Hetherington Group Expert Investigations and Intelligence Services

What the APP?! Top Social Media APPS and the Lowdown on What Info They Collect.

By Matthew Golabek and Trevor Morgan, Hetherington Group

An Hg FactSheet

B001

Exact, precise delivery of critical intelligence.

Table of Contents

pg 3: Introduction

pg 4: Banking & Household, Dating, Fitness & Health

pg 5: Food Delivery

pg 6: Gaming, News & Info, TeenScene

pg 8: Travel

pg 9: Weather

What are they collecting?

Starting a new health and fitness routine? Need to get to the library, but your car is in the shop? Has your 12-year-old son been grounded from receiving photos from his friends on his smartphone but appears unaffected by it? Booking a trip to Bermuda? Or, are you stepping out of your single's lifestyle and looking for love?

All of these questions have one thing in common that a mere 10 years ago did not exist:

There's an app for that!

From calorie counters to food delivery services to secret and deceptive "vaults" to hide info from parents, millions of humans are tethered to smartphones as if they were their only lifeline. With the convenience, however, comes potential risks for the user.

IBM's Cost of a Data Breach Report 2019 identified the following startling figures:

- Average total cost of a data breach: $3.92 million;
- Average size of data breach: 25,575 records;
- Time to identify and contain a breach: 279 days;
- Highest country average cost: United States, $8.19 million; and
- 2019 odds of a data breach within two years: 29.6%, up from 27.9 in 2018.

While these data critically inform decisions and actions taken by CEOs, investigative analysts, and cybersecurity professionals in an effort to protect a company's assets, they are also important to the average consumer.

Take for example, the popular app, MyFitnessPal, which we review below. In February 2019, it was reported that 151 million accounts were breached and being sold on Dream Market, a nefarious site on the anonymous Dark Web where drugs, stolen data, and counterfeit consumer goods were being sold. It closed "shop" a month later, with rumors that law enforcement had been breathing down its cyber neck. Another popular app, DoorDash, which we review below, had a data breach of 5 million records in 2019.

In this Hg FactSheet, our seasoned analysts have compiled a list of popular apps used by teenagers and adults to better inform readers of what information each app is collecting. We also provide a link to each app's privacy policy.

A highlight to this report is our "TeenScene," which provides parents with identifiable icons for apps that could bring trouble to your adolescents and young adults.

Our hope is that you will consider your convenience options, while also protecting your privacy data.

Banking & Household

Cozi

Cozi is a calendar app tailored for families and friends. This app collects and stores a wide array of data, including but not limited to passwords, addresses, payment information, calendar data, photos, contacts, birthday information, and resume data. View its privacy policy.

PayPal

PayPal determines what information the mobile business app will collect depending on a user's needs. More than likely a user will be required to provide their name, postal address, telephone number, email address, and identification information. Not only does this app collect the user's information, but, at times, this app would need to collect the information of those within whom you are completing a transaction, such as friends, family, and associates. Visit its privacy policy.

Venmo

This popular service is designed to help users transfer and collect funds without any physical exchange of cash. Users are able to include emojis and words to express thanks, intrigue, and payment information, which can be viewed by their followers and friends on social media channels. Venmo may also collect your identification, device, geolocation, social networks, and financial information. View its privacy policy.

Dating

OkCupid

With permission, this dating app can access your specific geo-location. Location may be tracked even when the app is no longer in use. This service also collects all personal details on a user's profile and Facebook account, should you choose to link them. View its privacy policy.

Tinder

This app may be for dating, but it has a lot more strings attached. By design, users broadcast their personality, photos, lifestyle, and activities on their profile. Along with personal information, this app also tracks geo-location. View its privacy policy. Because Tinder is one of many apps under the Match Group, your data may be shared with other Match Group companies such as BlackPeopleMeet, LoveScout24, Match, Meetic, OkCupid, OurTime, Pairs, ParPerfeito, Plenty of Fish, and Twoo). Learn more.

Fitness & Health

Lifesum

This app is perfect for keeping track of dietary habits, fitness routines, and personal information. Per their privacy policy, this app collects login information, weight, height, date of birth, gender, daily workout routine, and calorie intake. If linked with third party services, information from them may be collected and shared as well. A review of this privacy policy might have its users running—with no app needed. View its privacy policy.

MapMyFitness

Map My Fitness app aggregates the most common and popular walking, running, riding, or hiking routes throughout the world. This app tracks every stride, calorie, and second an individual may take while on this route; and this is where the problems occur. Map My Fitness collects several personal details from you such as name, email address, precise location, and your fitness and wellness data. This means that others using this app could potentially see this information and in no time, unwanted companions could be joining your workouts. View its privacy policy.

MyFitnessPal

With consent, this app has full access to view a user's location, gender, age, device information, and health summary. When matched with an email and login, this app can deduce both physical and technological identifiers. View its privacy policy.

MyPlate

Offered by Livestrong.com, MyPlate is an app that tracks much more than calories. The following information may be collected upon registration: Name, email address, mailing address, phone number, interests, login information, and information provided through surveys. MyPlate may share this information with advertisers and marketers, making private life more open and transparent. View its privacy policy.

Noom

Targeted at millennials and designed by behavioral psychologists, this app is built for long-term weight loss. However, it also collects confidential personal information. This data may include: First and last name, username, password, gender, age, country, zip code, IP address, and health information. If breeched, this app will expose all these identifiers. View its privacy policy.

Food Delivery

DoorDash

This food delivery app collects information in three ways: From what the users provide, from publicly available sources, and from automatic collection. DoorDash collects email addresses, delivery addresses, payment information, IP addresses, and more. View its privacy policy.

Grubhub

Ordering food through this app may come with a side of privacy concerns. Along with the information users provide, Grubhub may collect the following data: Transaction information, device software and provider, analytics, and geo-location. This may be shared with third party services, including advertisers. Location is necessary for delivery, providing workers with potentially private information. Thinking twice before ordering food to your residence may be necessary. View its privacy policy.

Postmates

Postmates is one of many food delivery apps that are available today. The convenience of food delivery services, however, opens your door to sharing personal information such as payment information, phone contacts, and location settings. View its privacy policy.

Gaming

DraftKings
Headquartered in Boston, this fantasy football app is a gambling platform. It collects a user's exact geo-location, social security number, usernames, passwords, device information, phone number, and much more. View its privacy policy.

Words with Friends
Looking to play a simple word game with your friends? Words with Friends is a highly popular gaming app, but it also collects user information such as first and last name, username, gender, age or birthday, and email address. If a user provides a phone number, Words with Friends will collect and store your number for their use. View its privacy policy.

Discord
Discord is an app for gamers to chat and interact with one another in real time. In addition to real time chats, gamers can also talk via text-based chat rooms and direct messages. In order to join a chat, the user must provide an email—making the user's email publicly known. View its privacy policy.

News & Info

Quartz
Quartz is a community-based app where recent economic news headlines across the globe are discussed. Quartz collects some personal information, including a user's computer or mobile device IP address, other unique identifiers, device settings, current street address, employment and demographic information. View its privacy policy.

AskFM
With 215 million users, AskFM is an anonymous app that allows users to pose questions and receive answers on a topic. Headquartered in Latvia, the app collects payment information, phone numbers, and gender. View its privacy policy.

TeenScene

Blendr
Blendr is a popular dating app used by teenagers. To become a member, one must provide information such as date of birth, geolocation, and personal pictures. Users can unwillingly post photos that include identifying information such as a street sign, house number, or license plate—posing potential risk from potential harassers or unsolicited parties. View its privacy policy.

Chatous
Chatous is a global social networking app, which allows people to chat anonymously about anything through a matching system. Minimum age is 17 years, but there is no verification process to confirm a user's real age. It is considered inappropriate for children and teenagers due to its anonymous nature and reporting of anonymous individuals seeking contact with young girls and boys. Visit its privacy policy.

FaceApp
Developed by Wireless Lab, a Russian company, FaceApp is used to change facial expressions, age, and gender. By using this age-enhancing photo app, users grant this app a license to use, reproduce, modify, publish, and display user content, cookies, log files, and location in all media formats and channels now known or that will be later developed. View its privacy policy.

Hinge

Hinge is a dating app that is popular with a younger audience. With permission, this dating app allows exact geo-location through GPS, Bluetooth, and WiFi to locate potential matches. Hinge also collects a user's device information, such as IP address and service provider. Facebook information can also be linked to the account, should the user opt in. View its privacy policy.

Houseparty

Houseparty is a stop gap measure for teens wanting to connect with friends on social media but cannot because they don't reach minimum age requirements. On Houseparty, teens converse, share, and chat—nothing abnormal. However, cyber bulling is of concern on this app, so parental oversight is an important mechanism to stamp out behaviors that can leave lasting psychological impacts on those taunted by their peers. View its privacy policy.

Omegle

Popular amongst teenagers, Omegle opens the door to anonymous chats with strangers around the world. While the app connects people across language, culture, and national boundary, child predators have been known to use this app, making the multi-cultural exchange a risky one. View its privacy policy.

Pokémon Go

Pokémon Go is one of the most popular interactive games for teenagers. When downloaded, it collects information regarding device type, operating system, device ID, and precise geo-location data. View its privacy policy.

Secret Calculator ++

This app appears to be the icon for standard smart phone calculator. However, it is far more than that. With a personal passcode, the user can unlock an array of hidden files, including inappropriate pictures, notes, and videos. There are many apps similar to this, ranging from Calculator apps to those simply branded as photo vaults. Teenagers and pre-teens alike frequently use these apps to hide content from parents, teachers, and guardians. View its privacy policy.

TikTok

With a mission to "inspire creativity and bring joy," TikTok is one of the most popular video recording apps for youths. While it may generate artistic expression, it can also collect personal information and data, including contact information, content, IP address, and geo-location. It also gathers one's private messages. View its privacy policy.

Vault

Vault is another inconspicuous app allowing a child to hide their private photos and videos. This app takes security to another level by requiring a password to enter the app itself and further encrypting albums within the app with passwords. Trying to enter the app and enter the wrong password? Smile and say "cheese" because Vault will take a picture of the "intruder's" face allowing its user to see who was entering. This is one of the many sneaky apps a child can use. View its privacy policy.

VSCO

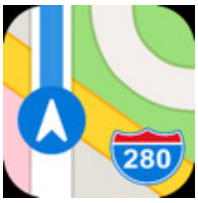
VSCO, a popular photo sharing and editing app, is often linked to a user's social media profiles. Distinguishing backgrounds, such as house

numbers, a popular shopping area and parking lot, or a school stadium are captured in the background of the user's photos—providing location clues to nefarious strangers. View its privacy policy.

Whisper
This social "confessional" app is popular amongst teenagers. Essentially, Whisper is a chat board like Reddit, where anyone can anonymously post photos and video messages. A teenager can be at risk, because her/his exact location is identifiable to friend and stranger through the app's geo-location technology. View its privacy policy.

Travel

Airbnb
This app is perfect for planning trips, experiences, and collecting data. With consent, it can collect email addresses, dates of birth, addresses, phone numbers, government IDs or passports, payment information, and geo-locations. View its privacy policy.



Apple Maps
Apple Maps is the modernized form of the old spiral ringed paper maps every car had—it's an easy to use GPS system which makes it easier to get to the desired destination. Once at the location, Apple Maps provides a 3D preview of the immediate location, providing a better sense of what is around the area such as food, gas stations, hospitals, and hotels. Visiting the same location several times? This allows Apple Maps to make a list of your most frequently visited locations and proactively suggest a route to that same location. View its privacy policy.

Google Maps
Google Maps is very similar to Apple Maps in its ability to provide GPS assistance for transportation from one destination to the other. Google Maps also provides 3D views of an immediate location, which can create security concerns because any user has the ability to view a curbside or aerial view of a house, business, or open location such as a park. This ability provides the user with relevant information such as various entry points into a specific house. A seemingly positive-natured app could be used for negative and criminal intent. View its privacy policy.

Lyft
Lyft is a transportation app that helps people get from point A to B with ease. Lyft is a seemingly harmless app but, in reality, it is collecting a lot of personal information. For instance, a user or "rider" of this app is freely providing a name, email address, phone number, date of birth, and bank account/ payment information. On the other side, "drivers" provide, date of birth, physical address, government identification such as a SSN, driver's license information, and vehicle and insurance information. Requesting a simple ride from one destination to the other comes with a hefty "cost" of your personal information. View its privacy policy.

Travelocity
The popular travel app, Travelocity, stores and uses personal information that a user inputs while purchasing airline tickets, reserving hotels, and renting cars, for example. Such information can include first and last name, telephone number, postal and email addresses, and billing information such as credit or debit card number, cardholder name, expiration date, and billing address. View its privacy policy.

Uber

If you are an Uber driver, the app collects your location both when the service is up on your phone and when it is in the background. If you are a rider, the app only collects your location information when the is open. View its privacy policy.

Waze

This community-based navigation and traffic alert app collects personal information based upon what a user wants from the app and how privacy settings are managed. If consent is granted, Waze will collect detailed location, travel and route information, voice and audio information when using Waze's audio features, as well as meta-data about the user's device and browser. View its privacy policy.

Weather

The Weather Channel

If using this app on a mobile phone, the user's exact geo-location is detected. With consent, this app can detect your location even when the app is closed. Earlier this year, this app was sued for selling users data to marketing and financial firms. View its privacy policy.

WeatherBug

Weather Bug, just as many other weather apps, is very useful when deciding what clothing to wear for the day ahead. However, when using this app, Weather Bug collects the following personal data from its users such as residential zip code, interests, date of birth, location data, and IP addresses. View its privacy policy.

Matt and Trevor are investigative analysts at Hg, where they use their open source research skills to extract data from social media accounts, conduct risk assessments, and monitor subjects for clients in pharma, tech, retail, and entertainment. Both are contributing writers to Hg's Data2Know, Industry Undercover, and OSINT Slack channels. On their lunch breaks, they can be found outside playing frisbee with their four-legged colleagues.

ORDER FORM

Order Information

Account Name:	Boston Regional Intelligence Center	**Contract Start Date:**	2/1/16
Prepared By:	Will Catton	**Contract End Date:**	5/31/16
Preparation Date:	12/10/15		
		Total Amount:	**$6,700.00**

Subscription Term, Billing & Payment Information

Company Name:	Boston Regional Intelligence Center	**Billing Phone:**	(617) 343-4328
Billing Name:	David Carabin	**Billing Fax:**	
Billing Email:	David.Carabin@pd.boston.gov		
Billing Address:	1 City Hall Plaza, Room 201 Boston, MA 02201	**Payment Method:** **PO Number:**	Invoice [IF APPLICABLE]
Billing Terms:	Invoices sent ***Annually***		

Payment Terms: Due Upon Receipt. Interest accrues at the rate of 1.5% per month 60 days after the invoice date. Invoices 30 days or more past due may result in suspension of Services.

This Order Form is subject to and governed by the terms and conditions of the Geofeedia Service Agreement posted online at http://www.geofeedia.com/legal/service-agreement/ (unless there is already a Geofeedia Service Agreement in force and effect between you and Geofeedia, in which case the terms of such existing Geofeedia Service Agreement shall govern this Order Form). If for any reason you are unable to view the Geofeedia Service Agreement online at http://www.geofeedia.com/legal/service-agreement, please contact Geofeedia immediately.

This Order Form is valid for 60 days from the Preparation Date.

Customer: Boston Regional Intelligence Center	**Geofeedia, Inc.**
Signature: [signature]	Signature:
Printed: Ryan Walsh	Printed:
Title: Deputy Director	Title:
Date: 12/31/15	Date:

Application Services Subscription*
The Application Services include the following:

Service Edition	**Total Price**
Standard Service Package Customer orders the following Standard Package:	$6,700.00

Geofeedia Public Safety Edition

Total Permitted Users: Thirty (30)

Search
- Real-Time Search Plus
- Keyword Search
- Discovery Search
- Streamer (5)
- Influencer Search

Engage & Share
- Alerts with Boolean Exclusions
- Notification Inbox
- iOS/Android Mobile App

Archive & Analyze
- Unlimited Data
- Unlimited Locations and Recordings
- Analytics
- Translate
- Collections
- CSV Export

Search Radius
- Maximum of 15 kilometers

Support & Services
Unlimited Tutorials & Documentation
Customer Support
Customer Success Manager

Total Annual Cost	**$6,700.00**

Order Comments
For additional details regarding standard features and functionality of the Application Services, please visit:
http://geofeedia.com/how-it-works

January 2020

BOSTON REGIONAL INTELLIGENCE CENTER

BRIC

Boston Regional Intelligence Center
Privacy, Civil Rights, and Civil Liberties Protection Policy

The Intelligence Reform and Terrorism Prevention Act of 2004, as amended by the Implementing Recommendations of the 9/11 Commission Act of 2007, established an information sharing environment for the sharing of terrorism-related information while protecting the privacy, civil rights, and civil liberties of individuals. The *Guidelines to Ensure That Information Privacy and Other Legal Rights of Americans Are Protected in the Development and Use of the Information Sharing Environment* ("ISE Privacy Guidelines") require that relevant entities, including fusion centers, have a written privacy protection policy in place that is "at least as comprehensive" as the ISE Privacy Guidelines.

This policy, produced by the Boston Regional Intelligence Center Privacy Committee, in collaboration with Boston Police Department's Office of the Legal Advisor, was reviewed and approved by the U.S. Department of Homeland Security Privacy and Civil Liberties Sub-Interagency Policy Committee on November 3, 2010, and was determined to be "at least as comprehensive" as the ISE Privacy Guidelines. The policy as implemented is intended to govern how the Boston Regional Intelligence Center will handle personally identifiable information and all other personal, sensitive information it seeks, receives, and uses in the normal course of law enforcement, public safety, and intelligence operations.

A. Table of Contents

A. PURPOSE STATEMENT 3
B. POLICY APPLICABILITY AND LEGAL COMPLIANCE 3
C. GOVERNANCE AND OVERSIGHT 3
D. TERMS AND DEFINITIONS 4
E. INFORMATION 4
F. ACQUIRING AND RECEIVING INFORMATION 7
G. INFORMATION QUALITY ASSURANCE 8
H. COLLATION AND ANALYSIS 8
I. MERGING RECORDS 9
J. SHARING AND DISCLOSURE 9
K. REDRESS 11
K.1 DISCLOSURE 11
K.2 CORRECTIONS 11
K.3 APPEALS 11
K.4 COMPLAINTS 11
L. SECURITY SAFEGUARDS 12
M. INFORMATION RETENTION AND DESTRUCTION 13
N. ACCOUNTABILITY AND ENFORCEMENT 13
N.1 INFORMATION SYSTEM TRANSPARENCY 13
N.2 ACCOUNTABILITY 14
N.3 ENFORCEMENT 14
O. TRAINING 15
APPENDIX A: TERMS AND DEFINITIONS 16
APPENDIX B: APPLICABLE LEGAL REFERENCES 26

A. PURPOSE STATEMENT

The purpose of this privacy, civil rights, and civil liberties protection policy is to help ensure that the Boston Regional Intelligence Center (hereafter "BRIC" or "the center") personnel and individuals assigned to the BRIC comply with applicable federal, state, local, and tribal law and assist the center and its participants in:

- Ensuring individual privacy, civil rights, civil liberties, and other protected interests.
- Increasing public safety and improving national security.
- Protecting the integrity of systems for the observation and reporting of public safety matters, including terrorism-related and other criminal activity and information.
- Encouraging individuals or community groups to trust and cooperate with the justice system.
- Promoting governmental legitimacy and accountability.
- Making the most effective use of public resources allocated to public safety agencies.

B. POLICY APPLICABILITY AND LEGAL COMPLIANCE

1. All BRIC personnel (including, but not limited to, individuals assigned to the BRIC from other agencies and individuals providing various support services) and authorized users will comply with:

   a. Applicable provisions of this privacy policy.

   b. Applicable laws protecting privacy, civil rights, and civil liberties, including, but not limited to, the U.S. Constitution, the Massachusetts Constitution, and applicable law protecting privacy, civil rights, and civil liberties, including, but not limited to, M.G.L. c. 4 §7, M.G.L. c. 6 §172, M.G.L. c. 12 §11H, M.G.L. c. 66 §10, and M.G.L. c. 66A §2, M.G.L. c. 151B, and 42 U.S.C.A. 1983.

   This policy applies to information the center gathers or collects, receives, maintains, stores, accesses, discloses, or disseminates to center personnel, governmental agencies (including Information Sharing Environment [ISE] participating centers and agencies), and participating justice and public safety agencies, as well as to private contractors, private entities, and the general public.

2. The BRIC will provide a printed or electronic copy of this policy to all of its personnel and will require both a written acknowledgement of receipt of this policy and a written agreement to comply with applicable provisions of this policy.

3. The BRIC has adopted internal operating policies that are in compliance with the U.S. Constitution, the Massachusetts Constitution, and applicable law protecting privacy, civil rights, and civil liberties, including, but not limited to, M.G.L. c. 4 §7, M.G.L. c. 6 §172, M.G.L. c. 12 §11H, M.G.L. c. 66 §10, and M.G.L. c. 66A §2, M.G.L. c. 151B, and 42 U.S.C.A. 1983.

C. GOVERNANCE AND OVERSIGHT

1. Primary responsibility for the operation of the BRIC; its justice systems, operations, and coordination of personnel; the receiving, seeking, retention, evaluation, information quality, analysis, destruction, sharing, disclosure, or dissemination of information; and the enforcement of this policy is assigned to the Bureau Chief of the Boston Police Department's Bureau of Intelligence and Analysis and/or the director of the BRIC.

2. The BRIC is guided by a designated Privacy Committee. Members of the committee will be available to address questions and concerns regarding the BRIC's privacy policy, privacy and civil rights protections as provided in this policy, and the center's information gathering and collection, retention, and dissemination processes and procedures. The committee will periodically review and, as necessary, recommend updates to the policy in response to changes in law and implementation experience, including the results of internal reviews. The committee is guided by the BRIC's trained privacy officer, an individual having supervisory responsibilities within the BRIC as appointed by the bureau chief of the Boston Police Department's Bureau of Intelligence and Analysis. The privacy officer serves as the liaison for the Information Sharing Environment, overseeing implementation of and compliance with the ISE Privacy Guidelines and ensuring that privacy protections are implemented through efforts such as training, business process changes, and system designs that incorporate privacy-enhancing technologies.

