events

Events Product Centre

events Agenda

- Welcome
- Immingle
- Salamanca
- QFDs
- Guiding Light
- Questions

SECRET STRAP1

GCHQ

events

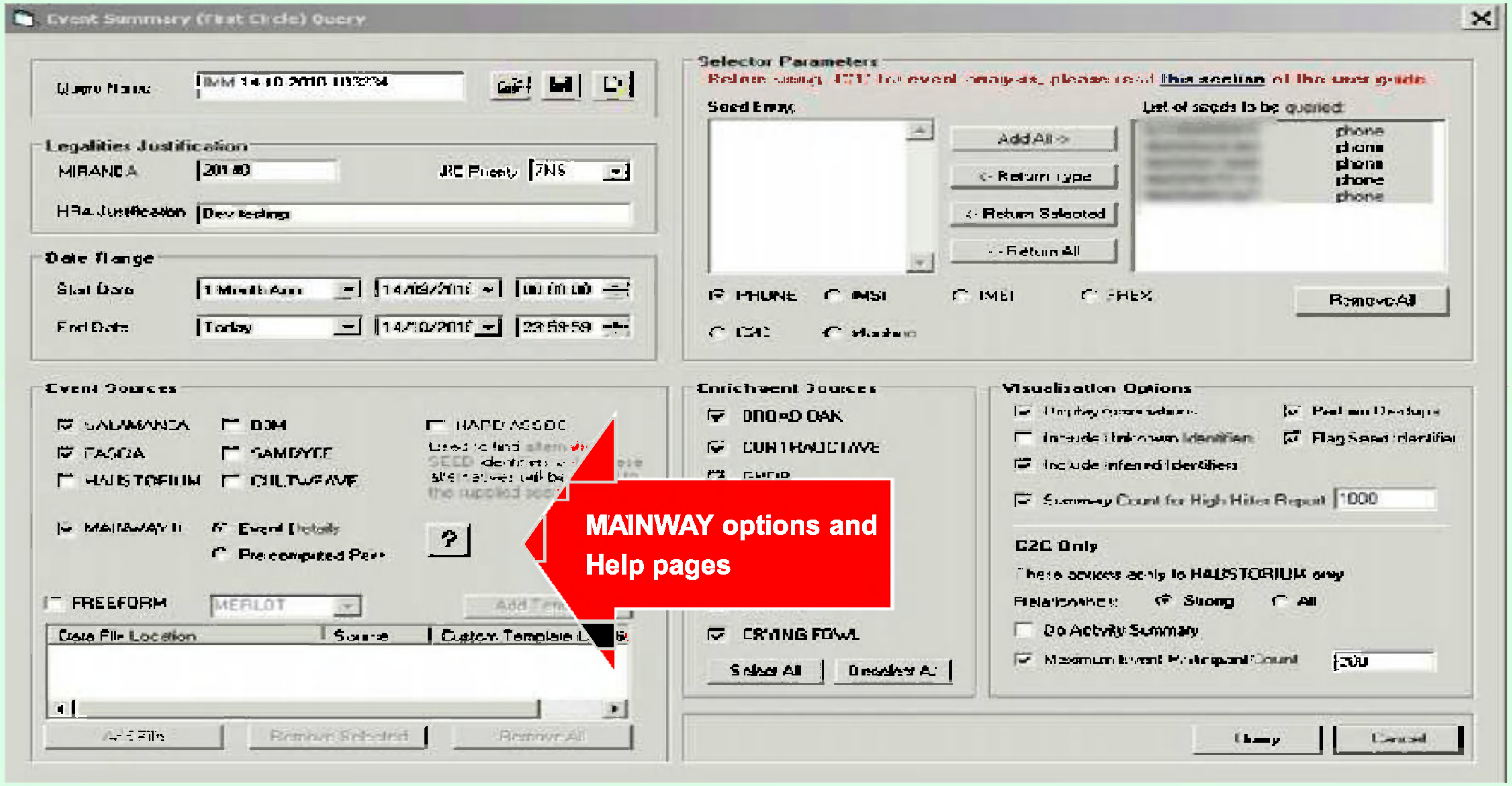
IMMINGLE

Key changes July 2010 to present:

- Inferred data from B3M now flagged
- Updates to handle identifiers from HARD ASSOC and B3M correctly
- MAINWAY: MSRNs now grouped and flagged in same way as SALAMANCA
- MAINWAY: direct access to event details provided
- GPRS flagging – THUGGEE rules applied to SALAMANCA events

events

IMMINGLE



Event Summary (First Circle) Query

Query Name: IMM 14-10-2010 103234

Legalities Justification

MIRANDA: 20140 JIC Priority: 7NS

HRA Justification: Dev testing

Date Range

Start Date: 1 Month Ago 14/09/2010 00:00:00

End Date: Today 14/10/2010 23:59:59

Selector Parameters

Before using FCQ for event analysis, please read this section of the user guide

Seed Entry

List of seeds to be queried:

[redacted] phone
phone
phone
phone
phone

● PHONE ○ IMSI ○ IMEI ○ FREX

○ C2C ○ [illegible]

Event Sources

☑ SALAMANCA ☐ DJM ☐ HARD ASSOC

☑ FASCIA ☐ SAMDYCE

☐ HAUSTORIUM ☐ CULTWEAVE

Used to find alternative SEED identifiers ... these alternatives will be ... the supplied seed

☑ MAINWAY II ● Event Details ○ Precomputed Pers

☐ FREEFORM MERLOT

Data File Location	Source	Custom Template L

Enrichment Sources

☑ DROPPED OAK

☑ CONTRADICTIVE

☑ CRYING FOWL

Visualization Options

☑ Display [illegible] ☑ Perform Dedupe

☐ Include Unknown Identifiers ☑ Flag Seed Identifier

☑ Include Inferred Identifiers

☑ Summary Count for High Hitter Report: 1000

C2C Only

These options apply to HAUSTORIUM only

Relationships: ● Strong ○ All

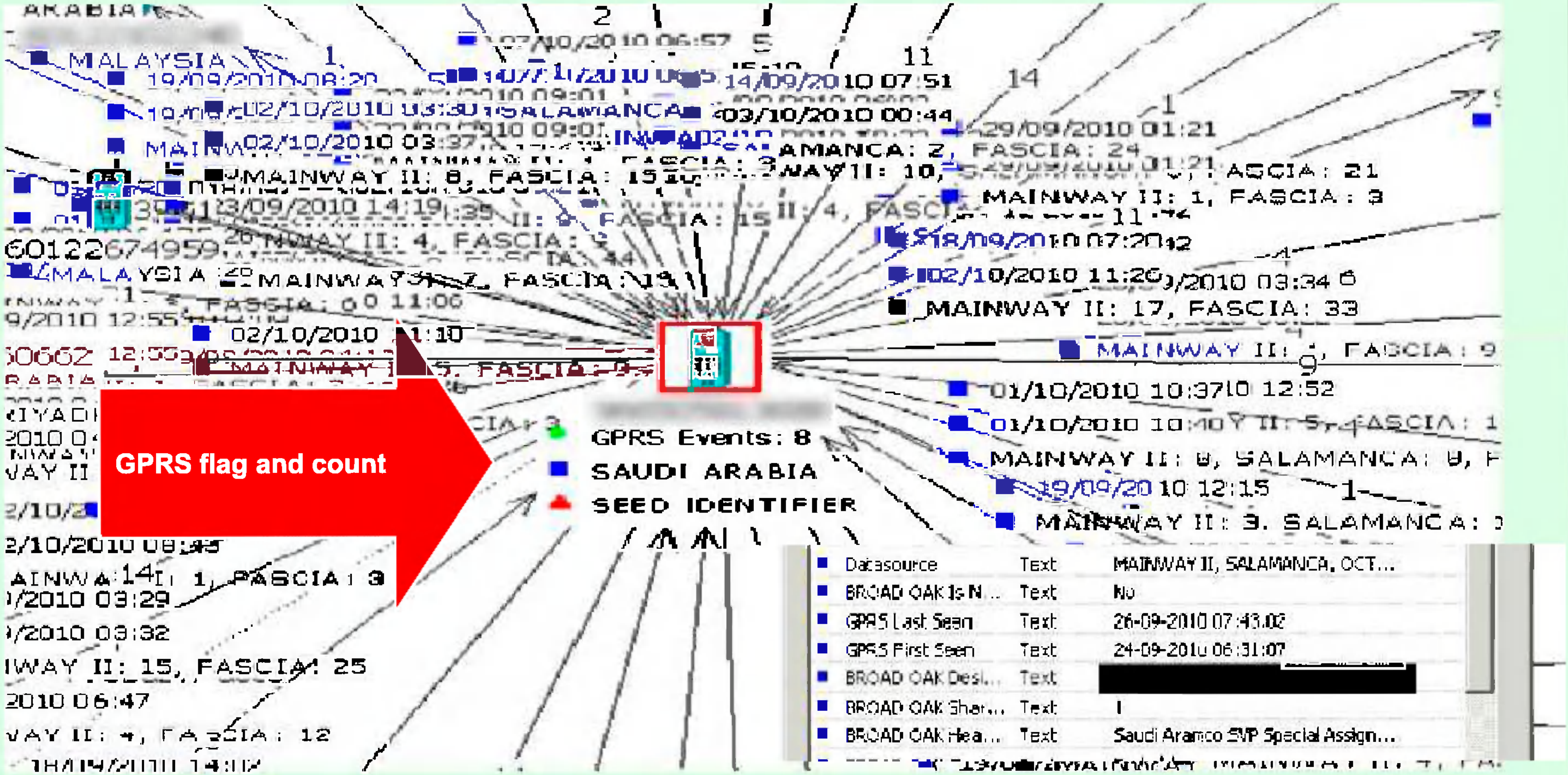
☐ Do Activity Summary

☑ Maximum Event Participant Count: 200

MAINWAY options and Help pages

SECRET STRAP1

events IMMINGLE



GPRS flag and count

Datasource	Text	MAINWAY II, SALAMANCA, OCT...
BROAD OAK Is N...	Text	No
GPRS Last Seen	Text	26-09-2010 07:43:02
GPRS First Seen	Text	24-09-2010 06:31:07
BROAD OAK Desi...	Text	[redacted]
BROAD OAK Shar...	Text	1
BROAD OAK Hea...	Text	Saudi Aramco SVP Special Assign...

