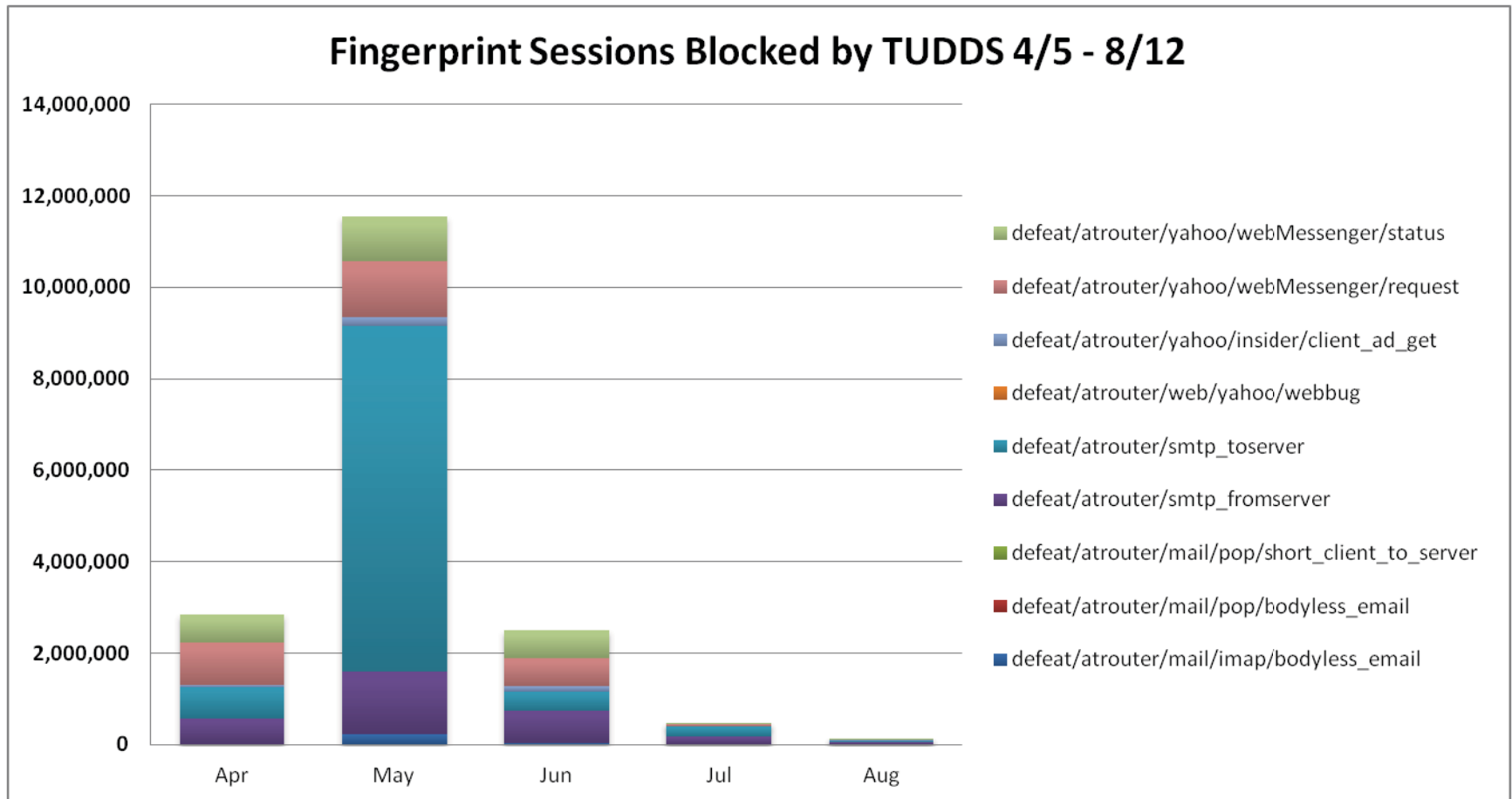
SSO Collection Optimization

Core SSO Team:



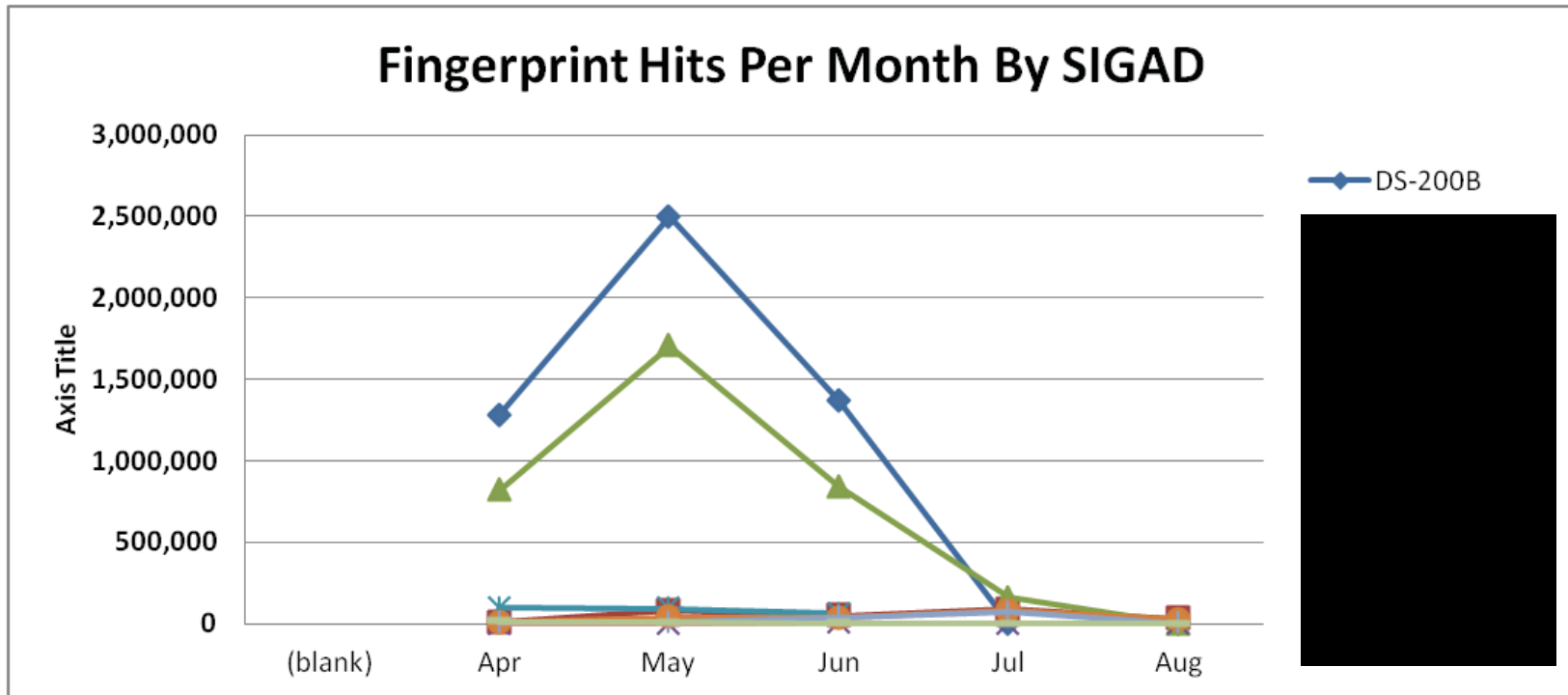


TUDDS Block





TUDDS Block





Current Efforts - Google

- Defeat Fingerprints

defeat/dev/google/adwords

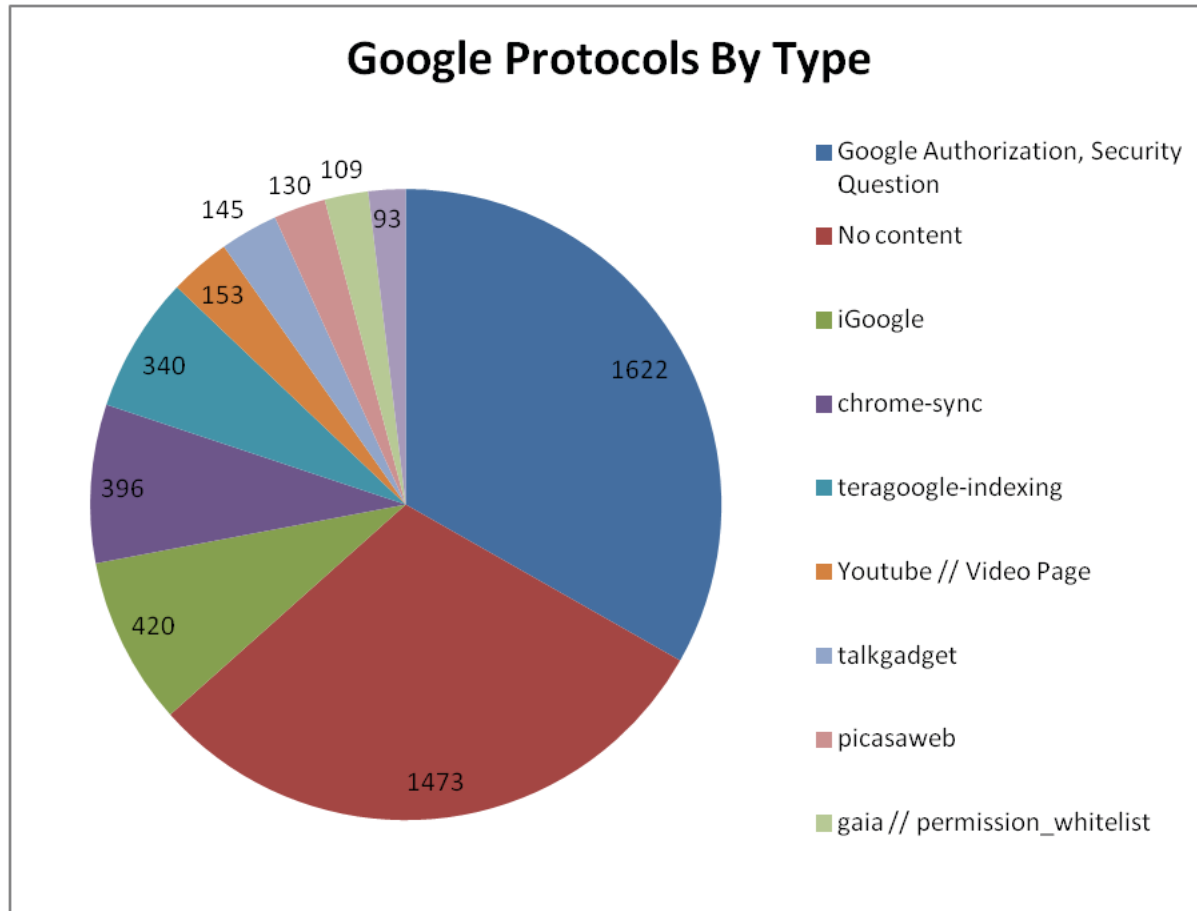
defeat/dev/google/bigtable

defeat/dev/google/blogger_js

defeat/dev/google/teragoogole



Serendipity – New Protocols



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)

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SSO Collection Optimization

Core SSO Team:



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Yahoo data formats (p. 2)

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TUDDS Block

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





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

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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: YNKE
 SIGAD: [REDACTED]
 PDDG: 9C
 DTG: 17JL1041Z12