3. The BRIC's Privacy Committee will be composed of personnel appointed by the bureau chief of the Boston Police Department's Bureau of Intelligence and Analysis. The Privacy Committee shall consist of individuals, both civilian and sworn law enforcement, having supervisory responsibilities in (a) homeland security, (b) criminal intelligence, and (c) legal compliance. The privacy officer and the Privacy Committee can be contacted at the following address:

   Boston Regional Intelligence Center
   Boston Police Department
   Privacy Committee
   One Schroeder Plaza
   Boston, MA 02120
   (617) 343-4328

   The Privacy Committee receives reports regarding alleged errors and violations of the provisions of this policy and receives and coordinates complaint resolution under the center's redress policy.

4. The BRIC's Privacy Committee ensures that enforcement procedures and sanctions outlined in Section N.3, Enforcement, are adequate and enforced.

D. TERMS AND DEFINITIONS

1. The primary terms and definitions used in this privacy policy are set forth in Appendix A, Terms and Definitions.

E. INFORMATION

1. The BRIC will seek or retain information that:

   - Is based on a possible threat to public safety or the enforcement of the criminal law, or
   - Is based on reasonable suspicion that an identifiable individual or organization has committed a criminal offense or is involved in or planning criminal (including terrorist) conduct or activity that presents a threat to any individual, the community, or the nation and that the information is relevant to the criminal (including terrorist) conduct or activity, or
   - Is relevant to the investigation and prosecution of suspected criminal (including terrorist) incidents; the resulting justice system response; the enforcement of sanctions, orders, or sentences; or the prevention of crime, or

- Is useful in crime analysis or in the administration of criminal justice and public safety (including topical searches), and
- Is reliable and verifiable or limitations on the quality of the information are identified, and
- Is based on the source agency's good faith belief that the information was acquired in accordance with agency policy and in a lawful manner.

The BRIC may retain protected information that is based on a level of suspicion that is less than "reasonable suspicion," such as tips and leads (including suspicious activity reports [SARs] and ISE-SARs), subject to BRIC policies, procedures, and guidelines.

2. The BRIC will not seek or retain (and originating agencies will agree not to submit) information about individuals or organizations solely on the basis of their religious, political, or social views or activities; their participation in a particular noncriminal organization or lawful event; or their races, ethnicities, citizenship, places of origin, ages, disabilities, genders, or sexual orientations.
3. The BRIC applies labels to agency-originated information to indicate to the accessing authorized user that:
   - The information is protected information as defined in Appendix A of the policy and, to the extent expressly provided in this policy, includes organizational entities.
   - The information is subject to Massachusetts General Law and federal regulations restricting access, use, or disclosure.
4. The BRIC personnel will, upon receipt of information, assess the information to determine or review its nature, usability, and quality. Personnel will assign categories to the information (or ensure that the originating agency has assigned categories to the information) prior to retention to reflect the assessment, such as:
   - Whether the information consists of tips and leads data via formal e-mail, phone, Internet, or incident report submission; criminal history; intelligence information; case records; conditions of supervision; case progress; or other information category.
   - The nature of the source as it affects veracity (for example, anonymous tip, trained interviewer or investigator, public record, private sector).
   - The reliability of the source (for example, completely reliable, usually reliable, unreliable, unknown reliability).
   - The validity of the content (for example, verified, unverified, and unable to verify).
5. At the time a decision is made by the BRIC to retain information, it will be labeled (by record, data set, or system of records), to the maximum extent feasible, pursuant to applicable limitations on access and sensitivity of disclosure to:
   - Protect confidential sources and police undercover techniques and methods.
   - Not interfere with or compromise pending criminal investigations.
   - Protect individuals' right of privacy or their civil rights and civil liberties.
   - Provide legally required protections based on the individual's status as a child, sexual abuse victim, resident of a substance abuse treatment program, resident of a mental health treatment program, or resident of a domestic abuse shelter.

6. The labels assigned to existing information under Section E.5, above, will be reevaluated whenever:
   - New information is added that has an impact on access limitations or the sensitivity of disclosure of the information.
   - There is a change in the use of the information affecting access or disclosure limitations; for example, the information becomes part of court proceedings for which there are different public access laws.
7. BRIC personnel are required to adhere to the following practices and procedures for the receipt, collection, assessment, storage, access, dissemination, retention, and security of tips and leads and SAR information. Center personnel will:
   - Prior to allowing access to or dissemination of the information, ensure that attempts to validate or refute the information have taken place and that the information has been assessed for sensitivity and confidence by subjecting it to an evaluation or screening process to determine its credibility and value and categorize the information as unsubstantiated or uncorroborated if attempts to validate or determine the reliability of the information have been unsuccessful. The center will use a standard reporting format and data collection codes for SAR information.
   - Store the information using the same storage method used for data which rises to the level of reasonable suspicion and which includes an audit and inspection process, supporting documentation, and labeling of the data to delineate it from other information.
   - Allow access to or disseminate the information using the same (or a more restrictive) access or dissemination standard that is used for data that rises to the level of reasonable suspicion (for example, “need-to-know” and “right-to-know” access for dissemination for personally identifiable information).
   - Regularly provide access to or disseminate the information in response to an interagency inquiry for law enforcement, homeland security, or public safety and analytical purposes or provide an assessment of the information to any agency, entity, individual, or the public when credible information indicates potential imminent danger to life or property.
   - Retain information for up to five (5) years in order to work an unvalidated tip or lead or SAR information to determine its credibility and value or assign a “disposition” category (for example, undetermined or unresolved, cleared or unfounded, verified, or under active investigation) so that a subsequently authorized user knows the status and purpose for the retention and will retain the information based on the retention period associated with the disposition category.
   - Adhere to and follow the center’s physical, administrative, and technical security measures to ensure the protection and security of tips and leads.
8. The BRIC incorporates the gathering, processing, reporting, analyzing, and sharing of terrorism-related suspicious activities and incidents (SAR process) into existing processes and systems used to manage other crime-related information and criminal intelligence, thus leveraging existing policies and protocols utilized to protect the information, as well as information privacy, civil rights, and civil liberties.
9. The BRIC will identify and review all protected information that may be accessed from or disseminated by the center prior to sharing that information. The BRIC will provide notice mechanisms, via document labeling caveats, that will enable authorized users to determine

the nature of the protected information and how to handle the information in accordance with applicable legal requirements.

10. The BRIC requires certain basic descriptive information labels to be entered and electronically associated with data or content for which there are special laws, rules, or policies regarding access, use, and disclosure, including terrorism-related information shared through the ISE. The types of information include:
    - The name of the originating center, department or agency, component, and subcomponent.
    - The name of the center's justice information system from which the information is disseminated.
    - The date the information was collected and, where feasible, the date its accuracy was last verified.
    - The title and contact information for the person to whom questions regarding the information should be directed.
11. The BRIC will attach (or ensure that the originating agency has attached) specific labels and descriptive metadata to information that will be used, accessed, or disseminated to clearly indicate any legal restrictions on information sharing based on information sensitivity or classification.
12. The BRIC will keep a record of the source of all information sought and collected by the center.

F. ACQUIRING AND RECEIVING INFORMATION

1. Information acquisition and access, as well as investigative techniques used by the BRIC and source agencies, must comply with and adhere to applicable law, regulations, and guidelines, including, but not limited to, M.G.L. c. 6 §172, M.G.L. c. 12 §11H, M.G.L. c. 41 §98, and M.G.L. c. 151B.
2. The BRIC's SAR process provides for human review and vetting to ensure that information is both legally gathered and, where applicable, determined to have a potential terrorism nexus. Law enforcement officers and appropriate center and participating agency staff members will be trained to recognize those behaviors and incidents that are indicative of criminal activity related to terrorism.
3. The BRIC's SAR process includes safeguards to ensure, to the greatest degree possible, that only information regarding individuals involved in activities that have been determined to be consistent with criminal activities associated with terrorism will be documented and shared through the ISE. These safeguards are intended to ensure that information that could violate civil rights (race, religion, national origin, ethnicity, etc.) and civil liberties (speech, assembly, religious exercise, etc.) will not be intentionally or inadvertently gathered, documented, processed, and shared.
4. Information-gathering and investigative techniques used by the BRIC and those used by originating agencies should be the least intrusive means necessary in the particular circumstances to gather information the BRIC is authorized to seek or retain.
5. External agencies that access the BRIC's information or share information with the center are governed by the laws and rules governing those individual agencies, including applicable federal and state laws.

6. The BRIC will contract only with commercial database entities that provide an assurance that their methods for gathering personally identifiable information comply with applicable local, state, tribal, territorial, and federal laws, statutes, and regulations and that these methods are not based on misleading information-gathering practices.
7. The BRIC will not directly or indirectly receive, seek, accept, or retain information from:
   - An individual who or a nongovernmental entity that may or may not receive a fee or benefit for providing the information, except as expressly authorized by law or center policy.
   - An individual who or an information provider that is legally prohibited from obtaining or disclosing the information.

G. INFORMATION QUALITY ASSURANCE

1. The BRIC will make every reasonable effort to ensure that information sought or retained is derived from dependable and trustworthy sources; accurate; current; complete, including the relevant context in which it was sought or received and other related information; and merged with other information about the same individual or organization only when the applicable standard [refer to Section I, Merging Records] has been met.
2. At the time of retention in the system, the information will be labeled regarding its level of quality (accuracy, completeness, currency, and confidence [verifiability, and reliability]).
3. When errors and/or deficiencies are identified, the BRIC will correct the alleged errors and deficiencies or refer them to the originating agency, in a timely manner, and correct, delete, or refrain from using protected information found to be erroneous or deficient.
4. The labeling of retained information will be reevaluated by the BRIC or the originating agency when new information is gathered that has an impact on confidence (source reliability and content validity) in previously retained information.
5. The BRIC will conduct periodic data quality reviews of information it originates and make every reasonable effort to ensure that the information will be corrected, deleted from the system, or not used when:
   a. The center identifies information that is erroneous, misleading, obsolete, or otherwise unreliable; or,
   b. The center did not have authority to gather the information or to provide the information to another agency.
6. Originating agencies external to the BRIC are responsible for reviewing the quality and accuracy of the data provided to the center. When identified, the BRIC will notify the appropriate contact person in the originating agency, in writing or electronically, if data is alleged, suspected, or found to be inaccurate, incomplete, out of date, or unverifiable.
7. The BRIC will use written or electronic notification to inform recipient agencies when information previously provided to the recipient agency is deleted or changed by the center because the information is determined to be erroneous, includes incorrectly merged information, is out of date, cannot be verified, or lacks adequate context such that the rights of the individual may be affected.

H. COLLATION AND ANALYSIS

1. Information acquired or received by the BRIC or accessed from other sources will be analyzed only by qualified individuals who have successfully completed a background check

and appropriate security clearance, if applicable, and have been selected, approved, and trained accordingly.

2. Information subject to collation and analysis is information as defined and identified in [Refer to Section E, Information].
3. Information acquired or received by the BRIC or accessed from other sources is analyzed according to priorities and needs and will be analyzed only to:
   - Further crime prevention (including terrorism), law enforcement, public safety, force deployment, or prosecution objectives and priorities established by the center.
   - Provide tactical and/or strategic intelligence on the existence, identification, and capability of individuals and organizations suspected of having engaged in or engaging in criminal (including terrorist) activities.
4. At a minimum, all analytical products undergo peer review and, whenever practicable, a supervisory review prior to dissemination.

I. MERGING RECORDS

1. Records about an individual or organization from two or more sources will not be merged by the BRIC unless there is sufficient identifying information to reasonably conclude that the information is about the same individual or organization. The set of identifiers sufficient to allow merging will consist of all available attributes that can contribute to a higher accuracy of match.
2. If the matching requirements are not fully met but there is an identified partial match, the information may be associated by the BRIC if accompanied by a clear statement that it has not been adequately established that the information relates to the same individual or organization.

J. SHARING AND DISCLOSURE

1. Credentialed, role-based access criteria will be used by the BRIC, as appropriate, to control:
   - The information to which a particular group or class of users can have access based on the group or class.
   - The information a class of users can add, change, delete, or print.
   - To whom, individually, the information can be disclosed and under what circumstances.
2. The BRIC adheres to the current version of the ISE-SAR Functional Standard for its SAR process, including the use of a standard reporting format and commonly accepted data collection codes and a sharing process that complies with the ISE-SAR Functional Standard for suspicious activity with a potential nexus to terrorism.
3. Access to or disclosure of information retained by the BRIC will be provided at designated levels appropriate to the recipient's need and right to know only ***to persons within the center or in other governmental agencies*** who are authorized to have access and only for legitimate law enforcement, public protection, public prosecution, public health or justice purposes and only for the performance of official duties in accordance with law and procedures applicable to the agency for which the person is working. The center will have a mechanism in place sufficient to allow the identification of each individual who accessed information retained by the center, and the nature of the information accessed will be kept by the center.

4. In regards to secondary dissemination, agencies external to the BRIC may not disseminate information accessed or disseminated from the center without approval from the center or other originator of the information, unless otherwise marked.
5. Records retained by the BRIC may be accessed by or disseminated ***to those responsible for public protection, public safety, or public health*** only for public protection, public safety, or public health purposes and only in the performance of official duties in accordance with applicable laws and procedures. An audit trail sufficient to allow the identification of each individual who accessed or received information retained by the center and the nature of the information accessed will be kept by the center.
6. Information gathered or collected and records retained by the BRIC may be accessed or disseminated ***for specific purposes*** upon request by persons authorized by law to have such access and only for those uses and purposes specified in the law. An audit trail sufficient to allow the identification of each individual who requested, accessed, or received information retained by the center; the nature of the information requested, accessed, or received; and the specific purpose will be kept for no more than five years by the center.
7. Information gathered or collected and records retained by the BRIC may be accessed or disclosed ***to a member of the public*** only if the information is defined by law to be a public record or otherwise appropriate for release to further the center's mission and is not exempt from disclosure by law. Such information may be disclosed only in accordance with the law and procedures applicable to the center for this type of information. An audit trail sufficient to allow the identification of each individual member of the public who accessed or received information retained by the center and the nature of the information accessed will be kept by the center.
8. Information gathered or collected and records retained by the BRIC ***will not*** be:
    - Sold, published, exchanged, or disclosed for commercial purposes.
    - Disclosed or published without prior notice to the originating agency that such information is subject to disclosure or publication, unless disclosure is agreed to as part of the normal operations of the agency.
    - Disseminated to persons not authorized to access or use the information.
9. There are several categories of records that will ordinarily ***not be provided*** to the public. The following is not meant to be an exhaustive list but serves as examples of records that will not be subject to public disclosure:
    - Records required to be kept confidential by law. (M.G.L. c. 4 §7(26)(a)).
    - Information ***that meets the*** definition of "classified information" as that term is defined in the National Security Act, Public Law 235, Section 606, and in accord with Executive Order 13549, Classified National Security Information Program for State, Local, Tribal, and Private Sector Entities, August 18, 2010.
    - Investigatory records of law enforcement agencies. (M.G.L. c. 4 §7(26)(f)).
    - A record or part of a record the public disclosure of which would have a reasonable likelihood of threatening public safety by exposing a vulnerability to terrorist attack. This includes a record assembled, prepared, or maintained to prevent, mitigate, or respond to an act of terrorism, vulnerability assessments, risk planning documents, needs assessments, and threat assessments. (M.G.L. c. 4 §7(26)(n)).

- Protected federal, state, local, or tribal records that were originated and controlled by another agency and were shared with the Department on the condition of confidentiality and nondisclosure, unless otherwise required by law.

10. The BRIC shall not confirm the existence or nonexistence of information to any person or agency that would not be eligible to receive the information unless otherwise required by law.

K. REDRESS

K.1 DISCLOSURE

1. While most personally identifiable information in records maintained by the BRIC is exempt from disclosure under 2. below, an individual who is entitled to know the existence of and to review the information about him or her that has been gathered and retained by the BRIC may obtain a copy of the information and challenge the accuracy or completeness of the information (correction). The center's response to the request for information will be made within a reasonable time and in a form that is readily intelligible to the individual. A record will be kept of all requests and of what information is disclosed to an individual.
2. The existence, content, and source of the information will not be made available by the BRIC to an individual in certain circumstances, including, but not limited to, when:
   - Disclosure would interfere with, compromise, or delay an ongoing investigation or prosecution (M.G.L. c. 4 §7(26)(f)).
   - Disclosure would endanger the health or safety of an individual, an organization, or a community.
   - The information is in a criminal intelligence information system subject to 28 CFR Part 23 [see 28 CFR §23.20(e)].
   - Disclosure is not allowed by state and/or federal law (M.G.L. c. 4 §7(26)(a)).
   - Any other production that would violate state and/or federal law, including, but not limited to, M.G.L. c. 4 §7, M.G.L. c. 6 §172, or M.G.L. c. 66 §10.

K.2 CORRECTIONS

1. If an individual requests correction of information ***originating with the BRIC*** that has been disclosed, the center's privacy officer, on behalf of the Privacy Committee, will inform the individual of the procedure for requesting and considering requested corrections, including appeal rights if requests are denied in whole or in part. A record will be kept of all requests for corrections and the resulting action, if any.

K.3 APPEALS

1. The individual who has requested disclosure or to whom information has been disclosed will be given reasons if disclosure or requests for corrections are denied by the Privacy Committee. The individual will also be informed of the procedure for appeal when the center or originating agency has cited an exemption for the type of information requested or has declined to correct challenged information to the satisfaction of the individual to whom the information relates.

K.4 COMPLAINTS

1. If an individual has a complaint with regard to the accuracy or completeness of criminal or terrorism-related protected information that (a) is exempt from disclosure, (b) has been or may be shared through the ISE, or (c) is held by the BRIC and allegedly has resulted in

demonstrable harm to the complainant, the center will inform the individual of the procedure for submitting (if needed) and resolving such complaints. Complaints will be received by the center's privacy officer, on behalf of the Privacy Committee, at the following address:

Boston Regional Intelligence Center
Boston Police Department
Privacy Committee
One Schroeder Plaza
Boston, MA 02120

The privacy officer, on behalf of the Privacy Committee, will acknowledge the complaint and state that it will be reviewed but will not confirm the existence or nonexistence of the information to the complainant unless otherwise required by law. If the information did not originate with the center, the privacy officer, on behalf of the Privacy Committee, will notify the originating agency in writing or electronically within ten (10) business days of the receipt of the complaint and, upon request, may assist such agency to correct any identified data/record deficiencies, purge the information, or verify that the record is accurate. All information held by the center that is the subject of a complaint will be reviewed within thirty (30) days and confirmed or corrected/purged if determined to be inaccurate or incomplete, to include incorrectly merged information, or to be out of date. If there is no resolution within thirty (30) days, the center will not share the information until such time as the complaint has been resolved. A record will be kept by the center of all complaints and the resulting action taken in response to the complaint.

L. SECURITY SAFEGUARDS

1. The bureau chief of the Boston Police Department's Bureau of Intelligence and Analysis and/or the director of the BRIC will ensure that a secure environment exists within the BRIC's facility.
2. The BRIC will operate in a secure facility protected from external intrusion. The center will utilize secure internal and external safeguards against network intrusions. Access to the center's databases from outside the facility will be allowed only over secure networks.
3. The BRIC will secure tips, leads, and SAR information in a separate repository system using security procedures and policies that are the same as or similar to those used for a system that secures data rising to the level of reasonable suspicion under 28 CFR Part 23.
4. The BRIC will store information in a manner that ensures it cannot be added to, modified, accessed, destroyed, or purged except by personnel authorized to take such actions.
5. Access to BRIC information will be granted only to center personnel whose positions and job duties require such access; who have successfully completed a background check and appropriate security clearance, if applicable; and who have been selected, approved, and trained accordingly.
6. Queries made to the BRIC's data applications will be logged into the data system, as appropriate, to identify the user initiating the query.
7. The BRIC will utilize appropriate mechanisms to maintain audit trails of requested and disseminated information.
8. To prevent public records disclosure, risk and vulnerability assessments will not be stored with publicly available data.
9. The BRIC will notify an individual about whom personal information was or is reasonably believed to have been breached or obtained by an unauthorized person and access to

which threatens physical, reputational, or financial harm to the person. The notice will be made promptly and without unreasonable delay following discovery or notification of the access to the information, consistent with the legitimate needs of law enforcement to investigate the release or any measures necessary to determine the scope of the release of information and, if necessary, to reasonably restore the integrity of any information system affected by this release.

10. The BRIC will immediately notify the originating agency from which the center received personal information of a suspected or confirmed breach of such information.

M. INFORMATION RETENTION AND DESTRUCTION

1. All applicable information will be reviewed for record retention (validation or purge) by the BRIC at least every five (5) years, as provided by 28 CFR Part 23. The BRIC conducts quarterly reviews and ongoing maintenance to validate or purge information.
2. When information has no further value or meets the criteria for removal according to the BRIC's retention and destruction policy or according to applicable law, it will be purged, destroyed, and deleted or returned to the submitting (originating) agency.
3. The BRIC will delete information or return it to the originating agency once its retention period has expired as provided by this policy or as otherwise agreed upon with the originating agency in a participation or membership agreement.
4. No approval will be required from the originating agency before information held by the BRIC is destroyed or returned in accordance with this policy or as otherwise agreed upon with the originating agency in a participation or membership agreement.
5. Notification of proposed destruction or return of records may or may not be provided to the originating agency by the BRIC, depending on the relevance of the information and any agreement with the originating agency.
6. The BRIC keeps a record of dates when law enforcement and homeland security information is to be removed (purged) if not validated prior to the end of its period. An auto-generated notification is given prior to removal to prompt center personnel that a record is due for review and validation or purge.