SECRET STRAP1

GCHQ

IMMINGLE

- What next?

  - FASCIA GPRS flagging
  - HAUSTORIUM decommissioning
  - Next Gen Contact Chaining trial....

NEXT GENERATION events

FIRE STORM

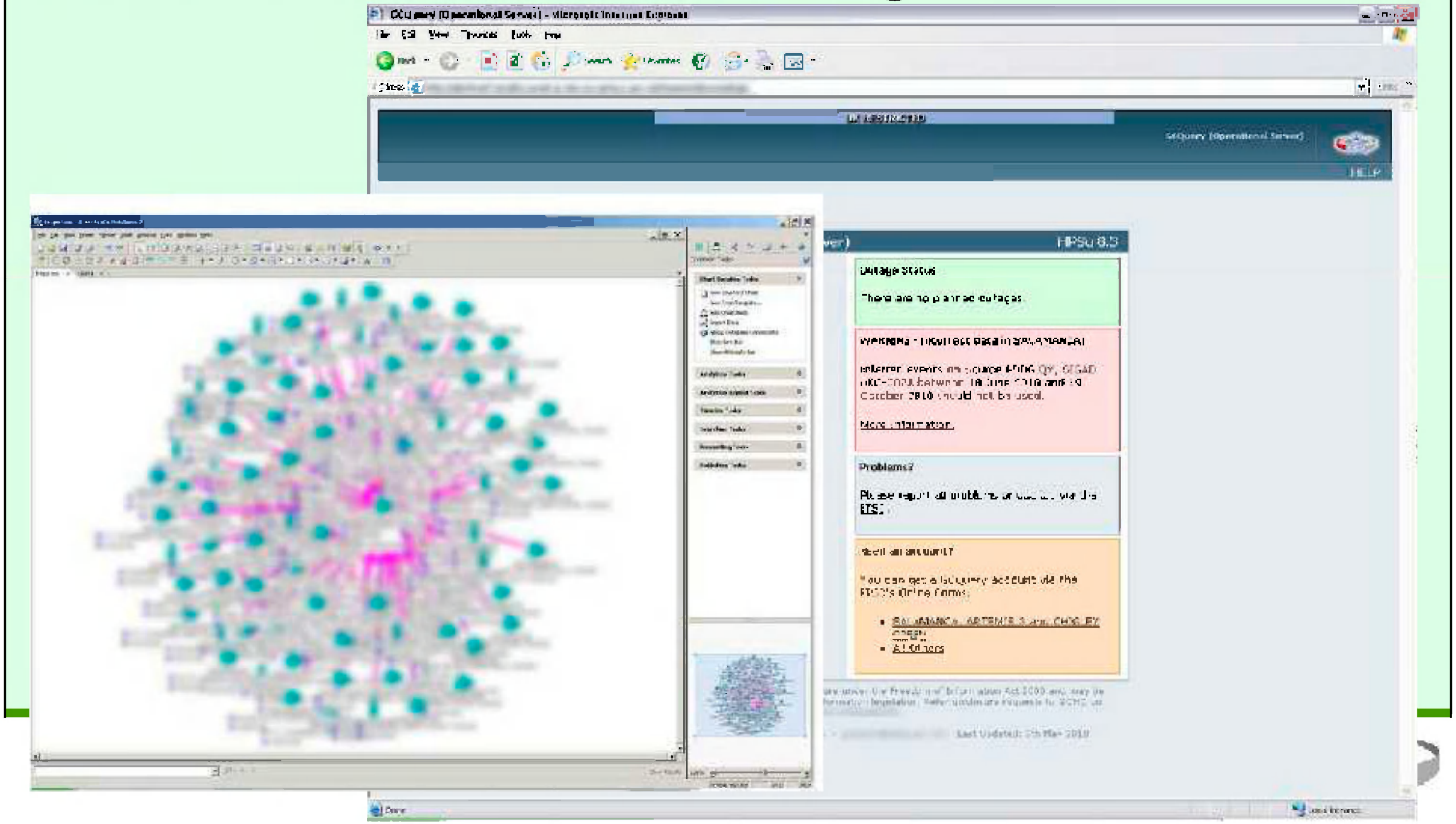
events

BRIO and SALAMANCA

- **Key changes since July:**
- NRT (Near Real Time) Storage = 3 days
- Extra feeds from TERRAINs at BUDE and SOUNDER
- 2nd Party usage of SALAMANCA: SHAREOWN replaces ESCHAR
- CallAnsweredState and CallEndState added to TERRAIN-SALAMANCA feed

events BRIO/SALAMANCA (cont.)

- Pakistan NGN inferencing errors



Outage Status

There are no planned outages.

WARNING - Incorrect data in SALAMANCA

Inferred events on source PDIG QY, OEGAD [illegible] between 18 June 2010 and 19 October 2010 should not be used.

More information.

Problems?

Please report all problems or issues via the ETS.

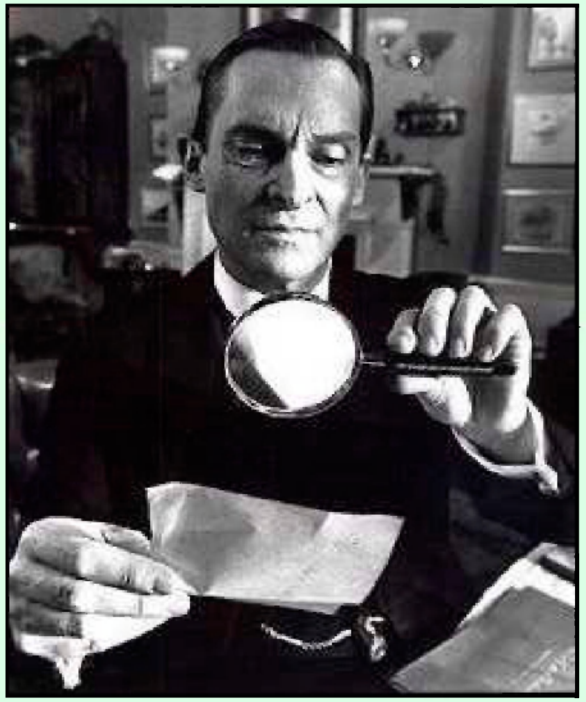
Need an account?

You can get a SaQuery account via the ETS's Online Forms:

- SALAMANCA, ARTEMIS 3 and CHOGLEY [illegible]
- All Others

Last Updated: [illegible] 2010

QFDs



[redacted]

events

Scaling

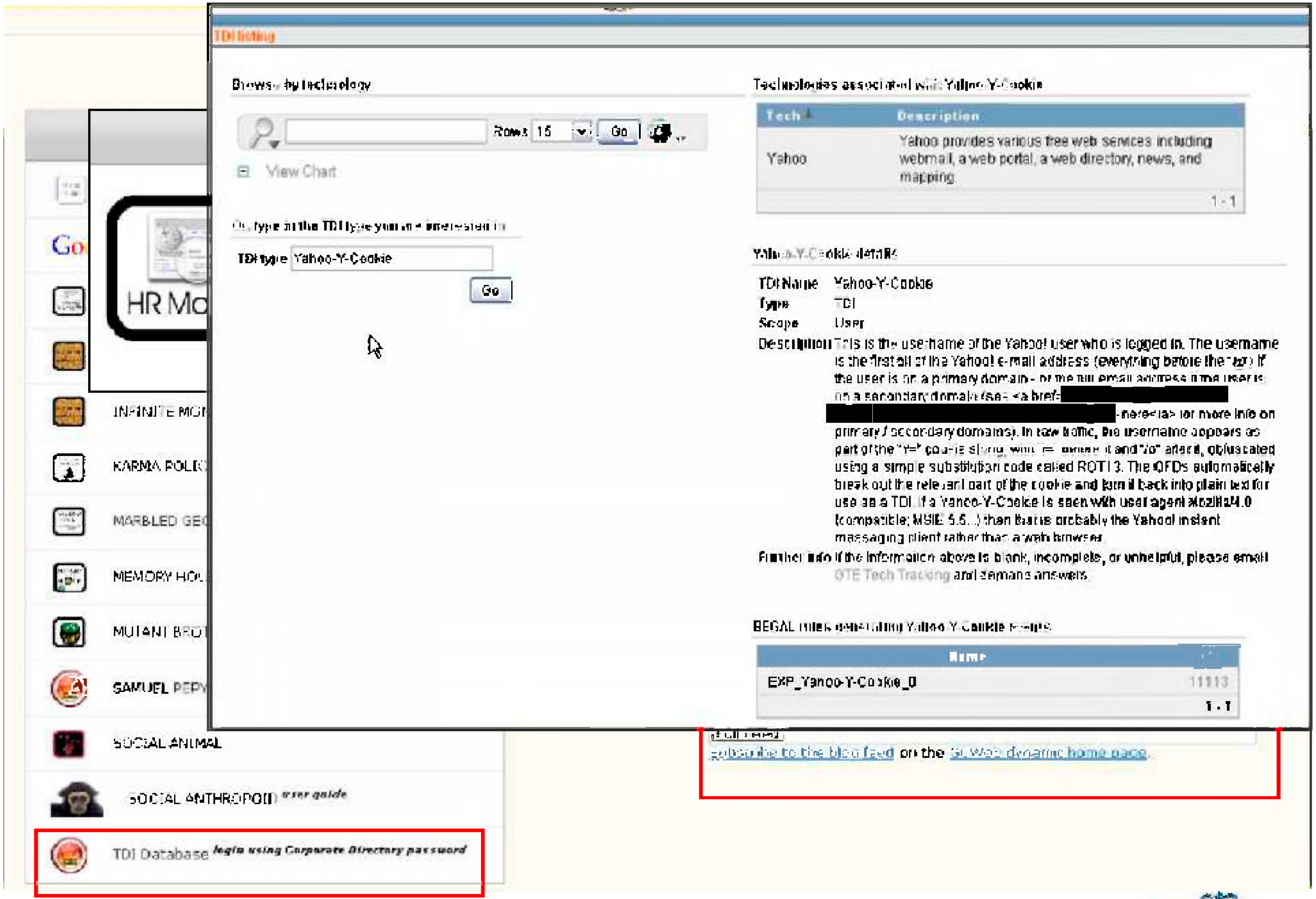
Current scale

- There are 100 unique bearers feeding the BzS tools.
- Consistently averaging over 30 billion events per-day into the input buffer.
  - MB is loading over 10.5 billion
  - 6 months data retention for MB = 1,890,000,000,000 records and requires 400 TB.
  - Total storage of over one petabyte.