 Case Notation: CTWBDF050000000
 Authorization Category: EO:1.3.33
 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)

File Name

85736eee-cfb-11e1-b70a-d0a2b41fd11

Display Information: Binary

No presentation is available for this type of data. Try sending it to another service for a better view. Below is an att

View As: Formatted Text Binary Char: Encoding Translate

```

L...
0...
.gai...
.kansas-gaia...
(gaia_permission_whitelist:...
3.0.4504.2152) GET CLR 3.0.60729; BOIIS;EMIS; gsp(gfe)
trident/4.0; GTB7.3; InfoPath.2; NET CLR 3.0.60727; NET CLR
.kansas-tech...@lve!.....* kansas-hq0.851.CO.A..

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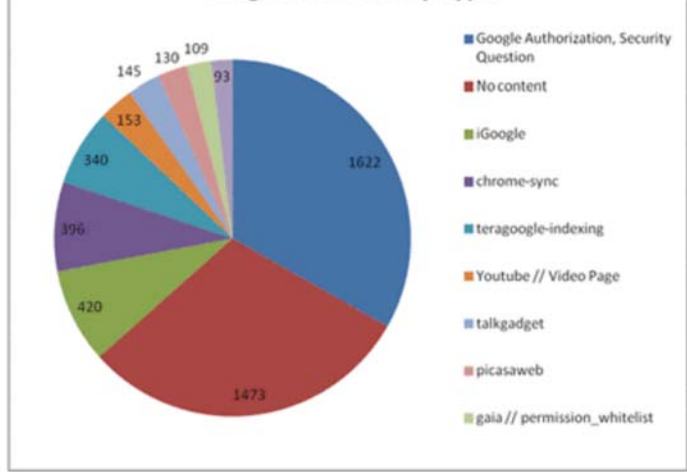
Google's internal traffic (p. 6)

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Serendipity – New Protocols

Google Protocols By Type



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