N. ACCOUNTABILITY AND ENFORCEMENT

N.1 INFORMATION SYSTEM TRANSPARENCY

1. The BRIC will be open with the public in regard to information and intelligence collection practices. The center's privacy policy will be provided to the public for review, made available upon request, and posted to http://www.bpdnews.com and the National Fusion Center Association Web site (http://new.nfcausa.org/).
2. The BRIC's privacy officer, on behalf of the Privacy Committee, will be responsible for receiving and responding to inquiries and complaints about privacy, civil rights, and civil liberties protections in the information system(s) maintained or accessed by the center. The Privacy Committee can be contacted at:

Boston Regional Intelligence Center
Boston Police Department
Privacy Committee
One Schroeder Plaza
Boston, MA 02120

N.2 ACCOUNTABILITY

1. The audit log of queries made to the BRIC will identify the user initiating the query.
2. The BRIC will maintain an audit trail of accessed, requested, or disseminated information. An audit trail will be kept for not more than five (5) years of requests for access to information for specific purposes and of what information is disseminated to each person in response to the request.
3. The BRIC follows agency-based user agreements for access to computer networks and systems. The BRIC will provide annual center-based personnel training to reinforce applicable laws and policies. The BRIC will adopt and implement procedures to evaluate the compliance of users with this policy and with applicable law, to include a review of logging access to BRIC information systems and periodic auditing of user compliance. These audits will be conducted at least annually, and a record of the audits will be maintained by the privacy officer on behalf of the Privacy Committee.
4. The BRIC's personnel or other authorized users shall report errors and suspected or confirmed violations of center policies relating to protected information to the center's Privacy Committee. See Section C.3.
5. The BRIC will annually conduct an audit and inspection of the information and intelligence contained in its information system(s). The audit will be conducted by the center's Privacy Committee. This committee has the option of conducting a random audit, without announcement, at any time and without prior notice to staff of the center. The audit will be conducted in such a manner as to protect the confidentiality, sensitivity, and privacy of the center's information and intelligence system(s).
6. The BRIC's Privacy Committee will review the provisions protecting privacy, civil rights, and civil liberties contained in this policy annually and recommend updates, as needed, to the BRIC director in response to changes in applicable law, technology, the purpose and use of the information systems, and public expectations.

N.3 ENFORCEMENT

1. If center personnel, a participating agency, or an authorized user is found to be in noncompliance with the provisions of this policy regarding the gathering, collection, use, retention, destruction, sharing, classification, or disclosure of information, the bureau chief of the Boston Police Department's Bureau of Intelligence and Analysis and/or the director of the BRIC may:
    - Suspend or discontinue access to information by the center personnel, the participating agency, or the authorized user.
    - Apply administrative and/or legal actions or sanctions as consistent with department rules and regulations or applicable law or as provided in agency/center personnel policies.
    - If the authorized user is from an agency external to the agency/center, request that the relevant agency, organization, contractor, or service provider employing the user initiate proceedings to discipline the user or enforce the policy's provisions.
2. The BRIC reserves the right to restrict the qualifications and number of personnel having access to center information and to suspend or withhold service and deny access to any participating agency or participating agency personnel violating the center's privacy policy.

O. TRAINING

1. All BRIC personnel will be trained regarding implementation of and adherence to the privacy, civil rights, and civil liberties policy prior to granting access.
2. The BRIC will provide special training regarding the center's requirements and policies for collection, use, and disclosure of protected information to personnel authorized to share protected information through the Information Sharing Environment.
3. The BRIC's privacy policy training program will cover:
    - Purposes of the privacy, civil rights, and civil liberties protection policy.
    - Substance and intent of the provisions of the policy relating to collection, use, analysis, retention, destruction, sharing, and disclosure of information retained by the center.
    - How to implement the policy in the day-to-day work of the user, whether a paper or systems user.
    - The impact of improper activities associated with infractions within or through the agency.
    - Mechanisms for reporting violations of center privacy protection policies and procedures.
    - The nature and possible penalties for policy violations, including possible transfer, dismissal, criminal liability, and immunity, if any.

APPENDIX A: TERMS AND DEFINITIONS

The following is a list of primary terms and definitions used throughout this policy.

Access—Data access is being able to get to (usually having permission to use) particular data on a computer. Web access means having a connection to the World Wide Web through an access provider or an online service provider. Data access is usually specified as read-only and read/write access.

With regard to the ISE, access refers to the business rules, means, and processes by and through which ISE participants obtain terrorism-related information, to include homeland security information, terrorism information, and law enforcement information acquired in the first instance by another ISE participant.

Access Control—The mechanisms for limiting access to certain information based on a user's identity and membership in various predefined groups. Access control can be mandatory, discretionary, or role-based.

Acquisition—The means by which an ISE participant obtains information through the exercise of its authorities, for example, through human intelligence collection or from a foreign partner. For the purposes of this definition, acquisition does not refer either to the obtaining of information widely available to other ISE participants through, for example, news reports, or to the obtaining of information shared with them by another ISE participant who originally acquired the information.

Agency—The Boston Regional Intelligence Center (BRIC) and all agencies that access, contribute, and share information in the BRIC's justice information systems.

Audit Trail—A generic term for recording (logging) a sequence of activities. In computer and network contexts, an audit trail tracks the sequence of activities on a system, such as user log-ins and log-outs. More expansive audit trail mechanisms would record each user's activity in detail—what commands were issued to the system, what records and files were accessed or modified, etc.

Audit trails are a fundamental part of computer security, used to trace (usually retrospectively) unauthorized users and uses. They can also be used to assist with information recovery in the event of a system failure.

Authentication—The process of validating the credentials of a person, a computer process, or a device. Authentication requires that the person, process, or device making the request provide a credential that proves it is what or who it says it is. Common forms of credentials are digital certificates, digital signatures, smart cards, biometrics data, and a combination of user names and passwords. See Biometrics.

Authorization—The process of granting a person, a computer process, or a device access to certain information, services, or functionality. Authorization is derived from the identity of the person, computer process, or device requesting access that is verified through authentication. See Authentication.

Biometrics—Biometrics methods can be divided into two categories: physiological and behavioral. Implementations of the former include face, eye (retina or iris), finger (fingertip, thumb, finger length or pattern), palm (print or topography), and hand geometry. The latter includes voiceprints and handwritten signatures.

Center—Refers to the Boston Regional Intelligence Center (BRIC) and all participating agencies.

Civil Liberties—Fundamental individual rights, such as freedom of speech, press, or religion; due process of law; and other limitations on the power of the government to restrain or dictate the actions of individuals. They are the freedoms that are guaranteed by the Bill of Rights, the first ten Amendments to the Constitution of the United States. Civil liberties offer protection to individuals from improper government action and arbitrary governmental interference. Generally, the term "civil rights" involves positive (or affirmative) government action, while the term "civil liberties" involves restrictions on government.

Civil Rights—Refers to the government's role in ensuring that all citizens have equal protection under the law and equal opportunity to exercise the privileges of citizenship regardless of race, religion, gender, or other characteristics unrelated to the worth of the individual. Civil rights are, therefore, obligations imposed on government to promote equality. More specifically, they are the rights to personal liberty guaranteed to all United States citizens by the Thirteenth and Fourteenth Amendments and by acts of Congress.

Computer Security—The protection of information assets through the use of technology, processes, and training.

Confidentiality—The obligations of individuals and institutions to use information under their control appropriately once it has been disclosed to them. One observes rules of confidentiality out of respect for and to protect and preserve the privacy of others. See Privacy.

Credentials—Information that includes identification and proof of identification that is used to gain access to local and network resources. Examples of credentials are user names, passwords, smart cards, and certificates.

Criminal Intelligence Information—Information deemed relevant to the identification of and the criminal activity engaged in by an individual who or organization that is reasonably suspected of involvement in criminal activity. Criminal intelligence records are maintained in a criminal intelligence system per 28 CFR Part 23.

Data—Elements of information.

Data Breach—The unintentional release of secure information to an untrusted environment. This may include incidents such as theft or loss of digital media such as computer tapes, hard drives, or laptop computers containing such media upon which such information is stored unencrypted; posting such information on the World Wide Web or on a computer otherwise accessible from the Internet without proper information security precautions; transfer of such information to a system that is not completely open but is not appropriately or formally accredited for security at the approved level, such as unencrypted e-mail; or transfer of such information to the information systems of a possibly hostile agency or environment where it may be exposed to more intensive decryption techniques.

Data Protection—Encompasses the range of legal, regulatory, and institutional mechanisms that guide the collection, use, protection, and disclosure of information.

Disclosure—The release, transfer, provision of access to, sharing, publication, or divulging of personal information in any manner—electronic, verbal, or in writing—to an individual, an agency, or an organization outside the agency that collected it. Disclosure is an aspect of privacy, focusing on information which may be available only to certain people for certain purposes but which is not available to everyone.

Electronically Maintained—Information stored by a computer or on any electronic medium from which the information may be retrieved by a computer, such as electronic memory chips, magnetic tape, magnetic disk, or compact disc optical media.

Electronically Transmitted—Information exchanged with a computer using electronic media, such as the movement of information from one location to another by magnetic or optical media or transmission over the Internet, intranet, extranet, leased lines, dial-up lines, private networks, telephone voice response, or faxback systems. It does not include faxes, telephone calls, video teleconferencing, or messages left on voicemail.

Fair Information Principles—The Fair Information Principles (FIPs) are contained within the Organisation for Economic Co-operation and Development's (OECD) Guidelines on the Protection of Privacy and Transborder Flows of Personal Data. These were developed around commercial transactions and the transborder exchange of information; however, they do provide a straightforward description of underlying privacy and information exchange principles and a simple framework for the legal analysis that needs to be done with regard to privacy in integrated justice systems. Some of the individual principles may not apply in all instances of an integrated justice system.

The eight FIPs are:

1. Collection Limitation Principle
2. Data Quality Principle
3. Purpose Specification Principle
4. Use Limitation Principle
5. Security Safeguards Principle
6. Openness Principle
7. Individual Participation Principle
8. Accountability Principle

Firewall—A security solution that segregates one portion of a network from another portion, allowing only authorized network traffic to pass through according to traffic-filtering rules.

General Information or Data—Information that may include records, documents, or files pertaining to law enforcement operations, such as computer-aided dispatch (CAD) data, incident data, and management information. Information that is maintained in a records management system, CAD system, etc., for statistical/retrieval purposes. Information may be either resolved or unresolved. The record is maintained per statute, rule, or policy.

Homeland Security Information—As defined in Section 892(f)(1) of the Homeland Security Act of 2002 and codified at 6 U.S.C. § 482(f)(1), homeland security information means any information possessed by a federal, state, or local agency that (a) relates to a threat of terrorist activity; (b) relates to the ability to prevent, interdict, or disrupt terrorist activity; (c) would improve the identification or investigation of a suspected terrorist or terrorist organization; or (d) would improve the response to a terrorist act.

Identification—A process whereby a real-world entity is recognized and its identity established. Identity is operationalized in the abstract world of information systems as a set of information about an entity that uniquely differentiates it from other similar entities. The set of information may be as small as a single code, specifically designed as an identifier, or a collection of data, such as a given and family name, date of birth, and address. An organization's identification process consists of the acquisition of the relevant identifying information.

Individual Responsibility—Because a privacy notice is not self-implementing, an individual within an organization's structure must also be assigned responsibility for enacting and implementing the notice.

Information—Includes any data about people, organizations, events, incidents, or objects, regardless of the medium in which it exists. Information received by law enforcement agencies can be categorized into four general areas: general data, tips and leads data, suspicious activity reports, and criminal intelligence information.

Information Quality—Refers to various aspects of the information; the accuracy and validity of the actual values of the data, data structure, and database/data repository design. Traditionally, the basic elements of information quality have been identified as accuracy, completeness, currency, reliability, and context/meaning. Today, information quality is being more fully described in multidimensional models, expanding conventional views of the topic to include considerations of accessibility, security, and privacy.

Information Sharing Environment (ISE) Suspicious Activity Report (SAR) (ISE-SAR)—A SAR that has been determined, pursuant to a two-step process established in the ISE-SAR Functional Standard, to have a potential terrorism nexus (i.e., to be reasonably indicative of criminal activity associated with terrorism).

Intelligence-Led Policing (ILP)—A process for enhancing law enforcement agency effectiveness toward reducing crimes, protecting community assets, and preparing for responses. ILP provides law enforcement agencies with an organizational framework to gather and use multisource information and intelligence to make timely and targeted strategic, operational, and tactical decisions.

Invasion of Privacy—Intrusion on one's solitude or into one's private affairs, public disclosure of embarrassing private information, publicity that puts one in a false light to the public, or appropriation of one's name or picture for personal or commercial advantage. See also Right to Privacy.

ISE-SAR—A suspicious activity report (SAR) that has been determined, pursuant to a two-part process, to have a potential terrorism nexus. ISE-SAR business rules will serve as a unifying process to support the reporting, tracking, processing, storage, and retrieval of terrorism-related suspicious activity reports across the ISE.

ISE-SAR Information Exchange Package Documentation (IEPD)—A schema that facilitates the posting and sharing of ISE-SAR information. The ISE-SAR IEPD is used to represent ISE information in two different data formats:

1. The **detailed format** includes information contained in all data elements set forth in Section IV of the ISE-SAR FS ("ISE-SAR Exchange Data Model"), including fields denoted as privacy fields.
2. The **summary format** excludes certain privacy fields as identified in the ISE-SAR FS. The ISE-SAR FS identifies the minimum privacy fields that must be excluded. Each ISE participant may exclude additional privacy fields from its Summary ISE-SARs, in accordance with applicable legal requirements.

Label—Marking(s) applied to disseminated information and products with indications to the accessing authorized user that the information is protected information, including organizational entities, and the information is subject to Massachusetts General Law and Federal Regulations restricting access, use, or disclosure.

Law—As used by this policy, law includes any local, state, or federal statute, ordinance, regulation, executive order, policy, or court rule, decision, or order as construed by appropriate local, state, or federal officials or agencies.

Law Enforcement Information—For purposes of the ISE, law enforcement information means any information obtained by or of interest to a law enforcement agency or official that is both (a)

related to terrorism or the security of our homeland and (b) relevant to a law enforcement mission, including but not limited to information pertaining to an actual or potential criminal, civil, or administrative investigation or a foreign intelligence, counterintelligence, or counterterrorism investigation; assessment of or response to criminal threats and vulnerabilities; the existence, organization, capabilities, plans, intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or associated with criminal or unlawful conduct; the existence, identification, detection, prevention, interdiction, or disruption of or response to criminal acts and violations of the law; identification, apprehension, prosecution, release, detention, adjudication, supervision, or rehabilitation of accused persons or criminal offenders; and victim/witness assistance.

Lawful Permanent Resident—A foreign national who has been granted the privilege of permanently living and working in the United States.

Least Privilege Administration—A recommended security practice in which every user is provided with only the minimum privileges needed to accomplish the tasks he or she is authorized to perform.

Logs—Logs are a necessary part of an adequate security system because they are needed to ensure that data is properly tracked and that only authorized individuals are getting access to the system and the data. See Audit Trail.

Maintenance of Information—Applies to all forms of information storage. This includes electronic systems (for example, databases) and nonelectronic storage systems (for example, filing cabinets). To meet access requirements, an organization is not required to create new systems to maintain information or to maintain information beyond a time when it no longer serves an organization's purpose.

Metadata—In its simplest form, metadata is information (data) about information—more specifically, information about a particular aspect of the collected information. An item of metadata may describe an individual content item or a collection of content items. Metadata is used to facilitate the understanding, use, and management of information. The metadata required for this will vary based on the type of information and the context of use.

Need to Know—As a result of jurisdictional, organizational, or operational necessities, access to sensitive information or intelligence is necessary for the conduct of an individual's official duties as part of an organization that has a right to know the information in the performance of a law enforcement, homeland security, or counterterrorism activity, such as to further an investigation or meet another law enforcement requirement.

Nonrepudiation—A technique used to ensure that someone performing an action on a computer cannot falsely deny that he or she performed that action. Nonrepudiation provides undeniable proof that a user took a specific action, such as transferring money, authorizing a purchase, or sending a message.

Originating Agency—The agency or organizational entity that documents information or data, including source agencies that document SAR (and, when authorized, ISE-SAR) information that is collected by a fusion center.

Participating Agencies—Participating agencies include source (the agency or entity that originates SAR [and, when authorized, ISE-SAR] information), submitting (which is the agency or entity posting ISE-SAR information to the SAR Data Repository), and user (which is an agency or entity authorized by the submitting agency or other authorized agency or entity to access ISE-SAR information, including information in the SAR Data Repository, and which may include analytical or operational component(s) of the submitting or authorizing agency or entity)

agencies, in support of their responsibility to collect, document, process, access, or use SAR and ISE-SAR information.

Personal Information—Information that can be used, either alone or in combination with other information, to identify individual subjects suspected of engaging in an activity or incident potentially related to terrorism.

Personally Identifiable Information—One or more pieces of information that, when considered together or in the context of how the information is presented or gathered, are sufficient to specify a unique individual. The pieces of information can be:

- Personal characteristics (such as height, weight, gender, sexual orientation, date of birth, age, hair color, eye color, race, ethnicity, scars, tattoos, gang affiliation, religious affiliation, place of birth, mother's maiden name, distinguishing features, and biometrics information, such as fingerprints, DNA, and retinal scans).
- A unique set of numbers or characters assigned to a specific individual (including name, address, phone number, social security number, e-mail address, driver's license number, financial account or credit card number and associated PIN number, Automated Integrated Fingerprint Identification System [AIFIS] identifier, or booking or detention system number).
- Descriptions of event(s) or points in time (for example, information in documents such as police reports, arrest reports, and medical records).
- Descriptions of location(s) or place(s) (including geographic information systems [GIS] locations, electronic bracelet monitoring information, etc.).

Persons—Executive Order 12333 defines "United States persons" as United States citizens, aliens known by the intelligence agency concerned to be permanent resident aliens, an unincorporated association substantially composed of United States citizens or permanent resident aliens, or a corporation incorporated in the United States, except for a corporation directed and controlled by a foreign government or governments. For the intelligence community and for domestic law enforcement agencies, "persons" means United States citizens and lawful permanent residents.

Preoperational Planning—Describes activities associated with a known or particular planned criminal operation or with terrorist operations generally.

Privacy—Individuals' interests in preventing the inappropriate collection, use, and release of personal information. Privacy interests include privacy of personal behavior, privacy of personal communications, and privacy of personal data. Other definitions of privacy include the right to be physically left alone (solitude); to be free from physical interference, threat, or unwanted touching (assault, battery); or to avoid being seen or overheard in particular contexts.

Privacy Fields—Data fields in ISE-SAR IEPDs that contain personal information.

Privacy Policy—A written, published statement that articulates the policy position of an organization on how it handles the personal information that it gathers and uses in the normal course of business. The policy should include information relating to the processes of information collection, analysis, maintenance, disclosure, and access. The purpose of the privacy policy is to articulate that the center will adhere to those legal requirements and center policy determinations that enable gathering and sharing of information to occur in a manner that protects personal privacy interests. A well-developed and implemented privacy policy uses justice entity resources wisely and effectively; protects the agency, the individual, and the public; and promotes public trust.

Privacy Protection—A process of maximizing the protection of privacy, civil rights, and civil liberties when collecting and sharing information in the process of protecting public safety and public health.

Protected Information—Personal information about any individual that is subject to information privacy or other protections by law, including the U.S. Constitution, the Massachusetts Constitution, and other applicable law.

Public—Public includes:

- Any person and any for-profit or nonprofit entity, organization, or association.
- Any governmental entity for which there is no existing specific law authorizing access to the agency's/center's information.
- Media organizations.
- Entities that seek, receive, or disseminate information for whatever reason, regardless of whether it is done with the intent of making a profit and without distinction as to the nature or intent of those requesting information from the agency.

Public does not include:

- Employees of the agency.
- People or entities, private or governmental, who assist the agency/center in the operation of the justice information system.
- Public agencies whose authority to access information gathered and retained by the agency/center is specified in law.

Public Access—Relates to what information can be seen by the public; that is, information whose availability is not subject to privacy interests or rights.

Reasonably Indicative—This operational concept for documenting and sharing suspicious activity reports takes into account the circumstances in which the observation is made, which creates in the mind of the reasonable observer, including a law enforcement officer, an articulable concern that the behavior may indicate preoperational planning associated with terrorism or other criminal activity. It also takes into account the training and experience of a reasonable law enforcement officer, in cases in which an officer is the observer or documenter of the observed behavior reported to a law enforcement agency.

Record—Any item, collection, or grouping of information that includes personally identifiable information and is maintained, collected, used, or disseminated by or for the collecting agency or organization.

Redress—Laws, policies, and procedures that address public agency responsibilities with regard to access/disclosure and correction of information and the handling of complaints from persons regarding protected information about them which is under the agency's/center's control and which is exempt from disclosure and not disclosed to the individual to whom the information pertains.

Repudiation—The ability of a user to deny having performed an action that other parties cannot prove otherwise. For example, a user who deleted a file can successfully deny doing so if no mechanism (such as audit files) can contradict that claim.

Retention—See Storage.

Right to Know—Based on having legal authority or responsibility or pursuant to an authorized agreement, an agency or organization is authorized to access sensitive information and intelligence in the performance of a law enforcement, homeland security, or counterterrorism activity.

Right to Privacy—The right to be left alone, in the absence of some reasonable public interest in gathering, retaining, and sharing information about a person's activities. Invasion of the right to privacy can be the basis for a lawsuit for damages against the person or entity violating a person's privacy.

Role-Based Access—A type of access that uses roles to determine rights and privileges. A role is a symbolic category of users that share the same security privilege.

Security—The range of administrative, technical, and physical business practices and mechanisms that aim to preserve privacy and confidentiality by restricting information access to authorized users for authorized purposes. Computer and communications security efforts also have the goal of ensuring the accuracy and timely availability of data for the legitimate user set, as well as promoting failure resistance in the electronic systems overall.

Sharing—The act of one ISE participant disseminating or giving homeland security information, terrorism information, or law enforcement information to another ISE participant.

Source Agency—The agency or entity that originates SAR (and, when authorized, ISE-SAR) information.

Storage—In a computer, storage is the place where data is held in an electromagnetic or optical form for access by a computer processor. There are two general usages:

1. Storage is frequently used to mean the devices and data connected to the computer through input/output operations—that is, hard disk and tape systems and other forms of storage that do not include computer memory and other in-computer storage. This meaning is probably more common in the IT industry than meaning 2.

2. In a more formal usage, storage has been divided into (1) primary storage, which holds data in memory (sometimes called random access memory or RAM) and other "built-in" devices, such as the processor's L1 cache, and (2) secondary storage, which holds data on hard disks, tapes, and other devices requiring input/output operations.

Primary storage is much faster to access than secondary storage because of the proximity of the storage to the processor or because of the nature of the storage devices. On the other hand, secondary storage can hold much more data than primary storage.

With regard to the ISE, storage (or retention) refers to the storage and safeguarding of terrorism-related information, to include homeland security information, terrorism information, and law enforcement information relating to terrorism or the security of our homeland by both the originator of the information and any recipient of the information.