Scaling

Future Scale

- Further 58 bearers by end of 2010
- An additional 40 bearers in Q1 2011.
  - MB will ingest over 20 billion events per day requiring one petabyte of storage.
  - Overall storage will increase to 2.5 petabytes.
- Scope scaling to 400 bearers.



Or type in the TDI type you are interested in

TDI type: Yahoo-Y-Cookie

Technologies associated with Yahoo-Y-Cookie

Tech	Description
Yahoo	Yahoo provides various free web services including webmail, a web portal, a web directory, news, and mapping
	1 - 1

Yahoo-Y-Cookie details

TDI Name: Yahoo-Y-Cookie

Type: TDI

Scope: User

Description: This is the username of the Yahoo! user who is logged in. The username is the first part of the Yahoo! e-mail address (everything before the '@') if the user is on a primary domain - or the full email address if the user is on a secondary domain (see <a href=[redacted]>here</a> for more info on primary / secondary domains). In raw traffic, the username appears as part of the "Y=" cookie string, with "l=" before it and "/o" after it, obfuscated using a simple substitution code called ROT13. The QFDs automatically break out the relevant part of the cookie and turn it back into plain text for use as a TDI. If a Yahoo-Y-Cookie is seen with user agent Mozilla/4.0 (compatible; MSIE 5.5...) then this is probably the Yahoo! instant messaging client rather than a web browser.

Further info: If the information above is blank, incomplete, or unhelpful, please email GTE Tech Tracking and demand answers.

BEGAL rules generating Yahoo-Y-Cookie events

Name	
EXP_Yahoo-Y-Cookie_0	11113
	1 - 1

events

Samuel Pepys

- Pull through and upscaling of TR SPs.
  - Currently 43 bearers.
    - 14 from TR SP
    - 29 additional bearers from TPS (generating HTTP, TDI, Websearch, FTP and Squeal).
    - Circa 40 additional bearers just generating Squeal.
  - Approval to increase aperture to 100 bearers for all data-types.
  - Approval to increase user numbers to 200.

events

SOCIAL ANTHROPOID

events

- What is Social Anthropoid?
  - SOCIAL ANTHROPOID is a converged comms database. It will allow you to see when your targets have communicated via phone, over the internet, or using converged channels (e.g., sending e-mails from a phone or making voice calls over the internet).

events

- What about the existing comms data-bases?
  - When SOCIAL ANTHROPOID contains all the necessary data and has all the core functionality of the legacy tools Social animal, HAUSTORIUM and SALAMANCA will be de-commissioned.

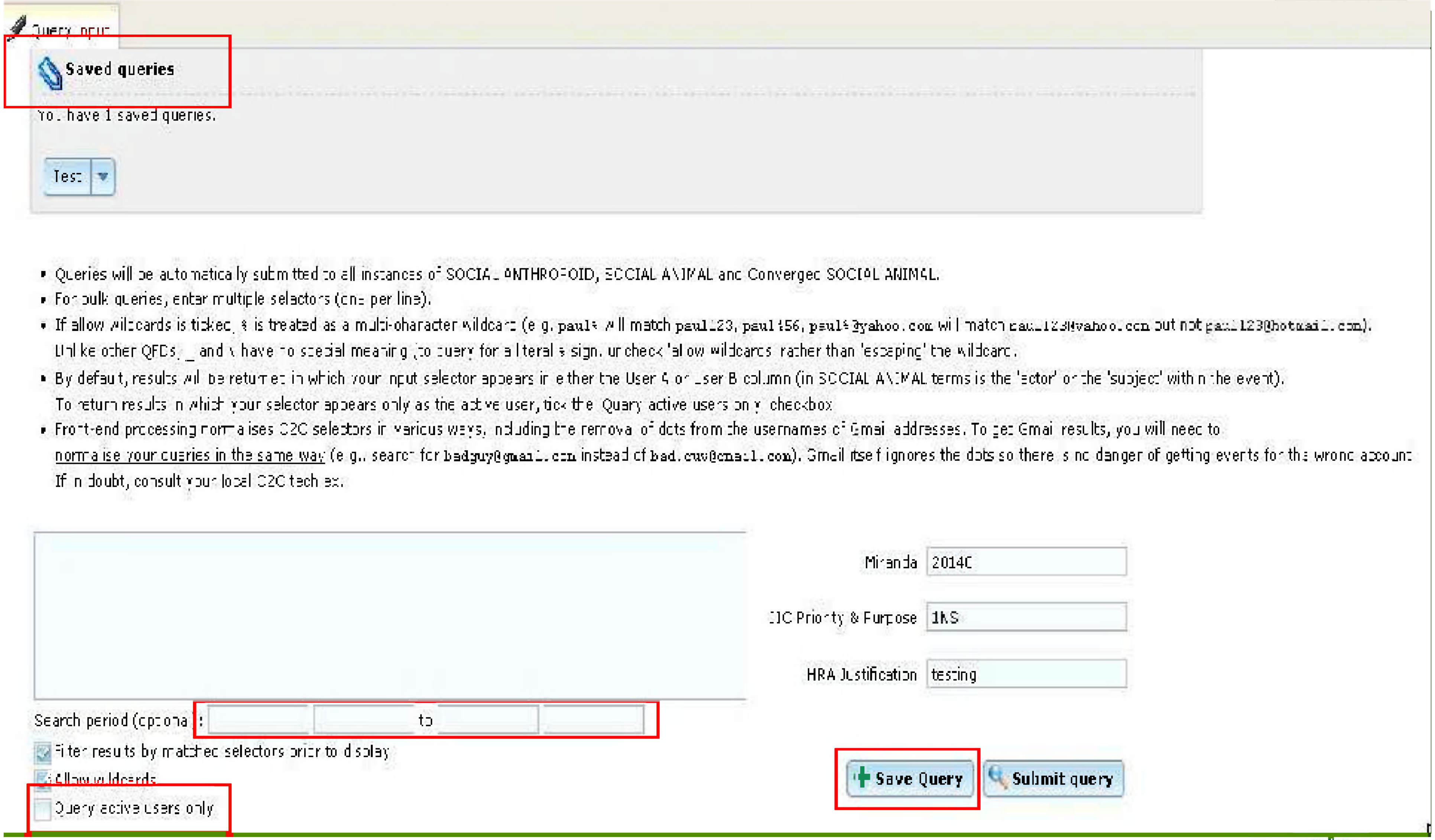
events

- What data is in Social Anthropoid??
  - All of Salamanca data (telephony)
  - Social animal data.
  - Instant Messenger.
  - Webmail. - SIP & H323 VOIP
  - Yahoo Voice
  - Blackberry
  - MMS
  - SMS (from Salamanca and other sources)
  - GTP (GPRS session set-ups)
  - And more..

events

- What about SMTP, POP3 and IMAP?
  - Starting to receive these data types now.
  - Capability deployed as part of HeartBeat 11.

events



Query input

Saved queries

You have 1 saved queries.

- Queries will be automatically submitted to all instances of SOCIAL ANTHROPOID, SOCIAL ANIMAL and Converged SOCIAL ANIMAL.
- For bulk queries, enter multiple selectors (one per line).
- If allow wildcards is ticked, % is treated as a multi-character wildcard (e.g. paul% will match paul123, paul456, paul%@yahoo.com will match paul123@yahoo.com but not paul123@hotmail.com). Unlike other QFDs, _ and \ have no special meaning (to query for a literal % sign, uncheck 'allow wildcards' rather than 'escaping' the wildcard.
- By default, results will be returned in which your input selector appears in either the User A or User B column (in SOCIAL ANIMAL terms is the 'actor' or the 'subject' within the event). To return results in which your selector appears only as the active user, tick the Query active users only checkbox
- Front-end processing normalises C2C selectors in various ways, including the removal of dots from the usernames of Gmail addresses. To get Gmail results, you will need to normalise your queries in the same way (e.g., search for badguy@gmail.com instead of bad.guy@gmail.com). Gmail itself ignores the dots so there is no danger of getting events for the wrong account. If in doubt, consult your local C2C tech ex.

