



Address Books

- Email address books for most major webmail are collected as stand-alone sessions (no content present*)
- Address books are repetitive, large, and metadata-rich
- Data is stored multiple times (MARINA/MAINWAY, PINWALE, CLOUDs)
- Fewer and fewer address books attributable to users, targets
- Address books account for ~ 22% of SSO's major accesses (up from ~ 12% in August)

Access (10 Jan 12)	Total Sessions	Address Books	Provider	Collected	Attributed	Attributed%
US-3171	1488453	237067 (16% of traffic)	Yahoo	444743	11009	2.48%
DS-200B	938378	311113 (33% of traffic)	Hotmail	105068	1115	1.06%
US-3261	94132	2477 (3% of traffic)	Gmail	33697	2350	6.97%
US-3145	177663	29336 (16% of traffic)	Facebook	82857	79437	95.87%
US-3180	269794	40409 (15% of traffic)	Other	22881	1175	5.14%
US-3180 (16 Dec 11)	289318	91964 (32% of traffic)	TOTAL	689246	95086	13.80%
TOTAL	3257738	712366 (22% of traffic)				



Serendipity – New Protocols

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(. . [90] . . . . . ö . . .
]. 0. [92] . . [REDACTED]@hotmMJöi0. What was your first phone numberÜ. [REDACTED] ú. .

]. Èú[92]4. [92] . [94] . [93] . [92] . . [90] . [96]ý[92]4. . . 6[90] . à[99]ÖÁ . . K[90] . [92]4ÈÄ . . [90] . Ì-æÄ . . 7[90] . î²Äí . . [96] . [90] . 4ø, Ö.
X. . [90] . ííÿ . . «!-4âp . . ðB° . . Ó. Ø. . â. . [REDACTED] è. . BDò . . . [96] ääô°*ô. D [99] íîB° &è îö§ [90] ä&ø.
. . X@+áÛ[90]Û[90]±. HÀÉö[90]©í< . . [90] .

. . . . . [90] [90] . . . . . [90] [90] . . . . . [90] [90] . . . . .

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Serendipity – HTTP Demux

**eoc2c

GUOX1HdS/4k8YWAc1iiPGd/NvriOvYa1boluzcaFd2cyfpHeg9rFTIytsjXoUyZnngI417JMAJH29M92XYwZU9qxvBwOLK2GBY1svC43iUBvCrf4e1cP2Pxs35+L
Cache-Control: no-cache

POST /gateway/gateway.dll?Action=poll&Lifespan=60&SessionID=868216649.1709645966 HTTP/1.1

Host: baymsg1030124.gateway.messenger.live.com

User-Agent: Mozilla/5.0 (Windows NT 5.1; rv:14.0) Gecko/20100101 Firefox/14.0.1

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8

Accept-Language: en-us,en;q=0.5

Accept-Encoding: gzip, deflate

Connection: keep-alive

X-Requested-Session-Content-Type: text/html

Content-Type: text/html; charset=utf-8

Pragma: No-Cache, no-cache

X-MSN-Auth: Use-Cookie

Referer: http://baymsg1030124.gateway.messenger.live.com/xmlProxy.htm?vn=9.090515.0&domain=live.com

Content-Length: 0

Cookie: wlidperf=latency=14338&throughput=0; mkt0=en-AF; wla42=cHJveHktYmF5LnB2dC1jb250YWNOcy5tc24uY29tfGJ5MSoxLDgzMTYzNjI1N

Cache-Control: no-cache

NENE

**eotxt

POST in middle of session