Submitting Agency—The agency or entity providing ISE-SAR information to the SAR Data Repository.

Suspicious Activity—Observed behavior reasonably indicative of preoperational planning associated with terrorism or other criminal activity. Examples of suspicious activity include surveillance, photography of facilities, site breach or physical intrusion, cyber attacks, testing of security, etc.

Suspicious Activity Reports (SARs)—Official documentation of observed behavior reasonably indicative of preoperational planning associated with terrorism or other criminal

activity. SAR information offers a standardized means for feeding information repositories or data analysis tools. Patterns identified during SAR information analysis may be investigated in coordination with the reporting agency and, if applicable, a state or regional fusion center. SAR information is not intended to be used to track or record ongoing enforcement, intelligence, or investigatory activities, nor is it designed to support interagency calls for service.

Terrorism Information—Consistent with Section 1016(a)(4) of IRTPA, all information relating to (a) the existence, organization, capabilities, plans, intentions, vulnerabilities, means of finance or materials support, or activities of foreign or international terrorist groups or individuals or of domestic groups or individuals involved in transnational terrorism, (b) threats posed by such groups or individuals to the United States, United States persons, or United States interests or to those interests of other nations, (c) communications of or by such groups or individuals, or (d) other groups or individuals reasonably believed to be assisting or associated with such groups or individuals.

Terrorism-Related Information—In accordance with IRTPA, as recently amended by the 9/11 Commission Act enacted on August 3, 2007 (P.L. 110-53), the ISE facilitates the sharing of terrorism and homeland security information, as defined in IRTPA Section 1016(a)(5) and the Homeland Security Act 892(f)(1) (6 U.S.C. § 482(f)(1)). See also *Information Sharing Environment Implementation Plan* (November 2006) and Presidential Guidelines 2 and 3 (the ISE will facilitate the sharing of "terrorism information," as defined in IRTPA, as well as the following categories of information to the extent that they do not otherwise constitute "terrorism information": (1) homeland security information as defined in Section 892(f)(1) of the Homeland Security Act of 2002 (6 U.S.C. § 482(f)(1)); and (2) law enforcement information relating to terrorism or the security of our homeland). Such additional information includes intelligence information.

Weapons of Mass Destruction (WMD) information was defined and included in the definition of "terrorism information" by P.L. 110-53.

Tips and Leads Information or Data—Generally uncorroborated reports or information generated from inside or outside a law enforcement agency that allege or indicate some form of possible criminal activity. Tips and leads are sometimes referred to as suspicious incident report (SIR), suspicious activity report (SAR), and/or field interview report (FIR) information. However, SAR information should be viewed, at most, as a subcategory of tip or lead data. Tips and leads information does not include incidents that do not have a criminal offense attached or indicated, criminal history records, or CAD data. Tips and leads information should be maintained in a secure system, similar to data that rises to the level of reasonable suspicion.

A tip or lead can come from a variety of sources, including, but not limited to, the public, field interview reports, and anonymous or confidential sources. This information may be based on mere suspicion or on a level of suspicion that is less than "reasonable suspicion" and, without further information or analysis, it is unknown whether the information is accurate or useful. Tips and leads information falls between being of little or no use to law enforcement and being extremely valuable depending on the availability of time and resources to determine its meaning.

Urban Area Fusion Center—A collaborative effort of two or more agencies that provide resources, expertise, and information to a designated government agency or agency component with the goal of maximizing its ability to detect, prevent, investigate, and respond to criminal and terrorist activity.

User—An individual representing a participating agency who is authorized to access or receive and use a center's information and intelligence databases and resources for lawful purposes.

User Agency—The agency or entity authorized by the submitting agency or other authorized agency or entity to access ISE-SAR information in the SAR Data Repository, which may include analytical or operational component(s) of the submitting or authorizing agency or entity.

APPENDIX B: APPLICABLE LEGAL REFERENCES

Effective: October 31, 2007

Massachusetts General Laws Annotated Currentness

Part I. Administration of the Government (Ch. 1–182)

Title X. Public Records (Ch. 66-66A)

Chapter 66A. Fair Information Practices (Refs & Annos)

§ 2. Holders maintaining personal data system; duties

Every holder maintaining personal data shall:–

(a) identify one individual immediately responsible for the personal data system who shall insure that the requirements of this chapter for preventing access to or dissemination of personal data are followed;

(b) inform each of its employees having any responsibility or function in the design, development, operation, or maintenance of the personal data system, or the use of any personal data contained therein, of each safeguard required by this chapter, of each rule and regulation promulgated pursuant to section three which pertains to the operation of the personal data system, and of the civil remedies described in section three B of chapter two hundred and fourteen available to individuals whose rights under chapter sixty-six A are allegedly violated;

(c) not allow any other agency or individual not employed by the holder to have access to personal data unless such access is authorized by statute or regulations which are consistent with the purposes of this chapter or is approved by the data subject whose personal data are sought if the data subject is entitled to access under clause

(i). Medical or psychiatric data may be made available to a physician treating a data subject upon the request of said physician, if a medical or psychiatric emergency arises which precludes the data subject's giving approval for the release of such data, but the data subject shall be given notice of such access upon termination of the emergency. A holder shall provide lists of names and addresses of applicants for professional licenses and lists of professional licensees to associations or educational organizations recognized by the appropriate professional licensing or examination board. A holder shall comply with a data subject's request to disseminate his data to a third person if practicable and upon payment, if necessary, of a reasonable fee; provided, however, that nothing in this section shall be construed to prohibit disclosure to or access by the bureau of special investigations to the records or files of the department of transitional assistance for the purposes of fraud detection and control;

(d) take reasonable precautions to protect personal data from dangers of fire, identity theft, theft, flood, natural disaster, or other physical threat;

(e) comply with the notice requirements set forth in section sixty-three of chapter thirty;

(f) in the case of data held in automated personal data systems, and to the extent feasible with data held in manual personal data systems, maintain a complete and accurate record of every access to and every use of any personal data by persons or organizations outside of or other than the holder of the data, including the identity of all such persons and organizations which have gained access to the personal data and their intended use of such data and the holder need not record any such access of its employees acting within their official duties;

(g) to the extent that such material is maintained pursuant to this section, make available to a data subject upon his request in a form comprehensible to him, a list of the uses made of his

personal data, including the identity of all persons and organizations which have gained access to the data;

(h) maintain personal data with such accuracy, completeness, timeliness, pertinence and relevance as is necessary to assure fair determination of a data subject's qualifications, character, rights, opportunities, or benefits when such determinations are based upon such data;

(i) inform in writing an individual, upon his request, whether he is a data subject, and if so, make such data fully available to him or his authorized representative, upon his request, in a form comprehensible to him, unless doing so is prohibited by this clause or any other statute. A holder may withhold from a data subject for the period hereinafter set forth, information which is currently the subject of an investigation and the disclosure of which would probably so prejudice the possibility of effective law enforcement that such disclosure would not be in the public interest, but this sentence is not intended in any way to derogate from any right or power of access the data subject might have under administrative or judicial discovery procedures. Such information may be withheld for the time it takes for the holder to complete its investigation and commence an administrative or judicial proceeding on its basis, or one year from the commencement of the investigation or whichever occurs first. In making any disclosure of information to a data subject pursuant to this chapter the holder may remove personal identifiers relating to a third person, except where such third person is an officer or employee of government acting as such and the data subject is not. No holder shall rely on any exception contained in clause Twentysixth of section seven of chapter four to withhold from any data subject personal data otherwise accessible to him under this chapter;

(j) establish procedures that (1) allow each data subject or his duly authorized representative to contest the accuracy, completeness, pertinence, timeliness, relevance or dissemination of his personal data or the denial of access to such data maintained in the personal data system and (2) permit personal data to be corrected or amended when the data subject or his duly authorized representative so requests and there is no disagreement concerning the change to be made or, when there is disagreement with the data subject as to whether a change should be made, assure that the data subject’s claim is noted and included as part of the data subject's personal data and included in any subsequent disclosure or dissemination of the disputed data;

(k) maintain procedures to ensure that no personal data are made available in response to a demand for data made by means of compulsory legal process, unless the data subject has been notified of such demand in reasonable time that he may seek to have the process quashed;

(l) not collect or maintain more personal data than are reasonably necessary for the performance of the holder’s statutory functions.

M.G.L.A. 66A § 2 Page 2

© 2009 Thomson Reuters/West. No Claim to Orig. US Gov. Works.

CREDIT(S)

Added by St.1975, c. 776, § 1. Amended by St.1976, c. 249, § 2; St.1977, c. 691, §§ 7 to 12; St.1995, c. 5, § 34;

St.2007, c. 82, § 2, eff. Oct. 31, 2007.

Current through Chapter 10 of the 2009 1st Annual Sess.

Effective: December 13, 2003

United States Code Annotated Currentness

Title 6. Domestic Security (Refs & Annos)

Chapter 1. Homeland Security Organization

Subchapter VIII. Coordination with Non-Federal Entities; Inspector General; United States Secret Service;

Coast Guard; General Provisions

Part I. Information Sharing

§ 482. Facilitating homeland security information sharing procedures

(a) Procedures for determining extent of sharing of homeland security information

(1) The President shall prescribe and implement procedures under which relevant Federal agencies—

(A) share relevant and appropriate homeland security information with other Federal agencies, including the Department, and appropriate State and local personnel;

(B) identify and safeguard homeland security information that is sensitive but unclassified; and

(C) to the extent such information is in classified form, determine whether, how, and to what extent to remove classified information, as appropriate, and with which such personnel it may be shared after such information is removed.

(2) The President shall ensure that such procedures apply to all agencies of the Federal Government.

(3) Such procedures shall not change the substantive requirements for the classification and safeguarding of classified information.

(4) Such procedures shall not change the requirements and authorities to protect sources and methods.

(b) Procedures for sharing of homeland security information

(1) Under procedures prescribed by the President, all appropriate agencies, including the intelligence community, shall, through information sharing systems, share homeland security information with Federal agencies and appropriate State and local personnel to the extent such information may be shared, as determined in accordance with subsection (a) of this section, together with assessments of the credibility of such information.

(2) Each information sharing system through which information is shared under paragraph (1) shall—

(A) have the capability to transmit unclassified or classified information, though the procedures and recipients for each capability may differ;

(B) have the capability to restrict delivery of information to specified subgroups by geographic location, type of organization, position of a recipient within an organization, or a recipient's need to know such information;

(C) be configured to allow the efficient and effective sharing of information; and

(D) be accessible to appropriate State and local personnel.

(3) The procedures prescribed under paragraph (1) shall establish conditions on the use of information shared under paragraph (1)—

(A) to limit the redissemination of such information to ensure that such information is not used for an unauthorized purpose;

(B) to ensure the security and confidentiality of such information;

(C) to protect the constitutional and statutory rights of any individuals who are subjects of such information; and

(D) to provide data integrity through the timely removal and destruction of obsolete or erroneous names and information.

(4) The procedures prescribed under paragraph (1) shall ensure, to the greatest extent practicable, that the information sharing system through which information is shared under such paragraph include existing information sharing systems, including, but not limited to, the National Law Enforcement Telecommunications System, the Regional Information Sharing System, and the Terrorist Threat Warning System of the Federal Bureau of Investigation.

(5) Each appropriate Federal agency, as determined by the President, shall have access to each information sharing system through which information is shared under paragraph (1), and shall therefore have access to all information, as appropriate, shared under such paragraph.

(6) The procedures prescribed under paragraph (1) shall ensure that appropriate State and local personnel are authorized to use such information sharing systems—

(A) to access information shared with such personnel; and

(B) to share, with others who have access to such information sharing systems, the homeland security information of their own jurisdictions, which shall be marked appropriately as pertaining to potential terrorist activity.

(7) Under procedures prescribed jointly by the Director of Central Intelligence and the Attorney General, each appropriate Federal agency, as determined by the President, shall review and assess the information shared under paragraph (6) and integrate such information with existing intelligence.

(c) Sharing of classified information and sensitive but unclassified information with State and local personnel

(1) The President shall prescribe procedures under which Federal agencies may, to the extent the President considers necessary, share with appropriate State and local personnel homeland security information that remains classified or otherwise protected after the determinations prescribed under the procedures set forth in subsection (a) of this section.

(2) It is the sense of Congress that such procedures may include 1 or more of the following means:

(A) Carrying out security clearance investigations with respect to appropriate State and local personnel.

(B) With respect to information that is sensitive but unclassified, entering into nondisclosure agreements with appropriate State and local personnel.

(C) Increased use of information-sharing partnerships that include appropriate State and local personnel, such as the Joint Terrorism Task Forces of the Federal Bureau of Investigation, the Anti-Terrorism Task Forces of the Department of Justice, and regional Terrorism Early Warning Groups.

(3)(A) The Secretary shall establish a program to provide appropriate training to officials described in subparagraph

(B) in order to assist such officials in--

(i) identifying sources of potential terrorist threats through such methods as the Secretary determines appropriate;

(ii) reporting information relating to such potential terrorist threats to the appropriate Federal agencies in the appropriate form and manner;

(iii) assuring that all reported information is systematically submitted to and passed on by the Department for use by appropriate Federal agencies; and

(iv) understanding the mission and roles of the intelligence community to promote more effective information sharing among Federal, State, and local officials and representatives of the private sector to prevent terrorist attacks against the United States.

(B) The officials referred to in subparagraph (A) are officials of State and local government agencies and representatives of private sector entities with responsibilities relating to the oversight and management of first responders, counterterrorism activities, or critical infrastructure.

(C) The Secretary shall consult with the Attorney General to ensure that the training program established in subparagraph (A) does not duplicate the training program established in section 908 of the USA PATRIOT Act (Public Law 107-56; 28 U.S.C. 509 note).

(D) The Secretary shall carry out this paragraph in consultation with the Director of Central Intelligence and the Attorney General.

(d) Responsible officials

For each affected Federal agency, the head of such agency shall designate an official to administer this chapter with respect to such agency.

(e) Federal control of information

Under procedures prescribed under this section, information obtained by a State or local government from a Federal agency under this section shall remain under the control of the Federal agency, and a State or local law authorizing or requiring such a government to disclose information shall not apply to such information.

(f) Definitions

As used in this section:

(1) The term “homeland security information” means any information possessed by a Federal, State, or local agency that—

(A) relates to the threat of terrorist activity;

(B) relates to the ability to prevent, interdict, or disrupt terrorist activity;

(C) would improve the identification or investigation of a suspected terrorist or terrorist organization; or

(D) would improve the response to a terrorist act.

(2) The term “intelligence community” has the meaning given such term in section 401a(4) of Title 50.

(3) The term “State and local personnel” means any of the following persons involved in prevention, preparation, or response for terrorist attack:

(A) State Governors, mayors, and other locally elected officials.

(B) State and local law enforcement personnel and firefighters.

(C) Public health and medical professionals.

(D) Regional, State, and local emergency management agency personnel, including State adjutant generals.

(E) Other appropriate emergency response agency personnel.

(F) Employees of private-sector entities that affect critical infrastructure, cyber, economic, or public health security, as designated by the Federal Government in procedures developed pursuant to this section.

(4) The term “State” includes the District of Columbia and any commonwealth, territory, or possession of the United States.

(g) Construction

Nothing in this chapter shall be construed as authorizing any department, bureau, agency, officer, or employee of the Federal Government to request, receive, or transmit to any other Government entity or personnel, or transmit to any State or local entity or personnel otherwise authorized by this chapter to receive homeland security information, any information collected by the Federal Government solely for statistical purposes in violation of any other provision of law relating to the confidentiality of such information.

CREDIT(S)

6 U.S.C.A. § 482 Page 4

© 2009 Thomson Reuters/West. No Claim to Orig. US Gov. Works.

(Pub.L. 107–296, Title VIII, § 892, Nov. 25, 2002, 116 Stat. 2253; Pub.L. 108–177, Title III, § 316(a), Dec. 13, 2003, 117 Stat. 2610.)

2002 Acts. This section effective 60 days after Nov. 25, 2002, see Pub.L. 107–296, § 4, set out as a note under 6 U.S.C.A. § 101.

Current through P.L. 111–15 (excluding P.L. 111–11 and 111–13) approved 4-24-09

Westlaw. (C) 2009 Thomson Reuters. No Claim to Orig. U.S. Govt. Works.

END OF DOCUMENT

6 U.S.C.A. § 482 Page 5

Effective: March 30, 2009

Massachusetts General Laws Annotated Currentness

Part I. Administration of the Government (Ch. 1–182)

Title I. Jurisdiction and Emblems of the Commonwealth, the General Court, Statutes and Public Documents

(Ch. 1–5)

Chapter 4. Statutes (Refs & Annos)

§ 7. Definitions of statutory terms; statutory construction

In construing statutes the following words shall have the meanings herein given, unless a contrary intention clearly appears:

First, “Aldermen”, “board of aldermen”, “mayor and aldermen”, “city council” or “mayor” shall, in a city which has no such body or officer, mean the board or officer having like powers or duties.

Second, “Annual meeting”, when applied to towns, shall mean the annual meeting required by law to be held in the month of February, March or April.

Second A, “Appointing authority”, when used in connection with the operation of municipal governments shall include the mayor of a city and the board of selectmen of a town unless some other local office is designated as the appointing authority under the provisions of a local charter.

Third, “Assessor” shall include any person chosen or appointed in accordance with law to perform the duties of an assessor.

Third A, “Board of selectmen”, when used in connection with the operation of municipal governments shall include any other local office which is performing the duties of a board of selectmen, in whole or in part, under the provisions of a local charter.

<[There is no clause Fourth.]>

Fifth, “Charter”, when used in connection with the operation of city and town government shall include a written instrument adopted, amended or revised pursuant to the provisions of chapter forty-three B which establishes and defines the structure of city and town government for a particular community and which may create local offices, and distribute powers, duties and responsibilities among local offices and which may establish and define certain procedures to be followed by the city or town government. Special laws enacted by the general court applicable only to one city or town shall be deemed to have the force of a charter and may be amended, repealed and revised in accordance with the provisions of chapter forty-three B unless any such special law contains a specific prohibition against such action.

Fifth A, “Chief administrative officer”, when used in connection with the operation of municipal governments, shall include the mayor of a city and the board of selectmen in a town unless some other local office is designated to be the chief administrative officer under the provisions of a local charter.

Fifth B, “Chief executive officer”, when used in connection with the operation of municipal governments shall include the mayor in a city and the board of selectmen in a town unless some other municipal office is designated to be the chief executive officer under the provisions of a local charter.

Sixth, “City solicitor” shall include the head of the legal department of a city or town.

Sixth A, “Coterminous”, shall mean, when applied to the term of office of a person appointed by the governor, the period from the date of appointment and qualification to the end of the term of said governor; provided that such person shall serve until his successor is appointed and qualified; and provided, further, that the governor may remove such person at any time, subject however to the condition that if such person receives notice of the termination of his appointment he shall have the right, at his request, to a hearing within thirty days from receipt of such notice at which hearing the governor shall show cause for such removal, and that during

the period following receipt of such notice and until final determination said person shall receive his usual compensation but shall be deemed suspended from his office.

Seventh, “District”, when applied to courts or the justices or other officials thereof, shall include municipal.

Eighth, “Dukes”, “Dukes county” or “county of Dukes” shall mean the county of Dukes county.

Ninth, “Fiscal year”, when used with reference to any of the offices, departments, boards, commissions, institutions or undertakings of the commonwealth, shall mean the year beginning with July first and ending with the following June thirtieth.

Tenth, “Gaming”, “illegal gaming” or “unlawful gaming” shall include every act punishable under any law relative to lotteries, policy lotteries or policy, the buying and selling of pools or registering of bets.

Eleventh, “Grantor” may include every person from or by whom a freehold estate or interest passes in or by any deed; and “grantee” may include every person to whom such estate or interest so passes.

Twelfth, “Highway”, “townway”, “public way” or “way” shall include a bridge which is a part thereof.

Thirteenth, “In books”, when used relative to the records of cities and towns, shall not prohibit the making of such records on separate leaves, if such leaves are bound in a permanent book upon the completion of a sufficient number of them to make an ordinary volume.

Fourteenth, “Inhabitant” may mean a resident in any city or town.

<[There is no clause Fifteenth.]>

Sixteenth, “Issue”, as applied to the descent of estates, shall include all the lawful lineal descendants of the ancestor.

Seventeenth, “Land”, “lands” and “real estate” shall include lands, tenements and hereditaments, and all rights thereto and interests therein; and “recorded”, as applied to plans, deeds or other instruments affecting land, shall, as affecting registered land, mean filed and registered.

Eighteenth, “Legal holiday” shall include January first, July fourth, November eleventh, and Christmas Day, or the day following when any of said days occurs on Sunday, and the third Monday in January, the third Monday in February, the third Monday in April, the last Monday in May, the first Monday in September, the second Monday in October, and Thanksgiving Day. “Legal holiday” shall also include, with respect to Suffolk county only, March seventeenth and June seventeenth, or the day following when said days occur on Sunday; provided, however, that the words “legal holiday” as used in section forty-five of chapter one hundred and forty-nine shall not include March seventeenth, or the day following when said day occurs on Sunday.

Eighteenth A, “Commemoration day” shall include March fifteenth, in honor of Peter Francisco day, May twentieth, in honor of General Marquis de Lafayette and May twenty-ninth, in honor of the birthday of President John F. Kennedy. The governor shall issue a proclamation in connection with each such commemoration day.

Eighteenth B, “Legislative body”, when used in connection with the operation of municipal governments shall include that agency of the municipal government which is empowered to enact ordinances or by-laws, adopt an annual budget and other spending authorizations, loan orders, bond authorizations and other financial matters and whether styled a city council, board of aldermen, town council, town meeting or by any other title.

Nineteenth, “Month” shall mean a calendar month, except that, when used in a statute providing for punishment by imprisonment, one “month” or a multiple thereof shall mean a period of thirty days or the corresponding multiple thereof; and “year”, a calendar year.

Nineteenth A, “Municipality” shall mean a city or town.

Twentieth, “Net indebtedness” shall mean the indebtedness of a county, city, town or district, omitting debts created for supplying the inhabitants with water and other debts exempted from the operation of the law limiting their indebtedness, and deducting the amount of sinking funds available for the payment of the indebtedness included.