Miranda	20140
CIC Priority & Purpose	1KS
HRA Justification	testing

Search period (optional): ______ ______ to ______ ______

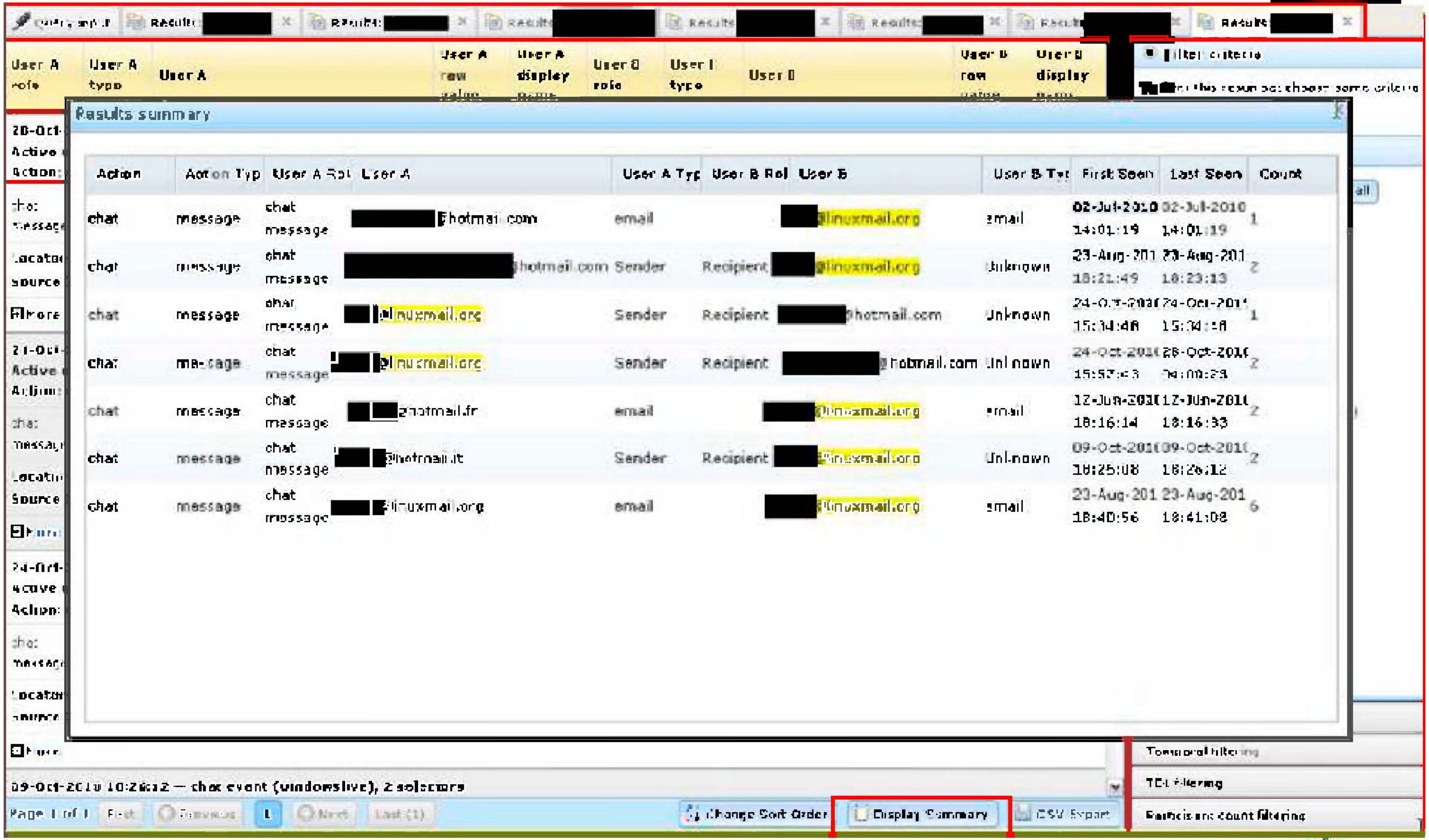
☑ Filter results by matched selectors prior to display

☑ Allow wildcards

☐ Query active users only

SECRET STRAP1

events C2C



Results summary

Action	Action Typ	User A Rol	User A	User A Typ	User B Rol	User B	User B Typ	First Seen	Last Seen	Count
chat	message	chat message	[redacted]@hotmail.com	email		[redacted]@linuxmail.org	email	02-Jul-2010 14:01:19	02-Jul-2010 14:01:19	1
chat	message	chat message	[redacted]@hotmail.com	Sender	Recipient	[redacted]@linuxmail.org	Unknown	23-Aug-201 18:21:49	23-Aug-201 18:23:13	2
chat	message	chat message	[redacted]@linuxmail.org	Sender	Recipient	[redacted]@hotmail.com	Unknown	24-Oct-201(15:34:48	24-Oct-201(15:34:48	1
chat	message	chat message	[redacted]@linuxmail.org	Sender	Recipient	[redacted]@hotmail.com	Unknown	24-Oct-201(15:57:43	26-Oct-201(04:00:23	2
chat	message	chat message	[redacted]@hotmail.fr	email		[redacted]@linuxmail.org	email	12-Jun-201(18:16:14	12-Jun-201(18:16:33	2
chat	message	chat message	[redacted]@hotmail.it	Sender	Recipient	[redacted]@linuxmail.org	Unknown	09-Oct-201(18:25:08	09-Oct-201(18:26:12	2
chat	message	chat message	[redacted]@linuxmail.org	email		[redacted]@linuxmail.org	email	23-Aug-201 18:40:56	23-Aug-201 18:41:08	6

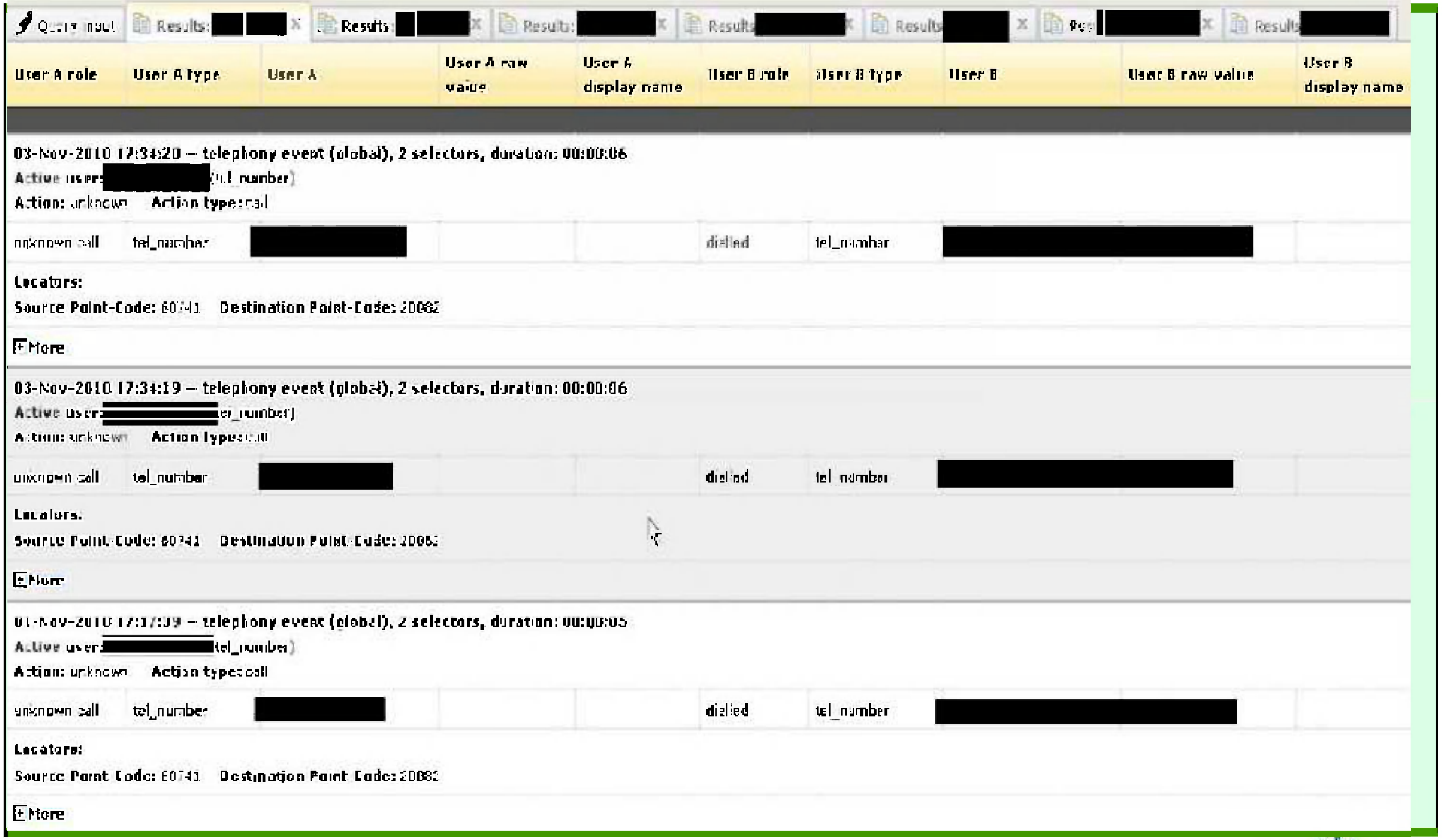
09-Oct-2010 10:26:12 — chat event (windowslive), 2 selectors

SECRET STRAP1

events

Telephony in Santhropoid

Blazing Saddles



Query input | Results: [redacted] [redacted] | Results: [redacted] [redacted] | Results: [redacted] | Results [redacted] | Results [redacted] | Res [redacted] | Results [redacted]

03-Nov-2010 17:34:20 – telephony event (global), 2 selectors, duration: 00:00:06
Active user: [redacted] (tel_number)
Action: unknown   Action type: call

User A role	User A type	User A	User A raw value	User A display name	User B role	User B type	User B	User B raw value	User B display name
unknown call	tel_number	[redacted]			dialled	tel_number	[redacted]		

Locators:
Source Point-Code: 60741   Destination Point-Code: 20082

⊞ More

03-Nov-2010 17:34:19 – telephony event (global), 2 selectors, duration: 00:00:06
Active user: [redacted] (tel_number)
Action: unknown   Action type: call

unknown call	tel_number	[redacted]			dialled	tel_number	[redacted]		

Locators:
Source Point-Code: 60741   Destination Point-Code: 20082

⊞ More

03-Nov-2010 17:17:39 – telephony event (global), 2 selectors, duration: 00:00:05
Active user: [redacted] (tel_number)
Action: unknown   Action type: call

