Our Approach

- Queried over 900 towers and other selectors in MAINWAY/SEDB in attempt to discover any identifiable selectors around the coordinates of interest.
- Created another query based on identified selectors of interest to pull for any cell fan information in order to more precisely locate each selector of interest.
- Queried in SEDB ship data on the ships of interest and plotted the track the ships took into.
- Identified selectors by cell fan information seen near the ports where the ships of interest had docked. Also correlated any selectors moving in relation to the ships’ movements using cell fan data.
Mission Example and Result: The HAPPYFOOT analytic aggregates leaked location-based service / location-aware application data to infer IP address geo-locations. SDS identified 'Public' and 'private' usage of the same IP address that caused HAPPYFOOT to assign [REDACTED] netblocks to [REDACTED] geo-locations (the IP address was used in both countries). This private network is now being realmned and properly geo-located. Ongoing work will solve this realmng problem for networks affecting other cloud analytics.
Our Approach

• Tracked target’s converged communications and CNE accesses.
• Monitored passive internet traffic; created automated processes where possible (XKS ANCHORMAN, Workflows, Fingerprints).
• Provided TAO/GCHQ with WLLids/DSL accounts, Cookies, GooglePREFIDs to enable remote exploitation.
• Partnered with NGA and R4 to confirm locations and USRP equipment based on collected photographs.
• Drove CNE collection and partnered with TAO to increase USRP specific endpoint accesses.
• Provided knowledge to interagency partners for potential on the ground survey options and FBI-led intelligence guiding efforts.
(S//SI//REL TO USA, FVEY) **Metadata/Target Discovery:** Analyze DNR/DNI/Convergence metadata for target discovery, identify gaps in collection, processing, and analytic methodologies; Improve metadata collection and processing; Create analytics that automate or improve analytic methodologies; Conduct target discovery through multiple technology thrusts, including endpoint, web-based technologies/services, mobile applications and networks, geo-location analysis, correlations/identity Analysis, Social Network Analysis; Collaboration/facilitation with TAO, S3, CIA, ODNI, SSO, CES, and SSG centers.
NSA signal-surveillance success stories

Excerpts from an April 2013 National Security Agency presentation detailing signal surveillance techniques and successes.

How the NSA uses tower data to find new targets  (p. 1)

What is HAPPYFOOT?  (p. 2)

What is CNE?  (p. 3)

Google tracking cookie used to pinpoint targets  (p. 3)

NSA partnered with NGA  (p. 3)
What is TAC? (p. 3)

* Drave CRE collection and partnered with TAO to increase USRP specific endpoint accesses.

DNR/DNI metadata (p. 4)

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