Twenty-first, “Oath” shall include affirmation in cases where by law an affirmation may be substituted for an oath.

Twenty-second, “Ordinance”, as applied to cities, shall be synonymous with by-law.

Twenty-third, “Person” or “whoever” shall include corporations, societies, associations and partnerships. Twenty-fourth, “Place” may mean a city or town.

Twenty-fifth, “Preceding” or “following”, used with reference to any section of the statutes, shall mean the section last preceding or next following, unless some other section is expressly designated in such reference.

Twenty-sixth, “Public records” shall mean all books, papers, maps, photographs, recorded tapes, financial statements, statistical tabulations, or other documentary materials or data, regardless of physical form or characteristics, made or received by any officer or employee of any agency, executive office, department, board, commission,

bureau, division or authority of the commonwealth, or of any political subdivision thereof, or of any authority established by the general court to serve a public purpose, unless such materials or data fall within the following exemptions in that they are:

(a) specifically or by necessary implication exempted from disclosure by statute;

(b) related solely to internal personnel rules and practices of the government unit, provided however, that such records shall be withheld only to the extent that proper performance of necessary governmental functions requires such withholding;

(c) personnel and medical files or information; also any other materials or data relating to a specifically named individual, the disclosure of which may constitute an unwarranted invasion of personal privacy;

(d) inter-agency or intra-agency memoranda or letters relating to policy positions being developed by the agency; but this subclause shall not apply to reasonably completed factual studies or reports on which the development of such policy positions has been or may be based;

(e) notebooks and other materials prepared by an employee of the commonwealth which are personal to him and not maintained as part of the files of the governmental unit;

(f) investigatory materials necessarily compiled out of the public view by law enforcement or other investigatory officials the disclosure of which materials would probably so prejudice the possibility of effective law enforcement that such disclosure would not be in the public interest;

(g) trade secrets or commercial or financial information voluntarily provided to an agency for use in developing governmental policy and upon a promise of confidentiality; but this subclause shall not apply to information submitted as required by law or as a condition of receiving a governmental contract or other benefit;

(h) proposals and bids to enter into any contract or agreement until the time for the opening of bids in the case of proposals or bids to be opened publicly, and until the time for the receipt of bids or proposals has expired in all other cases; and inter-agency or intra-agency communications made in connection with an evaluation process for reviewing bids or proposals, prior to a decision to enter into negotiations with or to award a contract to, a particular person;

(i) appraisals of real property acquired or to be acquired until (1) a final agreement is entered into; or (2) any litigation relative to such appraisal has been terminated; or (3) the time within which to commence such litigation has expired;

(j) the names and addresses of any persons contained in, or referred to in, any applications for any licenses to carry or possess firearms issued pursuant to chapter one hundred and forty or any firearms identification cards issued pursuant to said chapter one hundred and forty and the names and addresses on sales or transfers of any firearms, rifles, shotguns, or machine guns or ammunition therefor, as defined in said chapter one hundred and forty and the names and addresses on said licenses or cards;

<[There is no subclause (k).]>

(l) questions and answers, scoring keys and sheets and other materials used to develop, administer or score a test, examination or assessment instrument; provided, however, that such materials are intended to be used for another test, examination or assessment instrument;

(m) contracts for hospital or related health care services between (i) any hospital, clinic or other health care facility operated by a unit of state, county or municipal government and (ii) a health maintenance organization arrangement approved under chapter one hundred and seventy-six I, a nonprofit hospital service corporation or medical service corporation organized pursuant to chapter one hundred and seventy-six A and chapter one hundred and seventy-six B, respectively, a health insurance corporation licensed under chapter one hundred and seventy-five or any legal entity that is self insured and provides health care benefits to its employees.

(n) records, including, but not limited to, blueprints, plans, policies, procedures and schematic drawings, which relate to internal layout and structural elements, security measures, emergency preparedness, threat or vulnerability assessments, or any other records relating to the security or safety of persons or buildings, structures, facilities, utilities, transportation or other infrastructure located within the commonwealth, the disclosure of which, in the reasonable judgment of the record custodian, subject to review by the supervisor of public records under subsection (b) of section 10 of chapter 66, is likely to jeopardize public safety.

(o) the home address and home telephone number of an employee of the judicial branch, an unelected employee of the general court, an agency, executive office, department, board, commission, bureau, division or authority of the commonwealth, or of a political subdivision thereof or of an authority established by the general court to serve a public purpose, in the custody of a government agency which maintains records identifying persons as falling within those categories; provided that the information may be disclosed to an employee organization under chapter 150E, a nonprofit organization for retired public employees under chapter 180, or a criminal justice agency as defined in section 167 of chapter 6.

(p) the name, home address and home telephone number of a family member of a commonwealth employee, contained in a record in the custody of a government agency which maintains records identifying persons as falling within the categories listed in subclause (o).

(q) Adoption contact information and indices therefore of the adoption contact registry established by section 31 of chapter 46.

(r) Information and records acquired under chapter 18C by the office of the child advocate.

(s) trade secrets or confidential, competitively-sensitive or other proprietary information provided in the course of activities conducted by a governmental body as an energy supplier under a license granted by the department of public utilities pursuant to section 1F of chapter 164, in the course of activities conducted as a municipal aggregator under section 134 of said chapter 164 or in the course of activities conducted by a cooperative consisting of governmental entities organized pursuant to section 136 of said chapter 164, when such governmental body, municipal aggregator or cooperative determines that such disclosure will adversely affect its ability to conduct business in relation to other entities making, selling or distributing electric power and energy; provided, however, that this subclause shall not exempt a public entity from disclosure required of a private entity so licensed. Any person denied access to public records may pursue the remedy provided for in section ten of chapter sixtysix.

Twenty-seventh, “Salary” shall mean annual salary.

Twenty-eighth, “Savings banks” shall include institutions for savings.

<[There is no clause Twenty-ninth.]>

Thirtieth, “Spendthrift” shall mean a person who is liable to be put under guardianship on account of excessive drinking, gaming, idleness or debauchery.

Thirty-first, “State”, when applied to the different parts of the United States, shall extend to and include the District of Columbia and the several territories; and the words “United States” shall include said district and territories.

Thirty-second, “State auditor” and “state secretary” shall mean respectively the auditor of the commonwealth and the secretary of the commonwealth. “State treasurer” or “treasurer of the commonwealth” shall mean the treasurer and receiver general as used in the constitution of the commonwealth, and shall have the same meaning in all contracts, instruments, securities and other documents. Thirty-third, “Swear” shall include affirm in cases in which an affirmation may be substituted for an oath. When applied to public officers who are required by the constitution to take oaths therein prescribed, it shall refer to those oaths; and when applied to any other officer it shall mean sworn to the faithful performance of his official duties.

Thirty-fourth, “Town”, when applied to towns or officers or employees thereof, shall include city.

Thirty-fifth, “Valuation”, as applied to a town, shall mean the valuation of such town as determined by the last preceding apportionment made for the purposes of the state tax.

Thirty-sixth, “Water district” shall include water supply district.

Thirty-seventh, “Will” shall include codicils.

Thirty-eighth, “Written” and “in writing” shall include printing, engraving, lithographing and any other mode of representing words and letters; but if the written signature of a person is required by law, it shall always be his own handwriting or, if he is unable to write, his mark.

Thirty-ninth, “Annual election”, as applied to municipal elections in cities holding such elections biennially, shall mean biennial election.

Fortieth, “Surety” or “Sureties”, when used with reference to a fidelity bond of an officer or employee of a county, city, town or district, shall mean a surety company authorized to transact business in the commonwealth.

Forty-first, “Population”, when used in connection with the number of inhabitants of a county, city, town or district, shall mean the population as determined by the last preceding national census.

<[There is no clause Forty-second.]>

Forty-third, “Veteran” shall mean (1) any person, (a) whose last discharge or release from his wartime service as defined herein, was under honorable conditions and who (b) served in the army, navy, marine corps, coast guard, or air force of the United States, or on full time national guard duty under Titles 10 or 32 of the United States Code or under sections 38, 40 and 41 of chapter 33 for not less than 90 days active service, at least 1 day of which was for wartime service; provided, however, than any person who so served in wartime and was awarded a service-connected disability or a Purple Heart, or who died in such service under conditions other than dishonorable, shall be deemed to be a veteran notwithstanding his failure to complete 90 days of active service; (2) a member of the American Merchant Marine who served in armed conflict between December 7, 1941 and December 31, 1946, and who has received honorable discharges from the United States Coast Guard, Army, or Navy; (3) any person (a) whose last discharge from active service was under honorable conditions, and who (b) served in the army, navy, marine corps, coast guard, or air force of the United States for not less than 180 days active service; provided, however, that any person who so served and was awarded a service-connected disability or who died in such service under conditions other than dishonorable, shall be deemed to be a veteran notwithstanding his failure to complete 180 days of active service.

“Wartime service” shall mean service performed by a “Spanish War veteran”, a “World War I veteran”, a

“World War II veteran”, a “Korean veteran”, a “Vietnam veteran”, a “Lebanese peace keeping force veteran”, a “Grenada rescue mission veteran”, a “Panamanian intervention force veteran”, a “Persian Gulf veteran”, or a member of the “WAAC” as defined in this clause during any of the periods of time described herein or for which such medals described below are awarded.

“Spanish War veteran” shall mean any veteran who performed such wartime service between February fifteenth, eighteen hundred and ninety-eight and July fourth, nineteen hundred and two.

“World War I veteran” shall mean any veteran who (a) performed such wartime service between April sixth, nineteen hundred and seventeen and November eleventh, nineteen hundred and eighteen, or (b) has been awarded the World War I Victory Medal, or (c) performed such service between March twenty-fifth, nineteen hundred and seventeen and August fifth, nineteen hundred and seventeen, as a Massachusetts National Guardsman. “World War II veteran” shall mean any veteran who performed such wartime service between September 16, 1940 and July 25, 1947, and was awarded a World War II Victory Medal, except that for the purposes of chapter 31 it shall mean all active service between the dates of September 16, 1940 and June 25, 1950. “Korean veteran” shall mean any veteran who performed such wartime service between June twenty-fifth, nineteen hundred and fifty and January thirty-first, nineteen hundred and fifty-five, both dates inclusive, and any person who has received the Korea Defense Service Medal as established in the Bob Stump National Defense Authorization Act for fiscal year 2003.

“Korean emergency” shall mean the period between June twenty-fifth, nineteen hundred and fifty and January thirty-first, nineteen hundred and fifty-five, both dates inclusive.

“Vietnam veteran” shall mean (1) any person who performed such wartime service during the period commencing August fifth, nineteen hundred and sixty-four and ending on May seventh, nineteen hundred and seventyfive, both dates inclusive, or (2) any person who served at least one hundred and eighty days of active service in the armed forces of the United States during the period between February first, nineteen hundred and fifty-five and August fourth, nineteen hundred and sixty-four; provided, however, that for the purposes of the application of the provisions of chapter thirty-one, it shall also include all active service between the dates May seventh, nineteen hundred and seventy-five and June fourth, nineteen hundred and seventy-six;

and provided, further, that any such person who served in said armed forces during said period and was awarded a service-connected disability or a Purple Heart, or who died in said service under conditions other than dishonorable, shall be deemed to be a veteran notwithstanding his failure to complete one hundred and eighty days of active service.

“Lebanese peace keeping force veteran” shall mean any person who performed such wartime service and received a campaign medal for such service during the period commencing August twenty-fifth, nineteen hundred and eighty-two and ending when the President of the United States shall have withdrawn armed forces from the country of Lebanon.

“Grenada rescue mission veteran” shall mean any person who performed such wartime service and received a campaign medal for such service during the period commencing October twenty-fifth, nineteen hundred and eighty-three to December fifteenth, nineteen hundred and eighty-three, inclusive.

“Panamanian intervention force veteran” shall mean any person who performed such wartime service and received a campaign medal for such service during the period commencing December twentieth, nineteen hundred and eighty-nine and ending January thirty-first, nineteen hundred and ninety.

“Persian Gulf veteran” shall mean any person who performed such wartime service during the period commencing August second, nineteen hundred and ninety and ending on a date to be determined by presidential proclamation or executive order and concurrent resolution of the Congress of the United States. “WAAC” shall mean any woman who was discharged and so served in any corps or unit of the United States established for the purpose of enabling women to serve with, or as auxiliary to, the armed forces of the United States and such woman shall be deemed to be a veteran.

None of the following shall be deemed to be a “veteran”:

(a) Any person who at the time of entering into the armed forces of the United States had declared his intention to become a subject or citizen of the United States and withdrew his intention under the provisions of the act of Congress approved July ninth, nineteen hundred and eighteen.

(b) Any person who was discharged from the said armed forces on his own application or solicitation by reason of his being an enemy alien.

(c) Any person who has been proved guilty of willful desertion.

(d) Any person whose only service in the armed forces of the United States consists of his service as a member of the coast guard auxiliary or as a temporary member of the coast guard reserve, or both.

(e) Any person whose last discharge or release from the armed forces is dishonorable.

“Armed forces” shall include army, navy, marine corps, air force and coast guard.

“Active service in the armed forces”, as used in this clause shall not include active duty for training in the army national guard or air national guard or active duty for training as a reservist in the armed forces of the United States.

Forty-fourth, “Registered mail”, when used with reference to the sending of notice or of any article having no intrinsic value shall include certified mail.

Forty-fifth, “Pledge”, “Mortgage”, “Conditional Sale”, “Lien”, “Assignment” and like terms, when used in referring to a security interest in personal property shall include a corresponding type of

security interest under chapter one hundred and six of the General Laws, the Uniform Commercial Code.

Forty-sixth, “Forester”, “state forester” and “state fire warden” shall mean the commissioner of environmental management or his designee.

Forty-seventh, “Fire fighter”, “fireman” or “permanent member of a fire department”, shall include the chief or other uniformed officer performing similar duties, however entitled, and all other fire officers of a fire department, including, without limitation, any permanent crash crewman, crash boatman, fire controlman or assistant fire controlman employed at the General Edward Lawrence Logan International Airport, or members of the Massachusetts military reservation fire department.

Forty-eighth, “Minor” shall mean any person under eighteen years of age.

Forty-ninth, “Full age” shall mean eighteen years of age or older.

Fiftieth, “Adult” shall mean any person who has attained the age of eighteen.

Fifty-first, “Age of majority” shall mean eighteen years of age.

Fifty-second, “Superior court” shall mean the superior court department of the trial court, or a session thereof for holding court.

Fifty-third, “Land court” shall mean the land court department of the trial court, or a session thereof for holding court.

Fifty-fourth, “Probate court”, “court of insolvency” or “probate and insolvency court” shall mean a division of the probate and family court department of the trial court, or a session thereof for holding court.

Fifty-fifth, “Housing court” shall mean a division of the housing court department of the trial court, or a session thereof for holding court.

Fifty-sixth, “District court” or “municipal court” shall mean a division of the district court department of the trial court, or a session thereof for holding court, except that when the context means something to the contrary, said words shall include the Boston municipal court department.

Fifty-seventh, “Municipal court of the city of Boston” shall mean the Boston municipal court department of the trial court, or a session thereof for holding court.

Fifty-eighth, “Juvenile court” shall mean a division of the juvenile court department of the trial court, or a session thereof for holding court.

CREDIT(S)

Amended by St.1934, c. 283; St.1935, c. 26; St.1936, c. 180; St.1937, c. 38; St.1938, c. 245; St.1941, c. 91, § 1; St.1941, c. 509, § 1; St.1945, c. 242, § 1; St.1945, c. 637, § 1; St.1946, c. 190; St.1948, c. 241; St.1951, c. 215, § 1; St.1953, c. 319, § 2; St.1954, c. 128, § 1; St.1954, c. 627, § 1; St.1955, c. 99, §§ 1, 2; St.1955, c. 403, § 1; St.1955, c. 683; St. 1956, c. 281, §§ 1, 2; St.1957, c. 164, § 1; St.1957, c. 765, § 3; St.1958, c. 140; St.1958, c. 626, § 1; St.1960, c. 299; St.1960, c. 544, § 1; St.1960, c. 812, § 1; St.1962, c. 427, § 1; St.1962, c. 616, § 1; St.1964, c. 322; St.1965, c. 875, §§ 1, 2; St.1966, c. 716; St.1967, c. 437; St.1967, c. 844, § 23; St.1968, c. 24, § 1; St.1968, c. 531, § 1; St.1969, c. 544, § 1; St.1969, c. 831, § 2; St.1970, c. 215, § 1; St.1973, c. 925, § 1; St.1973, c. 1050, § 1; St.1974, c. 205, § 1; St.1974, c. 493, § 1; St.1975, c. 706, § 2; St.1976, c. 112, § 1; St.1976, c. 156; St.1977, c. 130; St.1977, c. 691, § 1; St.1977, c. 977; St.1978, c. 12; St.1978, c. 247; St.1978, c. 478, § 2; St.1979, c. 230; St.1982, c. 189, § 2; St.1983, c. 113; St.1984, c. 363, §§ 1 to 4; St.1985, c. 114; St.1985, c. 220; St.1985, c. 451, § 1;

St.1986, c. 534, §§ 1, 2; St.1987, c. 465, §§ 1, 1A; St.1987, c. 522, § 1; St.1987, c. 587, § 1; St.1988, c. 180, § 1; St.1989, c. 665, § 1; St.1991, c. 109, §§ 1, 2; St.1992, c. 133, § 169; St.1992, c. 286, § 1; St.1992, c. 403, § 1; St.1996, c. 204, § 3; St.1996, c. 450, §§ 1 to 4; St.2002, c. 313, § 1; St.2004, c. 116, § 1, eff. Aug. 26, 2004; St.2004, c. 122, § 2, eff. Sept. 1, 2004; St.2004, c. 149, § 8, eff. July 1, 2004; St.2004, c. 349, eff. Dec. 15, 2004; St.2005, c. 130, § 1, eff. Nov. 11, 2005; St.2007, c. 109, § 1, eff. Dec. 5, 2007; St.2008, c. 176, § 2, eff. July 8, 2008; St.2008, c. 308, § 1, eff. Sept. 1, 2008; St.2008, c. 445, § 1, eff.

Mar. 30, 2009.

Current through Chapter 10 of the 2009 1st Annual Sess.

(c) 2009 Thomson Reuters.

END OF DOCUMENT

M.G.L.A. 4 § 7 Page 11

Effective:[See Text Amendments]

Massachusetts General Laws Annotated Currentness

Part I. Administration of the Government (Ch. 1–182)

Title II. Executive and Administrative Officers of the Commonwealth (Ch. 6–28A)

Chapter 6. The Governor, Lieutenant Governor and Council, Certain Officers Under the Governor and

Council, and State Library (Refs & Annos)

§ 172. Dissemination of record information; certification; eligibility for access; scope of inquiry; listing; access limited; rules; use of information except as otherwise provided in this section and sections one hundred and seventy-three to one hundred and seventy-five, inclusive, criminal offender record information, and where present, evaluative information, shall be disseminated, whether directly or through any intermediary, only to (a) criminal justice agencies; (b) such other agencies and individuals required to have access to such information by statute including United States Armed Forces recruiting offices for the purpose of determining whether a person enlisting has been convicted of a felony as set forth in Title 10, section 504 of the United States Code; to the active or organized militia of the commonwealth for the purpose of determining whether a person enlisting has been convicted of a felony, and (c) any other agencies and individuals where it has been determined that the public interest in disseminating such information to these parties clearly outweighs the interest in security and privacy. The extent of such access shall be limited to that necessary for the actual performance of the criminal justice duties of criminal justice agencies under clause (a); to that necessary for the actual performance of the statutory duties of agencies and individuals granted access under clause (b); and to that necessary for the actual performance of the actions or duties sustaining the public interest as to agencies or individuals granted access under clause (c). Agencies or individuals granted access under clause (c) shall be eligible to receive criminal offender record information obtained through interstate systems if the board determines that such information is necessary for the performance of the actions or duties sustaining the public interest with respect to such agencies or individuals. The board shall certify those agencies and individuals requesting access to criminal offender record information that qualify for such access under clauses (a) or (b) of this section, and shall specify for each such agency or individual certified, the extent of its access. The board shall make a finding in writing of eligibility, or noneligibility of each such agency or

individual which requests such access. No such information shall be disseminated to any agency or individual prior to the board's determination of eligibility, or, in cases in which the board's decision is appealed, prior to the final judgment of a court of competent jurisdiction that such agency or individual is so eligible.

No agency or individual shall have access to criminal offender record information under clause (c), unless the board, by a two-thirds majority of the members present and voting, determines and certifies that the public interest in disseminating such information to such party clearly outweighs the interest in security and privacy. The extent of access to such information under clause (c) shall also be determined by such a two-thirds majority vote of the board. Certification for access under clause (c) may be either access to information relating to a specific identifiable individual, or individuals, on a single occasion; or a general grant of access for a specified period of time not to exceed two years. A general grant of access need not relate to a request for access by the party or parties to be certified. Except as otherwise provided in this paragraph the procedure and requirements for certifying agencies and individuals under clause (c) shall be according to the provisions of the preceding paragraphs of this section.

Each agency holding or receiving criminal offender record information shall maintain, for such period as the board shall determine, a listing of the agencies or individuals to which it has released or communicated such information.

Such listings, or reasonable samples thereof, may from time to time be reviewed by the board or the council to determine whether any statutory provisions or regulations have been violated.

Dissemination of criminal offender record information shall, except as provided in this section and for purposes of research programs approved under section one hundred and seventy-four, be permitted only if the inquiry is based upon name, fingerprints, or other personal identifying characteristics. The board shall adopt rules to prevent dissemination of such information where inquiries are based upon categories of offense or data elements other than said characteristics; provided, however, that access by criminal justice agencies to criminal offender record information on the basis of data elements other than personal identifying characteristics, including but not limited to, categories of offense, mode of operation, photographs and physical descriptive data generally, shall be permissible, except as may be limited by the regulations of the board. Except as authorized by this chapter it shall be unlawful to request or require a person to provide a copy of his criminal offender record information. At the time of making any criminal record inquiry pursuant to clause (b) or (c) of the first paragraph of this section, the party certified to receive criminal offender record information shall submit to the board an acknowledgement that such inquiry will be undertaken, signed by the person who is the subject of such inquiry on a form prepared or approved by the board.