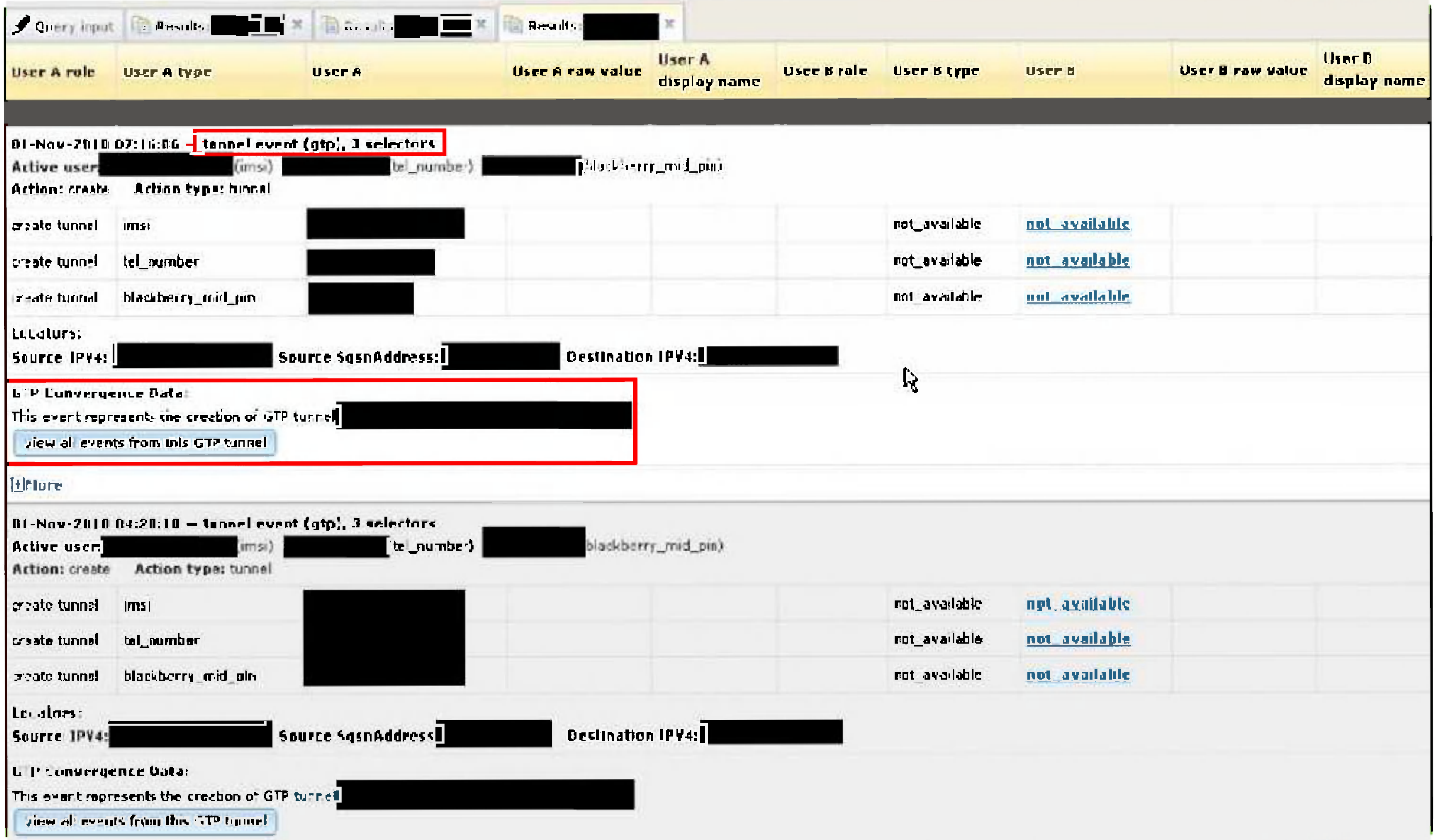
unknown call	tel_number	[redacted]			dialled	tel_number	[redacted]		

Locators:
Source Point-Code: 60741   Destination Point-Code: 20082

⊞ More

GCHQ

events Convergence - GTP tunnel



Query input | Results: [redacted] | Results: [redacted] | Results: [redacted]

User A role	User A type	User A	User A raw value	User A display name	User B role	User B type	User B	User B raw value	User B display name

01-Nov-2010 07:16:06 – tunnel event (gtp), 3 selectors

Active user: [redacted] (imsi) [redacted] (tel_number) [redacted] (blackberry_mid_pin)

Action: create Action type: tunnel

User A role	User A type	User A	User A raw value	User A display name	User B role	User B type	User B	User B raw value	User B display name
create tunnel	imsi	[redacted]				not_available	not_available		
create tunnel	tel_number	[redacted]				not_available	not_available		
create tunnel	blackberry_mid_pin	[redacted]				not_available	not_available		

Locators:

Source IPV4: [redacted] Source SgsnAddress: [redacted] Destination IPV4: [redacted]

GTP Convergence Data:

This event represents the creation of GTP tunnel [redacted]

View all events from this GTP tunnel

[+]More

01-Nov-2010 04:20:10 – tunnel event (gtp), 3 selectors

Active user: [redacted] (imsi) [redacted] (tel_number) [redacted] (blackberry_mid_pin)

Action: create Action type: tunnel

User A role	User A type	User A	User A raw value	User A display name	User B role	User B type	User B	User B raw value	User B display name
create tunnel	imsi	[redacted]				not_available	not_available		
create tunnel	tel_number	[redacted]				not_available	not_available		
create tunnel	blackberry_mid_pin	[redacted]				not_available	not_available		

Locators:

Source IPV4: [redacted] Source SgsnAddress: [redacted] Destination IPV4: [redacted]

GTP Convergence Data:

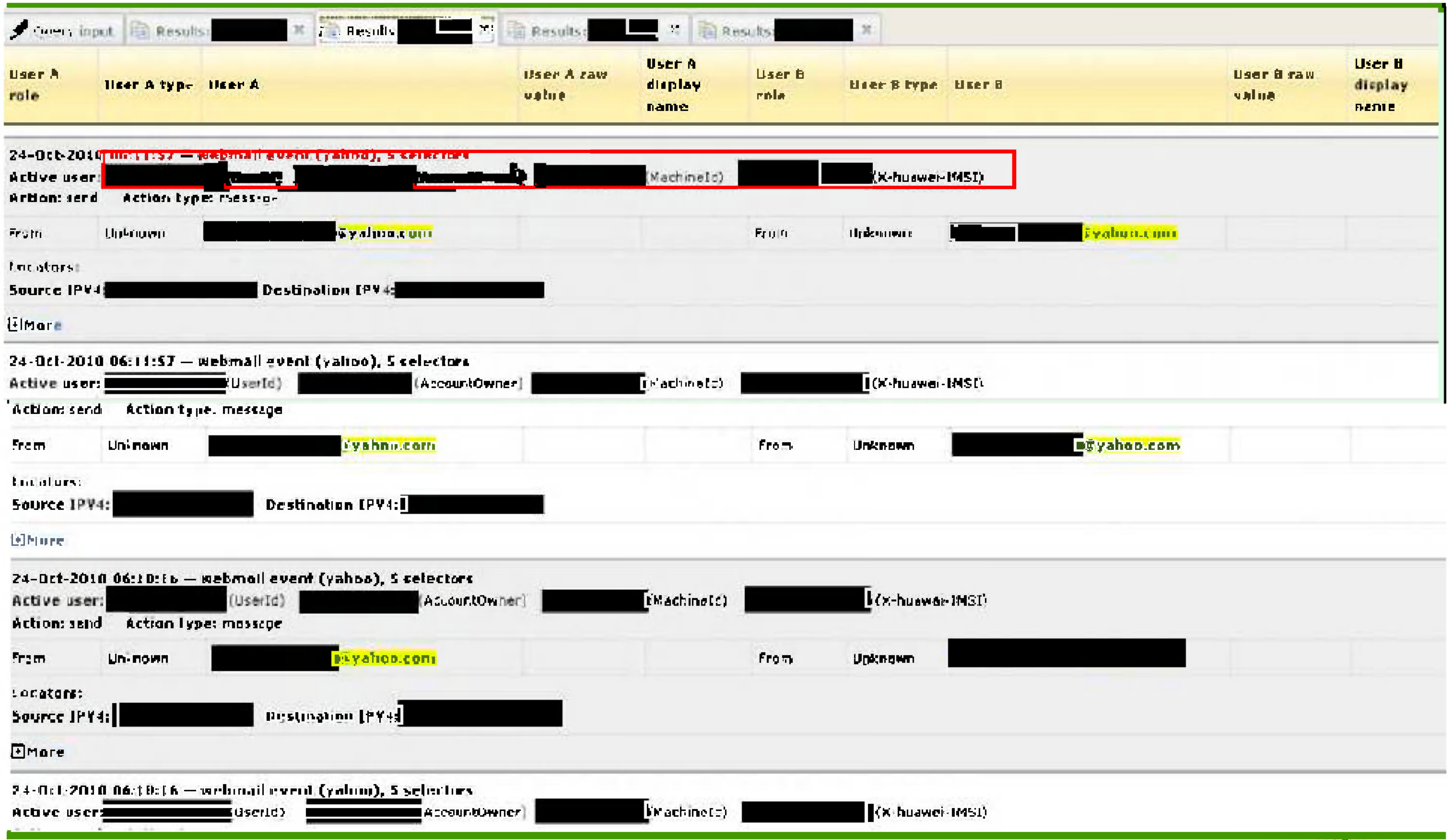
This event represents the creation of GTP tunnel [redacted]

View all events from this GTP tunnel

SECRET STRAP1

events

Convergence – Leaky Gateways



Query input | Results: [redacted] | Results: [redacted] | Results: [redacted] | Results: [redacted]

User A role	User A type	User A	User A raw value	User A display name	User B role	User B type	User B	User B raw value	User B display name

24-Oct-2010 06:11:57 — webmail event (yahoo), 5 selectors
Active user: [redacted] [redacted] [redacted] (MachineId) [redacted] [redacted] (X-huawei-IMSI)
Action: send Action type: message

From Unknown [redacted]@yahoo.com From Unknown [redacted] [redacted]@yahoo.com

Locators:
Source IPV4: [redacted] Destination IPV4: [redacted]

⊞ More

24-Oct-2010 06:11:57 — webmail event (yahoo), 5 selectors
Active user: [redacted] (UserId) [redacted] (AccountOwner) [redacted] (MachineId) [redacted] (X-huawei-IMSI)
Action: send Action type: message