Notwithstanding any other provisions of this section, the following information shall be available to any person upon request: (a) criminal offender record information consisting of conviction data; provided, however, that all requests for such conviction data shall be made to the board; and provided, further, that the board shall disclose only conviction data which it maintains in a standardized format in its automated criminal history file, and (b) information indicating custody status and placement within the correction system; provided, however, that no information shall be disclosed that identifies family members, friends, medical or psychological history, or any other personal information unless such information is directly relevant to such release or custody placement decision, and no information shall be provided if its release would violate any other provisions of state or federal law. The parole board, except as required by section one hundred and thirty of chapter one hundred and twentyseven, the department of correction, a county correctional authority, or a probation department with the approval

of a justice to the appropriate division of the trial court, may, in its discretion, make available a summary, which may include references to evaluative information, concerning a decision to release an individual on a permanent or temporary basis, to deny such release, or to change his custody status.

Information shall be provided or made available pursuant to the preceding paragraph only if the individual named in the request or summary has been convicted of a crime punishable by imprisonment for a term of five years or more, or has been convicted of any crime and sentenced to any term of imprisonment, and at the time of the request: is serving a sentence of probation or incarceration, or is under the custody of the parole board; or having been convicted of a misdemeanor, has been released from all custody or supervision for not more than one year; or having been convicted of a felony, has been released from all custody or supervision for not more than two years; or, having been sentenced to the custody of the department of correction, has finally been discharged therefrom, either having been denied release on parole or having been returned to penal custody for violation of parole, for not more than three years. In addition to the provisions of the preceding sentence, court records for all criminal cases shall be made available for public inspection for a period of one week following conviction and imposition of sentence.

Any individual or agency, public or private, that receives or obtains criminal offender record information, in violation of the provisions of this statute, whether directly or through any intermediary, shall not collect, store, disseminate, or use such criminal offender record information in any manner or for any purpose. Notwithstanding the provisions of this section, the dissemination of information relative to a person's conviction of automobile law violations as defined by section one of chapter ninety C, or information relative to a person's charge of operating a motor vehicle while under the influence of intoxicating liquor which resulted in his assignment to a driver alcohol program as described in section twenty-four D of chapter ninety, shall not be prohibited where such dissemination is made, directly or indirectly, by the motor vehicle insurance merit rating board established pursuant to section one hundred and eighty-three of chapter six, to an insurance company doing motor vehicle insurance business within the commonwealth, or to such insurance company's agents, independent contractors or insurance policyholders to be used exclusively for motor vehicle insurance purposes. Notwithstanding the provisions of this section or chapter sixty-six A, the following shall be public records: (1) police daily logs, arrest registers, or other similar records compiled chronologically, provided that no alphabetical arrestee, suspect, or similar index is available to the public, directly or indirectly; (2) chronologically maintained court records of public judicial proceedings, provided that no alphabetical or similar index of criminal defendants is available to the public, directly or indirectly; (3) published records of public court or administrative proceedings, and of public judicial administrative or legislative proceedings; and (4) decisions of the parole board as provided in section one hundred and thirty of chapter one hundred and twenty-seven.

CREDIT(S)

Added by St.1972, c. 805, § 1. Amended by St.1977, c. 365, § 1; St.1977, c. 691, § 4; St.1977, c. 841; St.1982, c. 31; St.1989, c. 268, § 1; St.1990, c. 177, § 6; St.1990, c. 319, §§ 7 to 12.

Current through Chapter 10 of the 2009 1st Annual Sess.

(c) 2009 Thomson Reuters.

END OF DOCUMENT

M.G.L.A. 6 § 172 Page 3

Effective:[See Text Amendments]

Massachusetts General Laws Annotated Currentness

Part I. Administration of the Government (Ch. 1–182)

Title II. Executive and Administrative Officers of the Commonwealth (Ch. 6–28A)

Chapter 12. Department of the Attorney General, and the District Attorneys (Refs & Annos)

§ 11H. Violations of constitutional rights; civil actions by attorney general; venue

Whenever any person or persons, whether or not acting under color of law, interfere by threats, intimidation or coercion, or attempt to interfere by threats, intimidation or coercion, with the exercise or enjoyment by any other person or persons of rights secured by the constitution or laws of the United States, or of rights secured by the constitution or laws of the commonwealth, the attorney general may bring a civil action for injunctive or other appropriate equitable relief in order to protect the peaceable exercise or enjoyment of the right or rights secured.

Said civil action shall be brought in the name of the commonwealth and shall be instituted either in the superior court for the county in which the conduct complained of occurred or in the superior court for the county in which the person whose conduct complained of resides or has his principal place of business.

CREDIT(S)

Added by St.1979, c. 801, § 1. Amended by St.1982, c. 634, § 4.

Current through Chapter 10 of the 2009 1st Annual Sess.

(c) 2009 Thomson Reuters.

END OF DOCUMENT

M.G.L.A. 12 § 11H Page 1

Effective: July 8, 2008

Massachusetts General Laws Annotated Currentness

Part I. Administration of the Government (Ch. 1–182)

Title X. Public Records (Ch. 66–66A)

Chapter 66. Public Records (Refs & Annos)

§ 10. Public inspection and copies of records; presumption; exceptions

(a) Every person having custody of any public record, as defined in clause Twenty-sixth of section seven of chapter four, shall, at reasonable times and without unreasonable delay, permit it, or any segregable portion of a record which is an independent public record, to be inspected and examined by any person, under his supervision, and shall furnish one copy thereof upon payment of a reasonable fee. Every person for whom a search of public records is made shall, at the direction of the person having custody of such records, pay the actual expense of such search. The following fees shall apply to any public record in the custody of the state police, the Massachusetts bay transportation authority police or any municipal police department or fire

department: for preparing and mailing a motor vehicle accident report, five dollars for not more than six pages and fifty cents for each additional page; for preparing and mailing a fire insurance report, five dollars for not more than six pages plus fifty cents for each additional page; for preparing and mailing crime, incident or miscellaneous reports, one dollar per page; for furnishing any public record, in hand, to a person requesting such records, fifty cents per page. A page shall be defined as one side of an eight and one-half inch by eleven inch sheet of paper.

(b) A custodian of a public record shall, within ten days following receipt of a request for inspection or copy of a public record, comply with such request. Such request may be delivered in hand to the office of the custodian or mailed via first class mail. If the custodian refuses or fails to comply with such a request, the person making the request may petition the supervisor of records for a determination whether the record requested is public. Upon the determination by the supervisor of records that the record is public, he shall order the custodian of the public record to comply with the person's request. If the custodian refuses or fails to comply with any such order, the supervisor of records may notify the attorney general or the appropriate district attorney thereof who may take whatever measures he deems necessary to insure compliance with the provisions of this section. The administrative remedy provided by this section shall in no way limit the availability of the administrative remedies provided by the commissioner of administration and finance with respect to any officer or employee of any agency, executive office, department or board; nor shall the administrative remedy provided by this section in any way limit the availability of judicial remedies otherwise available to any person requesting a public record.

If a custodian of a public record refuses or fails to comply with the request of any person for inspection or copy of a public record or with an administrative order under this section, the supreme judicial or superior court shall have jurisdiction to order compliance.

(c) In any court proceeding pursuant to paragraph (b) there shall be a presumption that the record sought is public, and the burden shall be upon the custodian to prove with specificity the exemption which applies.

(d) The clerk of every city or town shall post, in a conspicuous place in the city or town hall in the vicinity of the clerk’s office, a brief printed statement that any citizen may, at his discretion, obtain copies of certain public records from local officials for a fee as provided for in this chapter.

The executive director of the criminal history systems board, the criminal history systems board and its agents, servants, and attorneys including the keeper of the records of the firearms records bureau of said department, or any licensing authority, as defined by chapter one hundred and forty shall not disclose any records divulging or tending to divulge the names and addresses of persons who own or possess firearms, rifles, shotguns, machine guns and ammunition therefor, as defined in said chapter one hundred and forty and names and addresses of persons licensed to carry and/or possess the same to any person, firm, corporation, entity or agency except criminal justice agencies as defined in chapter six and except to the extent such information relates solely to the person making the request and is necessary to the official interests of the entity making the request.

The home address and home telephone number of law enforcement, judicial, prosecutorial, department of youth services, department of children and families, department of correction and any other public safety and criminal justice system personnel, and of unelected general court personnel, shall not be public records in the custody of the employers of such personnel or the public employee retirement administration commission or any retirement board established under chapter 32 and shall not be disclosed, but such information may be disclosed to an

employee organization under chapter 150E, a nonprofit organization for retired public employees under chapter 180 or to a criminal justice agency as defined in section 167 of chapter 6. The name and home address and telephone number of a family member of any such personnel shall not be public records in the custody of the employers of the foregoing persons or the public employee retirement administration commission or any retirement board established under chapter 32 and shall not be disclosed. The home address and telephone number or place of employment or education of victims of adjudicated crimes, of victims of domestic violence and of persons providing or training in family planning services and the name and home address and telephone number, or place of employment or education of a family member of any of the foregoing shall not be public records in the custody of a government agency which maintains records identifying such persons as falling within such categories and shall not be disclosed.

CREDIT(S)

Amended by St.1948, c. 550, § 5; St.1973, c. 1050, § 3; St.1976, c. 438, § 2; St.1978, c. 294; St.1982, c. 189, § 1; St.1982, c. 477; St.1983, c. 15; St.1991, c. 412, § 55; St.1992, c. 286, § 146; St.1996, c. 39, § 1; St.1996, c. 151, § 210; St.1998, c. 238; St.2000, c. 159, § 133; St.2004, c. 149, § 124, eff. July 1, 2004; St.2008, c. 176, § 61, eff. July 8, 2008.

Current through Chapter 10 of the 2009 1st Annual Sess.

(c) 2009 Thomson Reuters.

END OF DOCUMENT

M.G.L.A. 66 § 10 Page 2

What is Geofeedia?

Geofeedia is the only patented*, location-based social media monitoring, analysis and engagement platform for law enforcement. Our solution enables law enforcement agencies to derive social intelligence to understand, in real-time, what's happening at the locations most important to them.

With Geofeedia, you will have the ability to quickly search seven social media sources by geo-location, from a specific address to an entire neighborhood, then filter results by timeframe, keywords or specific individuals.

We have many ways to visualize and analyze social media within our platform. These include: 1) Map View, 2) Collage View, 3) Streamer View, 4) Analytics View, 5) Alerts and notifications, and 6) User Track View.

Law Enforcement agencies rely on Geofeedia for:

- Targeted surveillance and monitoring
- Tracking users of interest
- Crisis response and management
- Resource allocation
- Live event security efforts
- Source and data evaluation and corroboration
- Community engagement
- Command center operations

License details, terms and cost included on following pages…

This proposal (the "Proposal") will serve to confirm Customer's order for the services described above ("Services") for the prices listed herein. Customer's use of the Services is subject to the terms and conditions of Geofeedia's Online Terms of Use (http://geofeedia.com/terms-of-service). Payment terms. On the effective date, Geofeedia will invoice Customer for all fees indicated above. The fees indicated above are effective for the Initial Term. Thereafter, Geofeedia may change any of the fees indicated above, with such changes being effective at the conclusion of the then-current term, by providing Customer with notice of such chances at least thirty (30) days prior to the end of the then-current term.

* Our service is protected under U.S. patents 8,484,224, 8,595,317, 8,639,767, 8,612,533, 8,655,873, 8,655,983, 8,849,935, 8,850,531 and 8,862,589

What's included in your license?

Real-time search

- ✓ Search seven social media sources by location and view results in our map or collage views
- ✓ Unlimited data from monitored Geofeeds per this proposal, otherwise limited to the last 24 hours

Location Monitoring

- ✓ Geofeedia will continuously monitor and record social media from user defined locations providing the ability to perform historical searches and analysis
- ✓ Unlimited number of location recordings and ability to change locations at any time

Streaming

- ✓ View up to five concurrent live streams of social media per licensed user

User Track

- ✓ Connect undercover Twitter and Instagram accounts and follow specific users' posts

Archive and Export

- ✓ Unlimited monitored Geofeeds and archival in secure data warehouse
- ✓ Export Geofeed data to CSV format

Analytics

- ✓ Filtering by timeframe, keyword and user; trend views by volume, media, keyword and user; detailed view of feed items and associated metadata; curate items in collections

Alerts

- ✓ Create unlimited email alert notifications triggered by specific keywords, phrases or users
- ✓ Customize Alerts at any time

Language Translation

- ✓ Translate all content to and from more than 40 different languages

Hosting and Storage

- ✓ Included

User Licenses and Data Charges

- ✓ Unlimited number of user licenses (internal BRIC use only)
- ✓ Data includes up to 200,000 items per month
- ✓ Additional data packs available for purchase

Continued…

This proposal (the "Proposal") will serve to confirm Customer's order for the services described above ("Services") for the prices listed herein. Customer's use of the Services is subject to the terms and conditions of Geofeedia's Online Terms of Use (http://geofeedia.com/terms-of-service). Payment terms. On the effective date, Geofeedia will invoice Customer for all fees indicated above. The fees indicated above are effective for the Initial Term. Thereafter, Geofeedia may change any of the fees indicated above, with such changes being effective at the conclusion of the then-current term, by providing Customer with notice of such chances at least thirty (30) days prior to the end of the then-current term.

* Our service is protected under U.S. patents 8,484,224, 8,595,317, 8,639,767, 8,612,533, 8,655,873, 8,655,983, 8,849,935, 8,850,531 and 8,862,589

Support and Training

- ✓ Account set-up, initial location monitoring configuration, ongoing priority support
- ✓ One kick-off training session plus one user-training session per month when requested

Terms:

- Initial Term: signed date below to July 31, 2015
- Full payment due upon signing
- List price expires 90 days from date listed above

Cost Breakdown:

Option Details: Enterprise license

- Unlimited user licenses (internal BRIC users only)
- Unlimited recorded locations, up to 200,000 posts per month
- Unlimited Alerts
- Setup & training (Waived)

Total annual investment **$9,999**

Signed: _____ **Printed Name:** David Carabin

Title: Director **Date:** 1/13/15

Billing Contact: Andrew Murphy **Billing Address:** 1 City Hall Plaza
Room 204
Boston, MA 02201

This proposal (the "Proposal") will serve to confirm Customer's order for the services described above ("Services") for the prices listed herein. Customer's use of the Services is subject to the terms and conditions of Geofeedia's Online Terms of Use (http://geofeedia.com/terms-of-service). Payment terms. On the effective date, Geofeedia will invoice Customer for all fees indicated above. The fees indicated above are effective for the Initial Term. Thereafter, Geofeedia may change any of the fees indicated above, with such changes being effective at the conclusion of the then-current term, by providing Customer with notice of such chances at least thirty (30) days prior to the end of the then-current term.

* Our service is protected under U.S. patents 8,484,224, 8,595,317, 8,639,767, 8,612,533, 8,655,873, 8,655,983, 8,849,935, 8,850,531 and 8,862,589

Hetherington Group Expert Investigations and Intelligence Services

The Dark Web: A Primer

By Cynthia Hetherington, Hetherington Group

B060

The Dark Web might appear to have the star sex appeal and adrenaline rush of a nefarious Hollywood movie, but in reality, the Dark Web is a den of iniquity operated by the technically sophisticated.

You most likely do not belong here. However, if you have a need to track down stolen goods, manage reputational risk, are working in human trafficking, or are trying to communicate from North Korea with an escaped uncle in South Korea, you likely will find yourself turning to the Dark Web for information.

Or maybe you are cruising around the Dark Web to participate in, or observe, criminal activity.

What's the hype about? Crime, of course!

Who doesn't slow down to possibly get a glimpse of the gore of a traffic accident? It's ugly, but it's human nature to want to look.

Here is a primer to explain what the Dark Web is, how it compares to the Surface Web and the Deep Web, and how to look at Dark Web material carefully (or perhaps even through the lens of something a little safer).

What is the Dark Web?

The more we, as investigators and researchers, reflexively "Google it" for our first information pass, the less we understand what's going on behind the scenes and how to operate in this multilayered, technical world.

Those who searched online in pre-World Wide Web days might understand the Dark Web, because it actually reminds them of those early Internet days. You had a spreadsheet of online addresses to visit, friends would email each other new gopher locations, and when you were stuck, there was always an FTP site you could visit to try to locate what you wanted.

Then Yahoo! came along and started indexing websites for us. Alta Vista, Google, Bing, and others followed. With these search engines, the technical requirements were considerably dumbed down, allowing the everyday user to jump online and search for anything and everything.

With two generations of Google-ready users in the rearview mirror, we are now coming full circle, forced to remember the old ways to access the Dark Web. Though cumbersome, it's not impossible to remember how the Internet functions, enabling us to search against this intricate network to locate our findings.

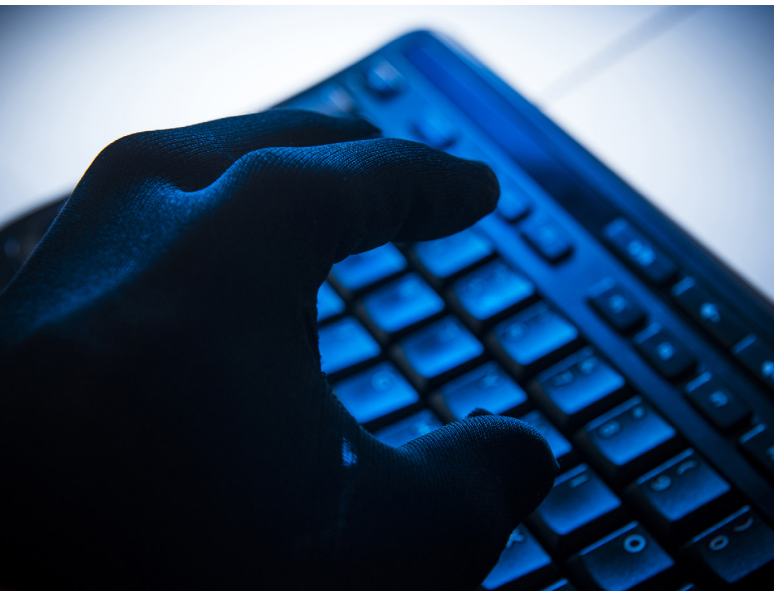
Let's start with some clear definitions and some comparisons of the three layers of the World Wide Web: Surface Web, Deep Web, and Dark Web.

Surface Web (a/k/a Clearnet)

The Surface Web is anything that can be indexed by a typical search engine, such as Google or Bing. The content is not anonymized, not private by any means, and is meant for full disclosure. The returned pages are indexed by keyword, and the assigned rankings are based on popularity. Since the focus of surface web pages is to stand out, and shows no or relatively low-base anonymity, most surface websites are routinely identifying users (i.e., searchers) by their IP addresses.

Deep Web

Often confused with the Dark Web, there is little anonymity or privacy on Deep Web pages. They really are as they sound: deep and full of content. Most often, Deep Web pages are the content rich databases that your Surface Web search just produced. Some examples of Deep Web content are social media platforms, county and state public record databases, and hotel and airline sites listing rooms, tickets, and prices. Newspaper website archives and Ticketmaster's inventory of tickets for sale are also deep content.



Surface to Deep Example

Imagine you use Google to search for hotels in Philadelphia. Such a search would produce about 260 authentic Surface Web matches, including links to travel websites such as Expedia, AirBnB, and Trip Advisor, as well as hotel websites for Lowes, Hilton, and Marriott. Not surprisingly, the very sites you expect to bubble to the top of the search results in fact do – as though to shout "Look at me!" No anonymity. My step into the Deep Web is as easy as selecting from the returned search results. I click on Marriott's website, from which I can select the dates and the specific Philadelphia location I want to stay. Marriott will even present me with a choice of rates. While I'm on the Marriott website, my IP address is captured, along with my browser type and other computer details. At the same time, Marriott could be inserting a cookie on my computer to track my current and future activity. Zero anonymity and zero privacy.

Dark Web (a/k/a darknet)

The Dark Web, or darknet, is classified as a small portion of the World Wide Web that has been intentionally hidden and is inaccessible through standard web browsers. There is, in fact, no "darknet Google." Darknet sites are often put up and taken down within a matter of minutes specifically to maintain anonymity. The entire drive behind the dark web is anonymity—and privacy. (Example: Say you wanted to find prostitutes, guns, and/or drugs while staying at the Marriott (see above paragraph). You would use the Dark Web (darknet) for that search, because of its anonymity and privacy, which the Marriott's Surface Web service would not provide.)

The most infamous content residing on the Dark Web is found in The Onion Router (Tor) network. The Tor network is an anonymous network that can only be accessed with a special web browser, called the Tor browser (www.torproject.org). This is the portion of the Internet most widely known for illicit activities, because of the anonymity that the Tor network gives. In fairness, virtual private networks (VPNs) can also access dark content, but in using a VPN you do give up some anonymity and privacy.

How is the dark web anonymous?

The backbone of the World Wide Web works because there are online directories handing off your search requests to the real location of the site. It's often easy to remember a domain name—especially if it's a catchy name. But it's the Internet Protocol (IP) address—the number—associated with the URL name that is the true language the Internet understands. For example, you type in hetheringtongroup.com and hit Enter. Up pops the website for Hetherington Group. But what's truly happening is this: the browser sends your hetheringtongroup.com address to a domain nameserver and is handed back the actual IP address, which, in this example, is 209.177.145.48, and at the same time takes you to Hetherington Group's website. To better understand, try this backwards. Instead of typing in hetheringtongroup.com in the search bar of Google, type in 209.177.145.48 and hit Enter. You will be taken to Hetherington Group's website, just as if you'd typed in hetheringtongroup.com and hit Enter. But hetheringtongroup.com is a heck of a lot easier to remember than 209.177.145.48, eh? So thank goodness for that!

It's quite similar to the mapping system in your car. For example, you enter the address 1600 Pennsylvania Ave, Washington, D.C., and the mapping software notes your location and begins the navigation by telling you, step-by-step, where to turn to reach that destination. What the mapping software is really doing, however, is taking your intended address and turning it into navigational coordinates—in this example 38° 53' 51.707 -77° 2' 11.4688, to be exact—and translating the travel directions into words for you to understand. If the navigational program were to speak out "38° 53' 51.707 -77° 2' 11.4688," it wouldn't be of much use to the average person.

It is easier to remember hetheringtongroup.com than 209.177.145.48, and it is easier to remember 1600 Pennsylvania Ave than 38° 53' 51.707 -77° 2' 11.4688. Technology—mapping software and domain name servers, specifically—has made it easy to substitute complicated numbering systems with words that enable us to drive to the White House from New Jersey or remember the name of an investigative firm's website.

On the darknet, however, there are no DNS servers. You must know where you want to go and what you are looking for. In fact, you must have those specific coordinates beforehand to locate what you want on the

darknet, otherwise you won't find it. More importantly, the darknet can't be indexed or mapped, which is what makes it anonymous.

To summarize:

- Dark Web websites don't resolve to a DNS server and have no directory to point the user in the right direction.
- Resistant to indexing, there is no dark google.
- Requires a special browser (e.g., Tor) to search this internet within an internet. (Capital letters?)
- Dark web websites are often put up and taken down in a short span of time, long enough for one transaction to occur.

Getting Started in the Dark Web

Once you are on a Dark Web website, there is a very likely chance the nefarious actors you want to communicate with won't talk to you and will instead try to insert malware onto your computer. Meanwhile, they are stealing your open content, while showing you videos of small animals being violated.

Best practice is to visit the Dark Web with a separate computer, one specifically designated for the use of dark searches. There are many approaches to this technique. If you search the Internet with such words and phrases as **sandbox, cold computer, virtual machines, tails processing,** you might find some slick technical avenues.

To search the Dark Web, I use a separate machine. It's a dedicated laptop void of any value or information connected to me. No email. No casual browsing. No client communications. No jumping onto open WIFI. No viewing of social media websites. The laptop does have a stripped-down Firefox browser and some malware and antivirus software. I ensure all software is up-to-date with the most recent versions. I use only this laptop to connect to Tor and search the Dark Web.

You can download the free Tor browser from the Tor website (www.torproject.org). VPNs are excellent for many other uses: they offer privacy, but note that they do not guarantee anonymity and can be comprised. A technically proficient attacker or several employees could retrieve the full identity information associated with a VPN user.

Tor is rather easy to use, since it is a glorified browser. Be sure to read about the pitfalls and problems you can experience with Tor. On the Tor website you will find such worthy reads as "What is Tor" and "Why Anonymity Matters." These short reads explain how JavaScript and YouTube videos can make you vulnerable, even if you think you are anonymous.

After reading these suggested materials, make sure your computer's version of Firefox, antivirus, and malware are all up-to-date. Also make you are using the most current version of Tor (if your version isn't the most current, the Tor software will flag you when you open it). In the upper left corner of the browser, you will see an onion graphic (part of the Tor logo). Click on the onion. It will direct you through Tor Circuit or places online you are hopping through.

This is what makes Tor anonymous. It masks your location. While you log in from ABC building in NYC, Tor actually routes your online presence through many other networks, so your IP address looks like it is coming from, say, XYZ building in Oslo.

A good way to start eyeballing online web pages is to try a few websites that try to create a searchable platform. Though the anonymity of these pages is questionable, it is a great platform to just see what is out there.

Some of those beginner websites are:

- The Hidden Wiki (torhiddenwiki.com): It's like Wikipedia for Dark Web content, or Yahoo's subject directory.
- Onion Link (onion.link): Uses Google's API on the links and content they have located. A search on, say, puppies in Surface Web Google would give very different results than the same search would give on Onion Link.

Depending on what sort of ugly, depraved material you are looking for, The Hidden Wiki (torHiddenwiki.com) is a quick site to direct you to such subjects as coin exchanges, pornography, stolen software, illegal platforms, and sites for purchasing guns, vehicles, drugs, and stolen credentials.

Next sites, most of which have now been taken down, were the marketplaces. Markets such as SilkRoad, Alpha Bay, and Hansa gained notoriety for being 'craigslist-like' exchanges that were easy to locate, even on the Dark Web. But that also made these websites easy for the law enforcement community (working at the same time to stop these illegal services) to find as well.

If you come across a market base or onion site online, it will look like an assortment of numbers and letters—such as clsvtzwzdgzkjda7.onion—which, as of this writing, takes you to a hacker underground page. Again, these sites were never meant to be easy to remember and will only last as long as it takes to execute an exchange. As an underground black market, the Dark Web also owns its own language. If you see words or phrases you aren't familiar with, do not click on the links. Phrases and words such as **Bugchasing kids** and **Crushing** sound harmless enough, but the images are hard to unsee. To be safe, look up those terms on the Surface Web first, say, in Urban Dictionary (www.urbandictionary.com).

But more importantly: Do not go there at all. The idle, curious viewer could easily, unintentionally, land in a malware infested website of child pornography images. Just don't go there.

Let's discuss the three traits that will not serve you well when searching the Dark Web:

Sloth

- Do not be stupid; read everything you can before trying out the Dark Web.
- Tor is a great bit of technology for the right user, but it is no match for operators who don't know what they're doing. Learn the browser. Use a clean computer with up-to-date software.
- Do not fill out any forms online or participate in any click-through surveys or websites.

Ego

- Do not make the wrong friends. There is a very good chance that you are poking a federal agent or a Russian hacker.
- If you build your own platform, onion page, or market, you will attract attention.
- With a handful of sites (7,000 at last count), you will draw attention. Memex and other government search tools are scouring the dark web.

Greed

- The party is only good the first time around. Get in, get it done, and get out.
- Watch for the Dark markets, online forums, and various other sites that can only be accessed via the Tor browser. These sites will use URLs with the .onion suffix rather than the usual .com, .net, and .org suffixes.
- Market platforms are going down as soon as they go up, so dealers will sell directly to you.

Remember: On the dark web, there is no room for sloth, ego or greed.

Flashlight on the Dark Web

Does this all sound depraved, grim, and mostly illegal? For the most part, it is. However, there can be great uses for this dark platform. It is the lifeline of communication for some who dare to reach out of their oppressed country, where every post and mention is monitored by their government. Or, if you find yourself outside of the U.S., and you want to watch your favorite television program but it's blocked because the licensing isn't permitted beyond the U.S., well… you might find the Dark Web useful in such a case. The Dark Web is meant as a communications platform. The Tor browser allows two-way anonymity. And, as you can imagine, two-way anonymity is exactly the sort of thing that appeals to technically savvy criminals.

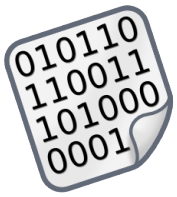
To shine a light on the Dark Web, just don't go there but rather start by visiting all the major social media channels where Dark Web users tend to get started and hang out. In the following list of social media platforms, none requires you to join or login. I would still stress using a separate computer—or at the very least, make sure your virus and malware software programs are up-to-date.

Reddit, Chans, and Pastebin

Reddit (www.reddit.com) is an easy chat board that

infuses multiple platforms of content and is organized by topic into subreddits. At the home page, search in the upper right-hand corner for **dark net** (ONE WORD?). One of several boards (such as www.reddit.com/r/DarkNetMarkets/ or /r/DNMParanoia) will give you hours of reading. To find the latest available search resource or market, go to www.reddit.com/r/DarkWebLinks/.

4chan (www.4chan.org) is mostly anime and manga porn, but it's also a platform where discussions of illegal markets, stolen products, and personal identifying information get spread (i.e., doxxing). 4chan is also well-known for revenge porn.



Pastebin (www.pastebin.com) is also a good website for doxxing, stolen credentials, leads to Dark Web services, and all manner of devious content. Searching on "SSN" will return a plethora of social security numbers and personal identifying information results.

Keeping up with the Dark Web

The Dark Web is a platform of villainous information. Like a car accident on the other side of the highway, it's human nature to want to rubberneck. But the Dark Web is also a brilliant tool for anonymous communication. As an investigator, I don't want to look away.

Keeping up with those who monitor the Dark Web and report on its progression is an excellent method for staying attuned to subtle changes. I monitor Reddit for the day-to-day websites and services it mentions. I also get a daily email filled with newly indexed onion pages from Justin Seitz's Hunchly (www.hunch.ly). I also rely on the platform tools, statistics, and the free blog from DarkOwl (www.darkowl.com) to keep me informed—I consider their Darknet Index invaluable. There are new tools being created to index the dark

world and its pseudo dark helpers, Reddit, 4chan, and Pastebin. The social media monitor LifeRaft's Navigator (www.liferaftinc.com) now offers a Dark Web search and monitor application built into its alert system and browser, which means they filter the content, not you.

All of these solutions are platforms for educating yourself or professional resources that allow you to watch the Dark Web without going into it yourself. These are perfect solutions for a professional investigator who isn't a part-time hacker. Every investigator, though not a hacker or even dealing with this content daily, has something in his or her work that must consider the Dark Web. Any books, articles, or professional seminars on this topic are highly recommended.

Educate yourself before entering this dark world and have a strong stomach—plus some strong antivirus software, as well.

...

Cynthia Hetherington, MLS, MSM, CFE, CII is the founder and president of Hetherington Group, a consulting, publishing, and training firm that leads in due diligence, corporate intelligence, and cyber investigations by keeping pace with the latest security threats and assessments. She has authored three books on how to conduct investigations, is the publisher of the newsletter, Data2know: Internet and Online Intelligence, and annually trains thousands of investigators, security professionals, attorneys, accountants, auditors, military intelligence professionals, and federal, state, and local agencies on best practices in the public and private sectors.

Developing a Policy on the Use of Social Media in Intelligence and Investigative Activities

Guidance and Recommendations

February 2013

B068

Developing a Policy on the Use of Social Media in Intelligence and Investigative Activities

Guidance and Recommendations

B070

Table of Contents

Executive Summary 1

Introduction 5

Social Media Policy Elements 11

Conclusion 19

Appendix A—Cases and Authorities 21

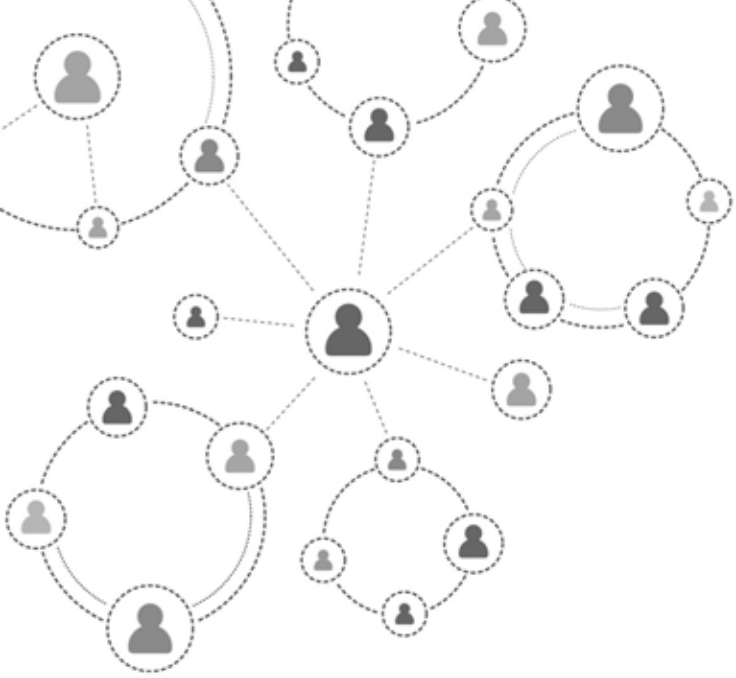
Appendix B—Georgia Bureau of Investigation Social Media Policy 29

Appendix C—Dunwoody Police Department Social Media Policy 37

Appendix D—New York City Police Department Social Media Policy 41

This project was supported by Grant No. 2010-MU-BX-K019 awarded by the Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice, in collaboration with the Global Justice Information Sharing Initiative. The opinions, findings, and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the U.S. Department of Justice.

B071



Executive Summary

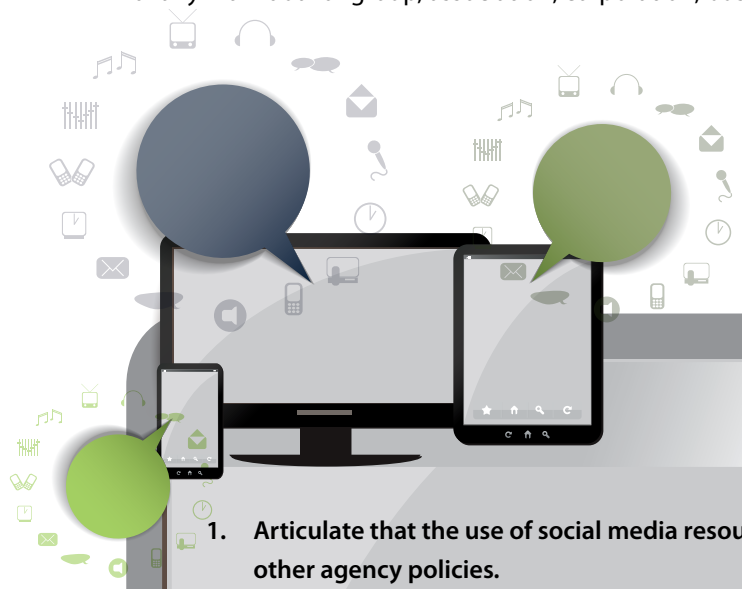
The advent of social media sites has created an environment of greater connection among people, businesses, and organizations, serving as a useful tool to keep in touch and interact with one another. These sites enable increased information sharing at a more rapid pace, building and enhancing relationships and helping friends, coworkers, and families to stay connected. Persons or groups can instantaneously share photos or videos, coordinate events, and/or provide updates that are of interest to their friends, family, or customer base. Social media sites can also serve as a platform to enable persons and groups to express their First Amendment rights, including their political ideals, religious beliefs, or views on government and government agencies. Many government entities, including law enforcement agencies, are also using social media sites as a tool to interact with the public, such as posting information on crime trends, updating citizens on community events, or providing tips on keeping citizens safe.

Social media sites are increasingly being used to instigate or conduct criminal activity, and law enforcement personnel should understand the concept and function of these sites, as well as know how social media tools and resources can be used to prevent, mitigate, respond to, and investigate criminal activity.

Social media sites have become useful tools for the public and law enforcement entities, but criminals are also using these sites for wrongful purposes. Social media sites may be used to coordinate a criminal-related flash mob or plan a robbery, or terrorist groups may use social media sites to recruit new members and espouse their criminal intentions. Social media sites are increasingly being used to instigate or conduct criminal activity, and law enforcement personnel should understand the concept and function of these sites, as well as know how social media tools and resources can be used to prevent, mitigate, respond to, and investigate criminal activity. To ensure that information obtained from social media sites for investigative and criminal intelligence-related activity is used lawfully while also ensuring that individuals' and groups' privacy, civil rights, and civil liberties are protected, law enforcement agencies should have a social media policy (or include the use of social media sites in other information-related policies). This social media policy should communicate how information from social media sites can be utilized by law enforcement, as well as the differing levels of engagement—such as apparent/overt, discrete, or covert—with subjects when law enforcement personnel access social media sites, in addition

to specifying the authorization requirements, if any, associated with each level of engagement. These levels of engagement may range from law enforcement personnel "viewing" information that is publicly available on social media sites to the creation of an undercover profile to directly interact with an identified criminal subject online. Articulating the agency's levels of engagement and authorization requirements is critical to agency personnel's understanding of how information from social media sites can be used by law enforcement and is a key aspect of a social media policy.

Social media sites and resources should be viewed as another tool in the law enforcement investigative toolbox and should be used in a manner that adheres to the same principles that govern all law enforcement activity, such as actions must be lawful and personnel must have a defined objective and a valid law enforcement purpose for gathering, maintaining, or sharing personally identifiable information (PII). In addition, any law enforcement action involving undercover activity (including developing an undercover profile on a social media site) should address supervisory approval, required documentation of activity, periodic reviews of activity, and the audit of undercover processes and behavior. Law enforcement agencies should also not collect or maintain the political, religious, or social views, associations, or activities of any individual or group, association, corporation, business, partnership, or organization unless there is a legitimate public safety purpose. These aforementioned principles help define and place limitations on law enforcement actions and ensure that individuals' and groups' privacy, civil rights, and civil liberties are diligently protected. When law enforcement personnel adhere to these principles, they are ensuring that their actions are performed with the highest respect for the



A Social Media Policy Should Address These Key Elements

1. **Articulate that the use of social media resources will be consistent with applicable laws, regulations, and other agency policies.**
2. **Define if and when the use of social media sites or tools is authorized (as well as use of information on these sites pursuant to the agency's legal authorities and mission requirements).**
3. **Articulate and define the authorization levels needed to use information from social media sites.**
4. **Specify that information obtained from social media resources will undergo evaluation to determine confidence levels (source reliability and content validity).**
5. **Specify the documentation, storage, and retention requirements related to information obtained from social media resources.**
6. **Identify the reasons and purpose, if any, for off-duty personnel to use social media information in connection with their law enforcement responsibilities, as well as how and when personal equipment may be utilized for an authorized law enforcement purpose.**
7. **Identify dissemination procedures for criminal intelligence and investigative products that contain information obtained from social media sites, including appropriate limitations on the dissemination of personally identifiable information.**

B073

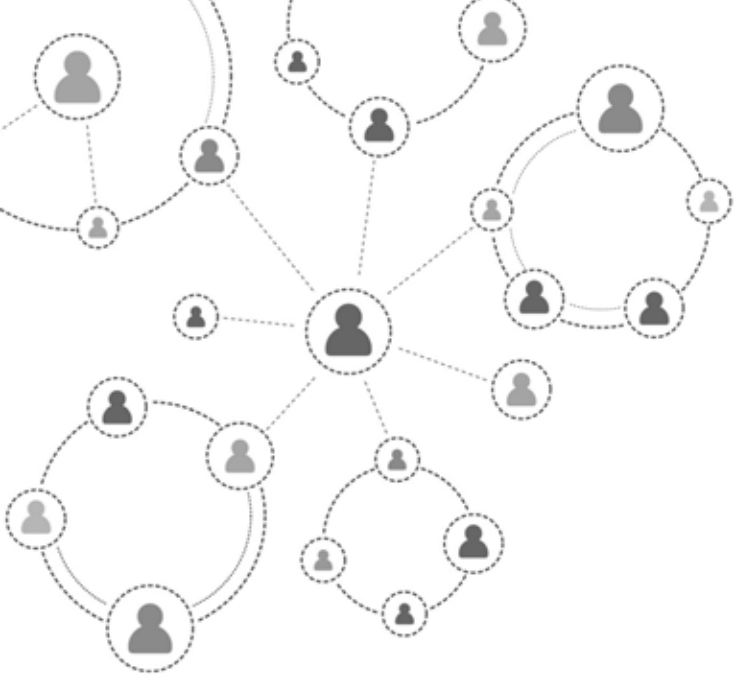
law and the community they serve, consequently fostering the community's trust in and support for law enforcement action.

The Bureau of Justice Assistance (BJA)—with the support of the Global Justice Information Sharing Initiative (Global) Advisory Committee (GAC), a Federal Advisory Committee (FAC) to the U.S. Attorney General on justice-related information sharing, and the Criminal Intelligence Coordinating Council (CICC)—has developed the resource *Developing a Policy on the Use of Social Media in Intelligence and Investigative Activities: Guidance and Recommendations,* which provides law enforcement leadership and policymakers with recommendations and issues to consider when developing policy related to the use of social media information for criminal intelligence and investigative activities. A social media-related policy (or a policy that includes procedures on the use of social media information) will help protect the law enforcement agency and agency personnel and will also help ensure the continued protection of privacy, civil rights, and civil liberties of individuals and groups in the community.

The *Developing a Policy on the Use of Social Media in Intelligence and Investigative Activities: Guidance and Recommendations* is designed to guide law enforcement agency personnel through the development of a social media policy by identifying elements that should be considered when drafting a policy, as well as issues to consider when developing a policy, focusing on privacy, civil rights, and civil liberties protections. This resource can also be used to modify and enhance existing policies to include social media information. All law enforcement agencies, regardless of size and jurisdiction, can benefit from the guidance identified in this resource.

The key elements identified in this resource can be applied to "traditional" social media sites (such as Facebook, Twitter, and YouTube) and are also applicable as different and new types of social media sites emerge and proliferate. As a policy is developed, the agency privacy officer and/or legal counsel should be consulted and involved in the process. Additionally, many agencies have an existing privacy policy that includes details on how to safeguard privacy, civil rights, and civil liberties, and an agency's social media-related policy should also communicate how these protections will be upheld when using information obtained from social media sites.

Social media sites have emerged as a method for instantaneous connection among people and groups; information obtained from these sites can also be a valuable resource for law enforcement in the prevention, identification, investigation, and prosecution of crimes. To that end, law enforcement leadership should ensure that their agency has a social media policy that outlines the associated procedures regarding the use of social media-related information in investigative and criminal intelligence activities, while articulating the importance of privacy, civil rights, and civil liberties protections. Moreover, the same procedures and prohibitions placed on law enforcement officers when patrolling the community or conducting an investigation should be in place when agency personnel are accessing, viewing, collecting, using, storing, retaining, and disseminating information obtained from social media sites. As these sites increase in popularity and usefulness, a social media policy is vital to ensuring that information from social media used in criminal intelligence and investigative activities is lawfully used, while also ensuring that individuals' and groups' privacy, civil rights, and civil liberties are diligently protected.



Introduction

In recent years, social media sites[1] have emerged as a useful tool for friends, coworkers, and families to keep in touch and interact with one another. Persons and groups can share photos or videos, coordinate meet-ups or plans for the weekend, and/or provide updates on newsworthy events to their friends, family, or customer base. One of the goals of these types of sites is instantaneous connections among people, businesses, and organizations, leading to greater and quicker sharing of information and enhanced relationships. Social media sites can also serve as a platform to enable people to express their First Amendment rights, including their political ideals, religious beliefs, or disappointments with government agencies. Many government entities, including law enforcement agencies, are now using social media sites to interact with the public and provide information on crime trends and community events and tips for keeping citizens safe.

To successfully and lawfully harness the power and value of social media sites, while ensuring that individuals' and groups' privacy, civil rights, and civil liberties are protected, agency leadership should support the development of a policy within their agency regarding the use of social media sites in criminal intelligence and investigative activity.

In addition to these types of information sharing exchanges between and among persons and entities, social media sites have become a tool that criminals are using for nefarious and criminal purposes. Examples of the use of social media to conduct criminal activity include individuals coordinating a criminal-related flash mob[2] or utilizing a social media site to plan a robbery, online predators joining a social media site to identify and interact with potential victims, and terrorist groups using social media to recruit new members and espouse criminal intentions. Because social media sites are increasingly being used to instigate and conduct criminal activity, law enforcement personnel should understand the concept and function of social media sites and know how social media tools and resources can be used to prevent, mitigate, respond to, and investigate criminal activity.