From Unknown [redacted]@yahoo.com From Unknown [redacted]@yahoo.com

Locators:
Source IPV4: [redacted] Destination IPV4: [redacted]

⊞ More

24-Oct-2010 06:10:16 — webmail event (yahoo), 5 selectors
Active user: [redacted] (UserId) [redacted] (AccountOwner) [redacted] (MachineId) [redacted] (X-huawei-IMSI)
Action: send Action type: message

From Unknown [redacted]@yahoo.com From Unknown [redacted]

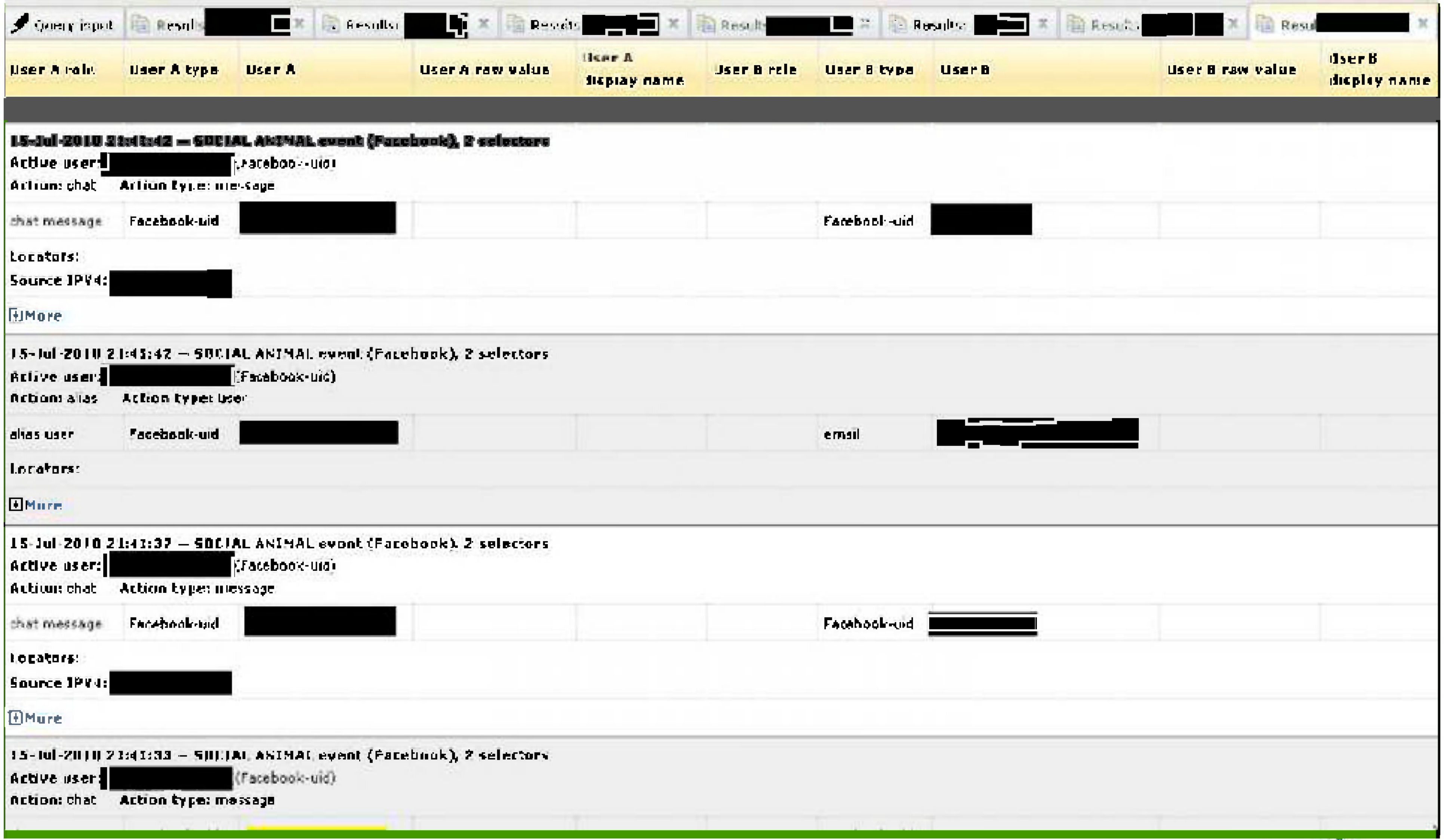
Locators:
Source IPV4: [redacted] Destination IPV4: [redacted]

⊞ More

24-Oct-2010 06:10:16 — webmail event (yahoo), 5 selectors
Active user: [redacted] (UserId) [redacted] (AccountOwner) [redacted] (MachineId) [redacted] (X-huawei-IMSI)

SECRET STRAP1

events OSN



<table>
<tr><th>User A role</th><th>User A type</th><th>User A</th><th>User A raw value</th><th>User A display name</th><th>User B role</th><th>User B type</th><th>User B</th><th>User B raw value</th><th>User B display name</th></tr>
<tr><td colspan="10"><b>15-Jul-2010 21:41:42 – SOCIAL ANIMAL event (Facebook), 2 selectors</b>
Active user: [redacted] (Facebook-uid)
Action: chat Action type: message</td></tr>
<tr><td>chat message</td><td>Facebook-uid</td><td>[redacted]</td><td></td><td></td><td></td><td>Facebook-uid</td><td>[redacted]</td><td></td><td></td></tr>
<tr><td colspan="10">Locators:
Source IPV4: [redacted]
⊞More</td></tr>
<tr><td colspan="10">15-Jul-2010 21:41:42 – SOCIAL ANIMAL event (Facebook), 2 selectors
Active user: [redacted] (Facebook-uid)
Action: alias Action type: user</td></tr>
<tr><td>alias user</td><td>Facebook-uid</td><td>[redacted]</td><td></td><td></td><td></td><td>email</td><td>[redacted]</td><td></td><td></td></tr>
<tr><td colspan="10">Locators:
⊞More</td></tr>
<tr><td colspan="10">15-Jul-2010 21:41:37 – SOCIAL ANIMAL event (Facebook), 2 selectors
Active user: [redacted] (Facebook-uid)
Action: chat Action type: message</td></tr>
<tr><td>chat message</td><td>Facebook-uid</td><td>[redacted]</td><td></td><td></td><td></td><td>Facebook-uid</td><td>[redacted]</td><td></td><td></td></tr>
<tr><td colspan="10">Locators:
Source IPV4: [redacted]
⊞More</td></tr>
<tr><td colspan="10">15-Jul-2010 21:41:33 – SOCIAL ANIMAL event (Facebook), 2 selectors
Active user: [redacted] (Facebook-uid)
Action: chat Action type: message</td></tr>
</table>

events

- Looks good, When can I have an account?
  - Santhropoid is currently in the second stage of UAT.
  - We currently have 200 users representing all areas of the business.
  - Aiming to be in a position to release Santhropoid to the masses in early January.

events New data sources

- LUSTRE – new data-source available in MB. Good for North Africa.

- Source field – This will enable new non-routine data-sources to be added to the QFD's.
  - CNE
  - JTRIG – GLASSBACK data used for test case.
  - COLLATERAL

New Loaders

- New loaders deployed to MB and HR Map, improvements to KP.
  - Latency of the data in the QFDs has been greatly reduced, now around 12 hours.
    - Each instance of MB can now ingest 8 billion events per-day (total 32 billion)
  - Some QFDs were previously 1-5 days behind.
  - Query performance during loading has also been improved.

GUIDING LIGHT QFD

Presented by [redacted]
(Guiding Light SU)

What is GUIDING LIGHT?

- New QFD developed in August 2010 by TDB-Events.
- Primary objective:

> "To understand the traffic seen on the Next Gen Events bearers."

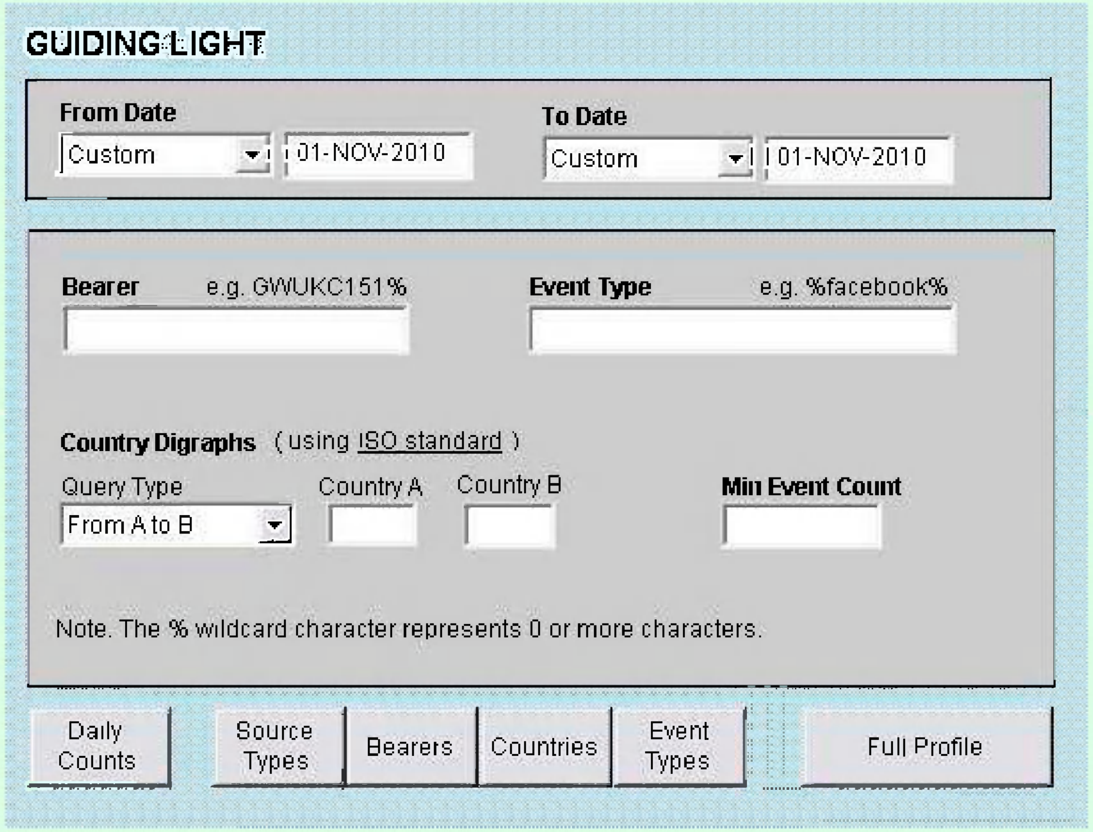
events What can it do for me?

General Questions:

- Given a case notation, what are the TDI types that are found on it?
- Given a TDI type/subset, which bearers produce the highest number of events?
- What type of traffic is on which bearers and where is it coming from?
- Which bearers provide the most amount of traffic type *x* from place *y*?

events

Front End Interface



GUIDING LIGHT

From Date
Custom
01-NOV-2010

To Date
Custom
01-NOV-2010

Bearer e.g. GWUKC151%

Event Type e.g. %facebook%

Country Digraphs (using ISO standard)

Query Type
From A to B

Country A

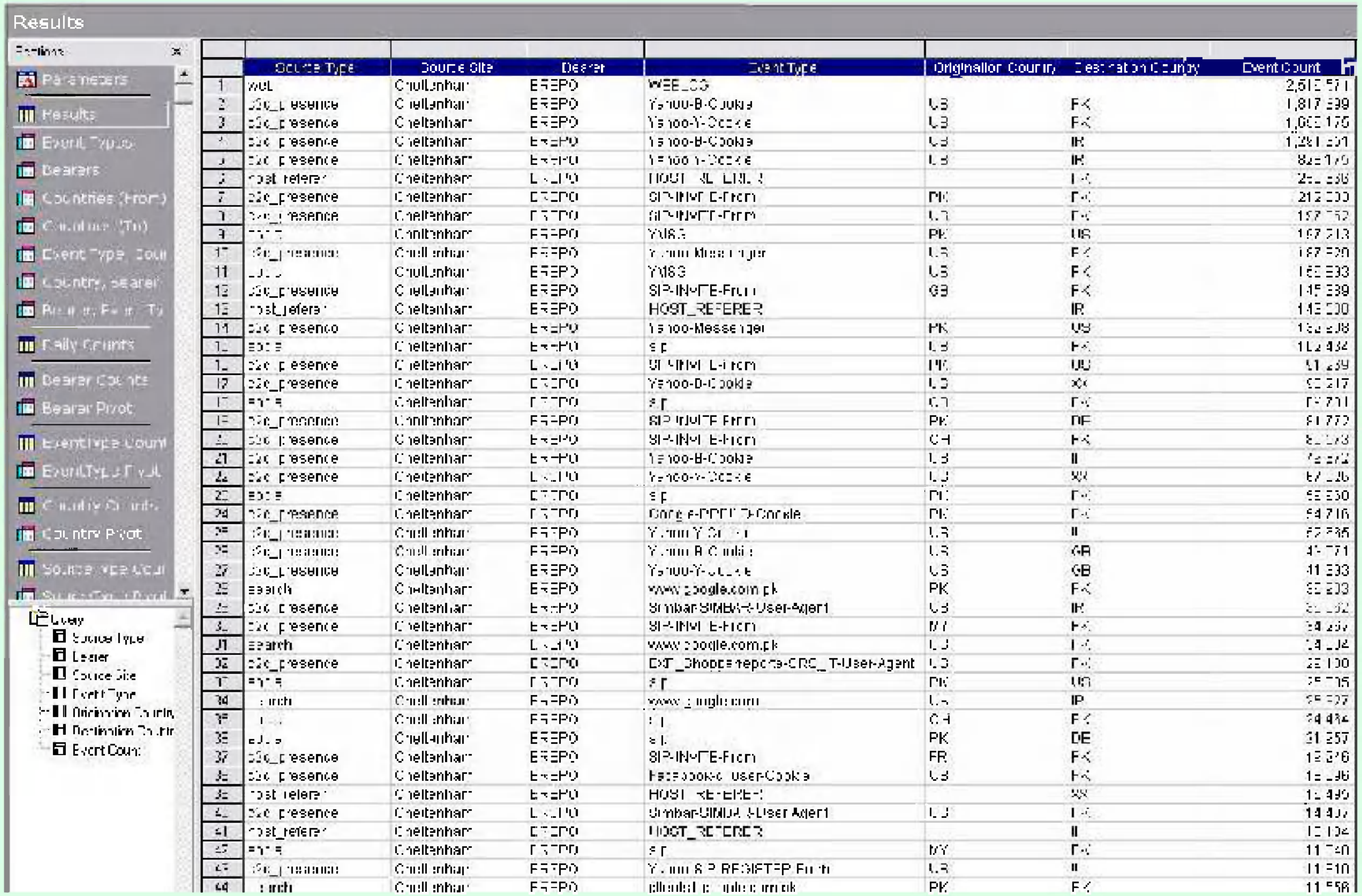
Country B

Min Event Count

Note. The % wildcard character represents 0 or more characters.

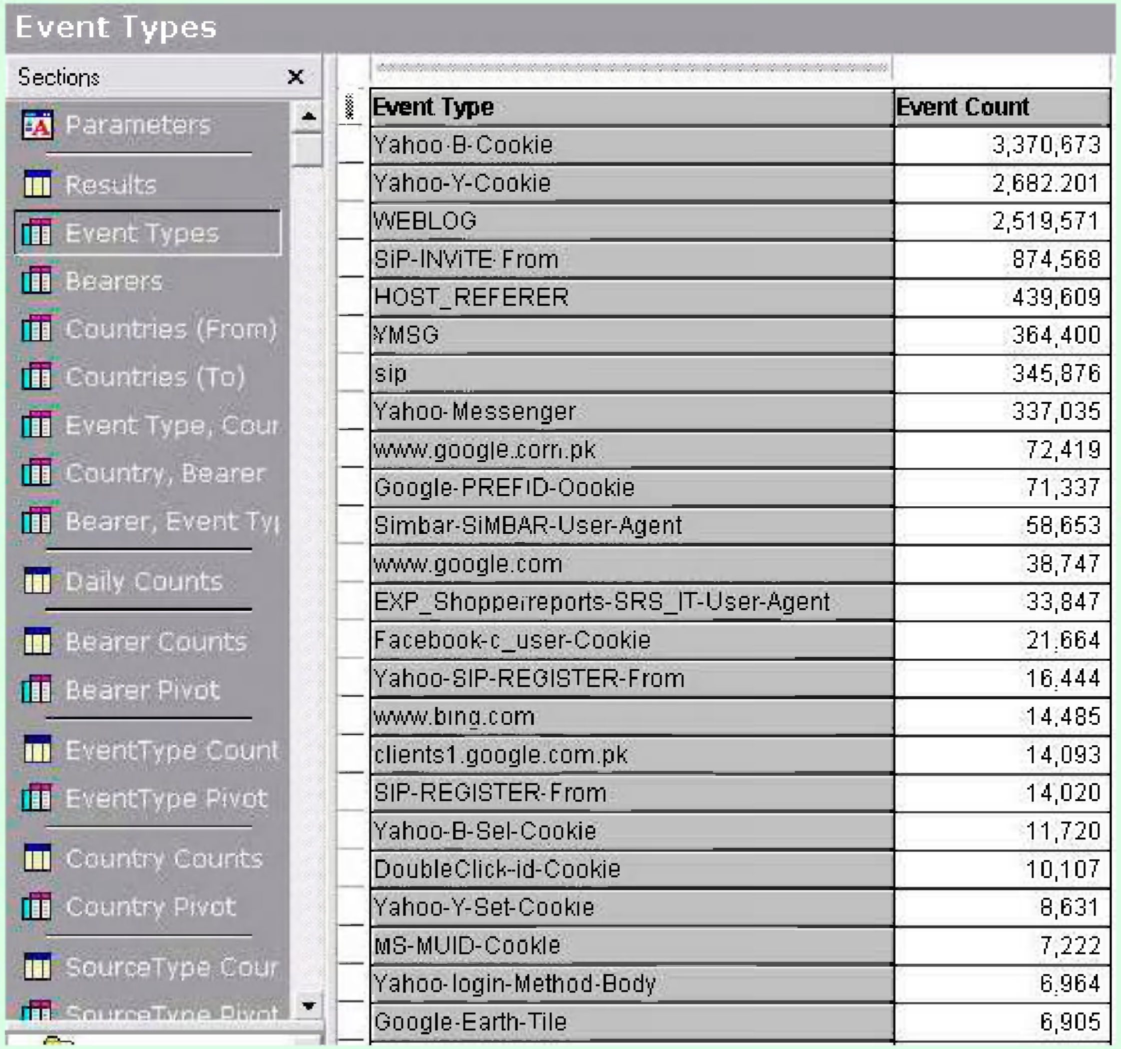
events

Results - Full Profile Query



	Source Type	Source Site	Bearer	Event Type	Origination Country	Destination Country	Event Count
1	web	Cheltenham	EREPO	WEB_LOG			2,512,571
2	c2c_presence	Cheltenham	EREPO	Yahoo-B-Cookie	US	PK	1,817,539
3	c2c_presence	Cheltenham	EREPO	Yahoo-Y-Cookie	US	PK	1,003,175
4	c2c_presence	Cheltenham	EREPO	Yahoo-B-Cookie	US	IR	1,281,531
5	c2c_presence	Cheltenham	EREPO	Yahoo-Y-Cookie	US	IR	825,175
6	host_referer	Cheltenham	EREPO	HOST_NL_LINK		PK	25?,536
7	c2c_presence	Cheltenham	EREPO	SIP-INVITE-From	PK	PK	212,000
8	c2c_presence	Cheltenham	EREPO	SIP-INVITE-From	US	PK	197,752
9	[illegible]	Cheltenham	EREPO	YMSG	PK	US	197,213
10	c2c_presence	Cheltenham	EREPO	Yahoo-Messenger	US	PK	187,520
11	[illegible]	Cheltenham	EREPO	YMSG	US	PK	165,533
12	c2c_presence	Cheltenham	EREPO	SIP-INVITE-From	GB	PK	145,539
13	host_referer	Cheltenham	EREPO	HOST_REFERER		IR	143,000
14	c2c_presence	Cheltenham	EREPO	Yahoo-Messenger	PK	US	132,208
15	[illegible]	Cheltenham	EREPO	sip	US	PK	102,434
16	c2c_presence	Cheltenham	EREPO	SIP-INVITE-From	PK	US	91,239
17	c2c_presence	Cheltenham	EREPO	Yahoo-B-Cookie	US	XX	90,217
18	[illegible]	Cheltenham	EREPO	sip	US	PK	89,711
19	c2c_presence	Cheltenham	EREPO	SIP-INVITE-From	PK	DE	81,772
20	c2c_presence	Cheltenham	EREPO	SIP-INVITE-From	CH	PK	80,573
21	c2c_presence	Cheltenham	EREPO	Yahoo-B-Cookie	US	II	72,572
22	c2c_presence	Cheltenham	EREPO	Yahoo-Y-Cookie	US	XX	67,026
23	[illegible]	Cheltenham	EREPO	sip	PK	PK	55,530
24	c2c_presence	Cheltenham	EREPO	Google-PREF-ID-Cookie	PK	PK	54,716
25	c2c_presence	Cheltenham	EREPO	Yahoo-Y-Cookie	US	II	52,835
26	c2c_presence	Cheltenham	EREPO	Yahoo-B-Cookie	US	GB	41,771
27	c2c_presence	Cheltenham	EREPO	Yahoo-Y-Cookie	US	GB	41,533
28	search	Cheltenham	EREPO	www.google.com.pk	PK	PK	32,203
29	c2c_presence	Cheltenham	EREPO	Simbar-SIMBAR-User-Agent	US	IR	[illegible]
30	c2c_presence	Cheltenham	EREPO	SIP-INVITE-From	MY	PK	34,257
31	search	Cheltenham	EREPO	www.google.com.pk	US	PK	34,004
32	c2c_presence	Cheltenham	EREPO	EXT_ShoppeReports-CRC_T-User-Agent	US	PK	28,100
33	[illegible]	Cheltenham	EREPO	sip	PK	US	25,715
34	search	Cheltenham	EREPO	www.google.com	US	IR	25,507
35	[illegible]	Cheltenham	EREPO	sip	CH	PK	24,434
36	[illegible]	Cheltenham	EREPO	sip	PK	DE	21,257
37	c2c_presence	Cheltenham	EREPO	SIP-INVITE-From	FR	PK	13,276
38	c2c_presence	Cheltenham	EREPO	Facebook-c_user-Cookie	US	PK	13,096
39	host_referer	Cheltenham	EREPO	HOST_REFERER		XX	12,495
40	c2c_presence	Cheltenham	EREPO	Simbar-SIMBAR-User-Agent	US	PK	14,407
41	host_referer	Cheltenham	EREPO	HOST_REFERER		II	12,104
42	[illegible]	Cheltenham	EREPO	sip	MY	PK	11,740
43	c2c_presence	Cheltenham	EREPO	Yahoo-SIP-REGISTER-From	US	II	11,510
44	search	Cheltenham	EREPO	clients1.google.com.pk	PK	PK	11,558

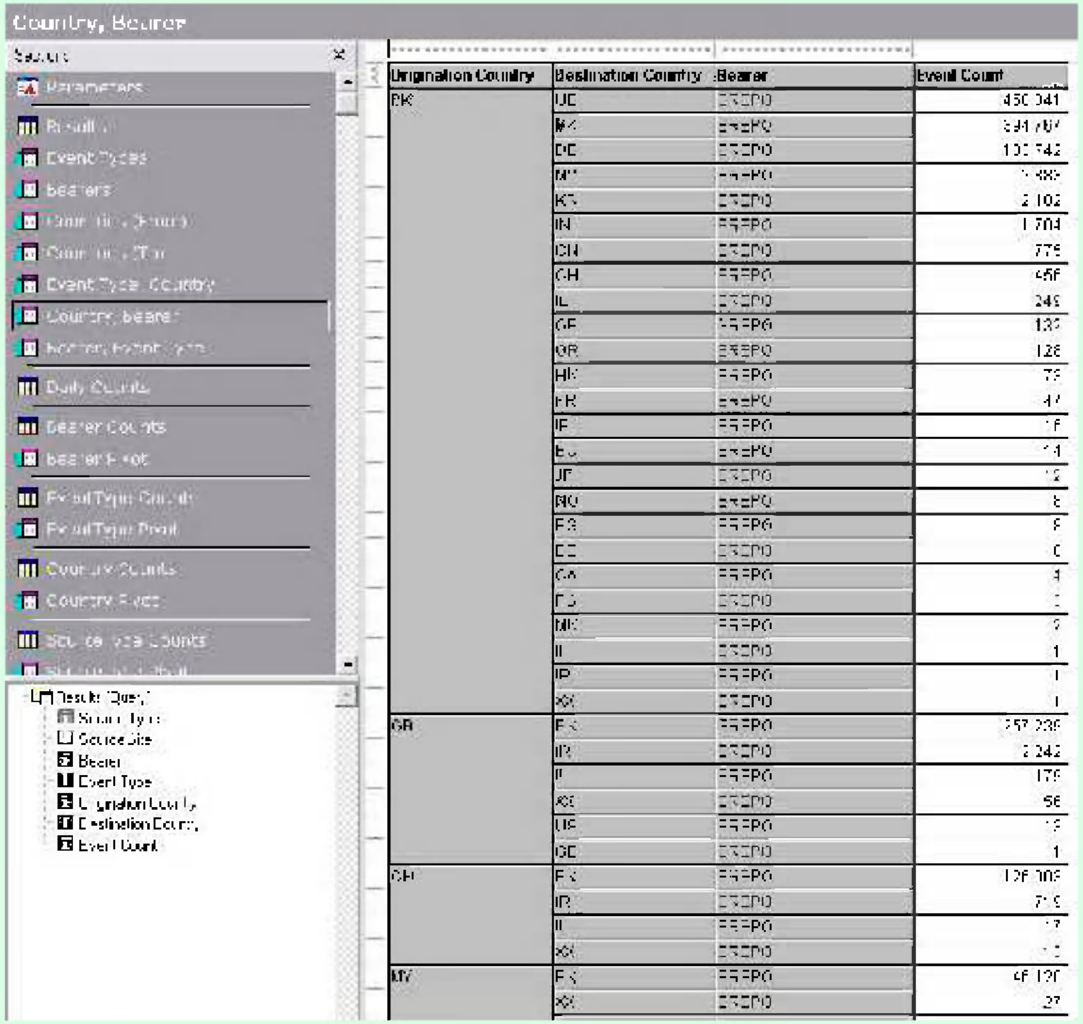
Results Pivot: Event Types



Event Type	Event Count
Yahoo-B-Cookie	3,370,673
Yahoo-Y-Cookie	2,682,201
WEBLOG	2,519,571
SIP-INVITE-From	874,568
HOST_REFERER	439,609
YMSG	364,400
sip	345,876
Yahoo-Messenger	337,035
www.google.corn.pk	72,419
Google-PREFID-Oookie	71,337
Simbar-SIMBAR-User-Agent	58,653
www.google.com	38,747
EXP_Shoppeireports-SRS_IT-User-Agent	33,847
Facebook-c_user-Cookie	21,664
Yahoo-SIP-REGISTER-From	16,444
www.bing.com	14,485
clients1.google.com.pk	14,093
SIP-REGISTER-From	14,020
Yahoo-B-Sel-Cookie	11,720
DoubleClick-id-Cookie	10,107
Yahoo-Y-Set-Cookie	8,631
MS-MUID-Cookie	7,222
Yahoo-login-Method-Body	6,964
Google-Earth-Tile	6,905

events

Results Pivot: Countries (From)



Origination Country	Destination Country	Bearer	Event Count
PK	UE	[illegible]	450 041
	M[illegible]	[illegible]	391 7[illegible]
	DE	[illegible]	101 742
	M[illegible]	[illegible]	[illegible] 88[illegible]
	K[illegible]	[illegible]	2 102
	IN	[illegible]	1 704
	CN	[illegible]	775
	CH	[illegible]	456
	IL	[illegible]	249
	GF	[illegible]	13[illegible]
	GR	[illegible]	128
	HK	[illegible]	7[illegible]
	FR	[illegible]	47
	IE	[illegible]	16
	E[illegible]	[illegible]	14
	JP	[illegible]	12
	NO	[illegible]	8
	E[illegible]	[illegible]	9
	D[illegible]	[illegible]	6
	CA	[illegible]	4
	F[illegible]	[illegible]	[illegible]
	NK	[illegible]	2
	II	[illegible]	1
	IP	[illegible]	1
	XX	[illegible]	1
GB	F[illegible]	[illegible]	257 239
	IR	[illegible]	2 242
	I[illegible]	[illegible]	179
	XX	[illegible]	56
	US	[illegible]	1[illegible]
	GE	[illegible]	1
CH	F[illegible]	[illegible]	126 009
	IR	[illegible]	719
	II	[illegible]	17
	XX	[illegible]	1[illegible]
MY	F[illegible]	[illegible]	46 120
	XX	[illegible]	27

SECRET STRAP1

GCHQ

events

Recent Enhancements

- Data from Bude (RPC)
  - Including data from SWORDPLAY
- New fields
  - PDDG
  - SIGAD
  - SSDG

Future Enhancements

Near future:

- Adding BROAD OAK Targeting data
- Incorporating MI functionality from REFORMER (where appropriate!)
- Adding more feeds. (Ongoing)

Longer term:

- Adding Cipher and eAD MI information
- Linkage into ARTEMIS (or its successor)

events

Any Questions

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