1 The International Association of Chiefs of Police's (IACP) Center for Social Media defines *social media* as "a category of Internet-based resources that integrate user-generated content and user participation. This includes, but is not limited to, social networking sites (Facebook, MySpace), microblogging sites (Twitter), photo- and video-sharing sites (Flickr, YouTube), wikis (Wikipedia), blogs, and news sites (Digg, Reddit)."

2 A *flash mob* is a "group of people, usually organized through social media or text message, that gather at a location to perform a specific action before dispersing. These actions may be for entertainment or criminal purposes." (http://www.IACPsocialmedia.org/glossary)

Social media sites can be valuable sources of information for law enforcement personnel as they fulfill their public safety mission—agency public information officers may use social media to interact with the public, detectives may access social media sites to assist in the identification and apprehension of criminal subjects, intelligence analysts may utilize social media resources as they develop intelligence products regarding emerging criminal activity, and fusion center analysts may use social media resources to assist in the development of analytic assessments. To successfully and lawfully harness the power and value of social media sites, while ensuring that individuals' and groups' privacy, civil rights, and civil liberties are protected, agency leadership should support the development of a policy within their agency regarding the use of social media sites in criminal intelligence and investigative activity.[3]

To assist agencies in drafting a social media policy, the Bureau of Justice Assistance (BJA)—with the support of the Global Justice Information Sharing Initiative (Global) Advisory Committee (GAC), a Federal Advisory Committee (FAC) to the U.S. Attorney General on justice-related information sharing, and the Criminal Intelligence Coordinating Council (CICC)—has developed this resource to provide law enforcement leadership and policymakers with recommendations and issues to consider related to the use of information obtained from social media sites as a part of criminal intelligence and investigative activities.[4]

It is recommended that all law enforcement leadership support the development of a social media-related policy and associated procedures (or enhance existing policies) to guide personnel on accessing, viewing, collecting, storing, retaining, and disseminating (or using) information from social media sites, tools, and resources as a part of their authorized investigative and criminal intelligence activities.[5] A written policy assists in the protection of the agency and agency personnel, as well as the individuals and groups in the community. With the advent of the Internet and, specifically, social media sites, the expectation of privacy has changed. Individuals and groups regularly make openly available various pieces of information of themselves (e.g., photos, relationship links, current locations, dates of birth); while in many cases this information is public and available to anyone with Internet access, law enforcement personnel should use this type of information only based upon a valid law enforcement purpose (i.e., consistent with legal authorities and mission requirements). A policy will assist agency personnel in identifying and understanding their purpose and limitations regarding the use of information from social media sites, the need to document this purpose, and the importance of protecting the public from inadvertent or intentional misuse of information obtained from social media sites.

This resource is designed to identify elements that should be considered for inclusion in a social media policy, issues to consider when developing a policy, and examples of the use of social media as an investigative or intelligence-related tool, focusing on the protection of privacy, civil rights, and civil liberties of individuals and groups. The tenets identified in this resource can be used to draft a new policy or enhance existing information and criminal intelligence-related policies.

3 Agency leadership may also incorporate the tenets identified in the paper into existing policies and procedures (such as policies on criminal intelligence and/or criminal investigations).

4 For purposes of this resource, *law enforcement* may be broadly defined to include all activities related to crime prevention or reduction and the enforcement of the criminal law. However, it is important to note that certain law enforcement or criminal justice agencies may be subject to additional constraints regarding access, use, or disclosure of social media sites and information. For example, prosecutors' offices must adhere to constitutional and statutory discovery and ethical standards that would not apply to police agencies. Consequently, nonpolice law enforcement agencies (such as state attorneys' offices or other prosecutorial entities) will need to take any unique considerations into account in developing a social media policy.

5 For the purpose of this document, accessing, viewing, collecting, storing, retaining, and disseminating information obtained from social media sites, tools, and resources will be referred to as using information obtained from social media sites, tools, and resources.

Audience

All law enforcement agencies, regardless of size—from a small, rural agency to a large, metropolitan law enforcement agency to a state or urban area fusion center—can benefit from the recommendations identified in this document. As agency policymakers review the components of this resource, it should be understood that social media is, in essence, simply another resource for law enforcement personnel to use in the performance of their public safety mission. The same basic policing principles apply in the use of social media as with other law enforcement action.[6] It is important to provide all agency personnel—from leadership to analysts to detectives and investigators to uniformed patrol officers—with pertinent and applicable guidance to ensure that social media resources are being utilized in a lawful and appropriate manner, a manner that upholds the agency's mission and legal authorities and complies with applicable federal, state, and tribal laws and local ordinances. As agencies develop and adapt a policy on using social media information as a part of their investigative and intelligence-related activities (or enhance existing policies), it is recommended that the agency privacy officer and/or legal counsel be consulted and be involved in the development and implementation process.

The Protection of Privacy, Civil Rights, and Civil Liberties

As with all law enforcement activity and actions, individuals' privacy, civil rights, and civil liberties must be diligently protected, and the proliferation of social media sites and technology has led to a renewed focus on these protections. Social media resources not only provide a new forum and format for free speech but also introduce a potential risk to individuals' privacy, civil rights, and civil liberties if unauthorized or inappropriate access or use occurs. To mitigate such risks, law enforcement officers and agency personnel are trained to ensure the protection of these rights while performing their duties, be it providing security at a public rally, conducting a criminal investigation, or developing criminal intelligence.[7] This type of training may also be applicable to the use of social media sites in investigative and intelligence activities and the privacy, civil rights, and civil liberties implications associated with access to social media sites and the use of information obtained from such sites.

In addition to training, many agencies have a privacy policy that includes details on how to protect individuals' and groups' privacy, civil rights, and civil liberties.[8] To support and enhance the agency's privacy policy, agencies should also have a policy regarding social media (or enhance existing information and criminal intelligence-related policies) that articulates how these protections will be upheld when using information obtained from social media sites and resources.

6 See the section titled "Law Enforcement Principles" for additional information on these principles.
7 An example of privacy training for line officers is available at http://www.ncirc.gov/training_privacylineofficer.cfm.
8 Additional information on how to develop a privacy policy is available at http://www.it.ojp.gov/privacy.

Uses of Social Media

Social media may be used by law enforcement personnel in their daily functions in a number of areas, including:

- Pre-employment background investigations
- Outreach and community engagement
- Emergency alerts and notifications
- Analytic assessments
- Situational awareness reports
- Intelligence development
- Criminal investigations

Additional guidance for law enforcement agencies and personnel regarding pre-employment background investigations, outreach and community engagement, and emergency alerts and notifications is accessible via the International Association of Chiefs of Police's (IACP) Center for Social Media Web site, http://www.IACPsocialmedia.org/.

Analytic assessments and situational awareness reports can be designed to provide information to law enforcement on a specific topic to assist agencies in maintaining public safety. These assessments may serve as a gauge for determining the types of criminal activity within a region or determining whether there are threats related to an upcoming public event.[9] Information from social media sites may be referenced in an analytic assessment that identifies current levels of criminal activity within an agency's jurisdiction. For example, an agency may search Twitter feeds, which may contain information on gang-related activities, and Flickr, which may include pictures of gang-related graffiti. This information may then be referenced in an assessment to provide examples of the types of gang activity occurring within a certain area.

As it relates to criminal intelligence development and criminal investigations, information from social media sites may be used as a part of criminal-related background investigative activities. For example, a criminal subject's Facebook page may be accessed to further support the identification of the subject and/or acquaintances. Social media sites and resources may also be used to determine a timeline of events for a suspect. For example, when a person "checks in" on the Web site FourSquare at a certain date and time, this information may be accessible by Facebook users. The individual may then post a picture of himself at this location, which may also be geotagged[10] via a smartphone and uploaded by the individual to Twitter.

There are an ever-increasing number and variety of social media sites: simple Web sites to post short pieces of information, virtual worlds (e.g., Club Penguin, Second Life, massively multiplayer online role-playing games, or online gambling sites), photo-sharing sites, and online forums and comment areas. Although this document will focus on "traditional" social media sites while acknowledging the continuing emergence and proliferation of different types of social media, it should be understood that the elements set forth in this paper may be applied to all types of social media sites and resources.

9 Additional information on responding to First Amendment-protected events is found in the *Recommendations for First Amendment-Protected Events for State and Local Law Enforcement Agencies*, available at http://it.ojp.gov/documents/First_Amendment_Guidance.pdf.

10 The terms *geolocation/geotagging*, defined at www.IACPsocialmedia.org/glossary, refer to the incorporation of location data in various media, such as, for instance, a photograph, a video, or an SMS message. This may be used on social media platforms to notify people where a user is at a given time.

Elements of a Social Media Policy

The purpose of a social media policy is to define and articulate acceptable law enforcement practices related to using information obtained from social media sites. As a part of a social media policy, agency leadership should reference other related policies and/or general orders regarding both criminal intelligence and criminal investigations, including an agency's privacy policy or policy regarding undercover activities. Because social media sites can be used to support these functions, it is important to ensure consistency and continuity between policies or orders.

Key elements of a social media policy include:

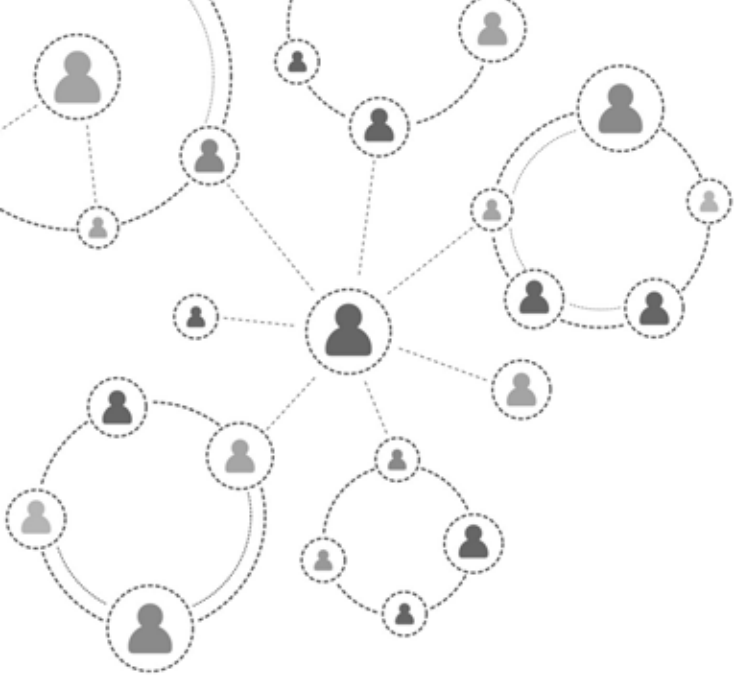
1. Articulate that the use of social media resources will be consistent with applicable laws, regulations, and other agency policies.
2. Define if and when the use of social media sites or tools is authorized (as well as use of information on these sites pursuant to the agency's legal authorities and mission requirements).
3. Articulate and define the authorization levels needed to use information from social media sites.
4. Specify that information obtained from social media resources will undergo evaluation to determine confidence levels (source reliability and content validity).
5. Specify the documentation, storage, and retention requirements related to information obtained from social media resources.
6. Identify the reasons and purpose, if any, for off-duty personnel to use social media information in connection with their law enforcement responsibilities, as well as how and when personal equipment may be utilized for an authorized law enforcement purpose.
7. Identify dissemination procedures for criminal intelligence and investigative products that contain information obtained from social media sites, including appropriate limitations on the dissemination of personally identifiable information (PII).

Law Enforcement Principles

Interwoven within these policy elements is the acknowledgement that social media sites and resources are another tool in law enforcement's toolbox of information sources. As such, social media sites and resources should be utilized in a manner that adheres to the same principles that govern all law enforcement actions. These principles include:

- Law enforcement actions must be lawful.
- Law enforcement actions should confirm with community standards, when appropriate.
- Law enforcement actions must have a defined objective and a valid law enforcement purpose for gathering, maintaining, or sharing personally identifiable information about criminal subjects.
- Law enforcement agencies should not collect or maintain information about the political, religious, or social views, associations, or activities of any individual or any group, association, corporation, business, partnership, or other organization unless there is a legitimate public safety purpose, such as the information directly relates to criminal conduct or activity. In the case of criminal intelligence, such information should not be collected or maintained unless there is reasonable suspicion to believe that the subject of the information is or may be involved in criminal conduct or activity and the information is directly related to the criminal conduct or activity.
- Law enforcement policy directives must define:
  - The circumstances under which conduct by personnel is authorized.
  - The limitations on conduct by personnel.
- All law enforcement officers and support personnel must be properly trained.
- If law enforcement action involves undercover activity, the following areas should be addressed:
  - Supervisory approval.
  - Required documentation of activity.
  - Periodic reviews of activity.
  - Audit of undercover processes and behavior, including authorization time frames for undercover activities.

Regardless of the tools law enforcement personnel use to perform their duties, these principles help define and place limitations on actions undertaken by personnel and ensure the protection of individuals' and groups' privacy, civil rights, and civil liberties. The implementation of these principles will help ensure that all law enforcement action is performed with the highest respect for the law and for the community and will also help enhance the community's trust in law enforcement.



Social Media Policy Elements

Element 1

Articulate that the use of social media resources will be consistent with applicable laws, regulations, and other agency policies.

Background: Social media should be viewed as another tool in the law enforcement toolbox and should be subject to the same policies and guiding principles as other investigative methods and tools, including the identification of reasonable suspicion, a criminal predicate, or a criminal nexus and adherence to the agency's legal authorities and mission requirements.

Action: As a part of the agency's authorized law enforcement purpose, social media sites may be accessed to follow up on tips and leads, suspicious activity reports, investigative support, development of criminal intelligence, and the development of situational awareness reports. An agency policy on the use of social media resources as a part of investigative and intelligence-related activities should be similar to agency policies regarding the use of other investigative tools, such as undercover activities or accessing other types of open source information (e.g., Accurint or Internet-based search engines). Further, the social media policy should specify that personnel should be able to articulate the purpose of using information from social media sites, answering the questions "What are you using?" "Why are you using it?" "How did you use it?" and "Is there a time frame on its relevance?"

As a part of this continuity, a social media policy should specifically address:

- When the use of social media sites is authorized.
- The supervisory authorization process (if needed).
- Limitations on using information from social media sites.
- When and how social media sites may be accessed (e.g., during working hours or via agency resources).

Element 2 Define if and when the use of social media sites or tools is authorized (as well as use of information on these sites pursuant to the agency's legal authorities and mission requirements).

Background: Agency leadership and policymakers should be knowledgeable of applicable laws and regulations (including the U.S. Constitution; the Bill of Rights, specifically the Fourth Amendment; the state constitution; other laws; and 28 CFR Part 23) when developing a social media policy and should know how these laws affect using information obtained from social media sites.

Law enforcement has an obligation to comply with the Fourth Amendment. Every person has the right to be free from "unreasonable searches and seizures" of their "persons, houses, papers, and effects." These same protections may also apply towards the use of social media sites—the uploading of pictures, the posting of activities, and the relationships between and among individuals and groups. With the increasing use of technology and the free flow of information on the Internet, it may be difficult to discern what access is reasonable and what would be deemed unreasonable under the Fourth Amendment; therefore, a social media policy should clearly identify reasonable access to social media sites and the use of information obtained from social media sites.

In addition to the Fourth Amendment, the ***Katz*** test[11] establishes a method that can also be utilized as agency personnel analyze public or private information on social media sites. This test, based on ***Katz v. United States***, 389 U.S. 347 (1967), which addresses the expectation of privacy and intent to make information private, could also be applied to the use of social media information, specifically whether a social media site user has exhibited an expectation of privacy in the information and whether the expectation is one that society is ready to recognize as reasonable. For information posted on the Internet (via a social media site) that a user has made no effort to make private or conceal, applying the principles of the *Katz* test would most likely result in a determination that the information is public. However, law enforcement personnel should use that information only when there is an identified, valid law enforcement purpose.

28 CFR Part 23 may also assist agencies as they develop a social media policy. The 28 CFR Part 23 federal regulation has become the de facto national standard regarding criminal intelligence information systems. Although 28 CFR Part 23 regulates systems, many of its tenets may be applicable to a policy regarding social media, such as storage, retention, and sharing of information obtained from social media sites and resources. Additionally, 28 CFR Part 23 states that a project "shall not collect or maintain criminal intelligence information about the political, religious, or social views, associations, or activities of any individual or any group, association, corporation, business, partnership, or other organization unless such information directly relates to criminal conduct or activity and there is reasonable suspicion that the subject of the information is or may be involved in criminal conduct or activity." This overarching purpose statement is also arguably pertinent to information obtained by law enforcement personnel via social media sites, specifically regarding what information personnel can store, retain, and disseminate on political, religious, or social views, associations, or activities of any individual or any group, association, corporation, business, partnership, or other organization.

Action: A social media policy should articulate the parameters regarding using information obtained from social media sites. These parameters should be consistent with applicable laws, regulations, and other agency policies and further articulate how privacy, civil rights, and civil liberties protections are upheld during such activities. It is important to note that although information on many social media sites may be "open" (e.g., anyone with Internet access can view the information), ***law enforcement must be mindful of what is legal, as well as what is consistent with community standards and expectations, when using information from a social media site***. In other words, simply because information is

11 See Appendix A for additional information on the ***Katz*** test and decision.

available to law enforcement does not mean it should be used by law enforcement in the absence of a clearly defined and valid law enforcement purpose. For example, a law enforcement investigator should search for and access an individual's Facebook profile when an authorized law enforcement purpose is identified, such as a search for a missing person or further identification of an alleged criminal, and not to look for information on a new neighbor.

Relevant investigative laws, regulations, and policies should also be referenced in a social media policy. Articulating laws, regulations, and policies, as they relate to the use of social media sites and information, will support the agency and personnel in ensuring that they are using social media for a valid law enforcement purpose, adhering to established law enforcement principles, and protecting citizens' and groups' privacy, civil rights, and civil liberties.

Additionally, a social media policy (or policy that addresses information obtained from social media sites) should address the ever-changing nature of social media and associated technology. Technology advancements may affect the access and collection of information from social media sites, and a policy should acknowledge that though technology may change, the foundational elements for accessing social media sites remain consistent, such as accessing social media sites for an authorized law enforcement purpose.

ELEMENT 3 ARTICULATE AND DEFINE THE AUTHORIZATION LEVELS NEEDED TO USE INFORMATION FROM SOCIAL MEDIA SITES.

Background: Social media sites have varying and differing levels of access and engagement, ranging from "following" someone on Twitter to "friending" someone on Facebook or simply searching for an individual or a topic via Google. Engagement levels may also vary, from reviewing publicly available information on a social-networking site to accessing social media resources from a nongovernmental Internet Protocol (IP) address to creating a user profile or account for undercover operations to lawful intercepts of electronic information. Within the different engagement levels are privacy, civil rights, and civil liberties implications. A social media policy should articulate the levels of engagement by law enforcement personnel with subjects when accessing social media sites and also specify the authorization requirements associated with each level.

As part of the levels of engagement, law enforcement personnel should understand privacy settings, end-user licensing agreements, and terms-of-service requirements. Users may regulate their privacy settings on their "profile," which in turn could affect the level-of-engagement parameters. Additionally, companies may articulate law enforcement engagement parameters via a terms-of-service agreement. [12]

12 Many Internet- and communication-based companies have developed guides to assist law enforcement in understanding what information is available and how that information may be obtained. Additional information on these guides is available at the IACP's Center for Social Media, at http://www.IACPsocialmedia.org/investigativeguides.

To assist in understanding how information from social media sites can be used by law enforcement, the graphic above provides a visual demonstration of the comparison between traditional law enforcement practices and specific social media actions. As identified in the graphic, examples of levels of engagement include:

Apparent/Overt Use—In the Apparent/Overt Use engagement level, law enforcement's identification need not be concealed. Within this engagement level, there is no interaction between law enforcement personnel and the subject/group. This level of access is similar to an officer on patrol. Information accessed via this level is open to the public (anyone with Internet access can "see" the information). Law enforcement's use and response should be similar to how it uses and responds to information gathered during routine patrol. An example of Apparent/Overt Use would be agency personnel searching Twitter for any indication of a criminal-related flash mob to develop a situational awareness report for the jurisdiction.

Apparent/Overt Use is based on user profiles/user pages being "open"—in other words, anyone with Internet capabilities can access and view the user's information. For instance, if an officer searches for a criminal subject's Facebook page and determines that a profile which appears to be that of the subject has the account privacy settings set to "public" (meaning the information can be viewed by everyone), then the use of that information would be considered Apparent/Overt Use.

The authorization level for Apparent/Overt Use may be minimal, as this level of engagement is considered part of normal, authorized law enforcement activity (based on the law enforcement purpose).

Discrete Use—During the Discrete Use engagement level, law enforcement's identity is not overtly apparent. There is no direct interaction with subjects or groups; rather, activity at this level is focused on information and criminal intelligence gathering. The activities undertaken during the Discrete Use phase can be compared to the activities and purpose of an unmarked patrol car or a plainclothes police officer. An example of Discrete Use is an analyst utilizing a nongovernmental IP address to read a Weblog (or blog)[13] written by a known violent extremist who regularly makes threats against the government. Bloggers (those who write or oversee the writing of blogs) may use an analytical tool to track both "hits" to the blog and IP addresses of computers that access the blog, which could potentially identify law enforcement personnel to the blogger. This identification could negatively impact the use of the information and the safety of law enforcement personnel, who would not want to reveal that they are accessing the blog for authorized law enforcement purposes. In many cases, direct supervisory approval may not be necessary within this level of engagement, but the policy should address agency protocol.

Covert Use—During the Covert Use engagement level, law enforcement's identity is explicitly concealed. Law enforcement is engaging in authorized undercover activities for an articulated investigative purpose, and the concealment of the officer's identity is essential. An example of Covert Use is the creation of an undercover profile to directly interact with an identified criminal subject online. Another example is an agency lawfully intercepting infomation from a social media site, through a court order, as a part of authorized law enforcement action. Clear procedures should be identified and documented on the use of social media in this phase, since there are many privacy, civil rights, and civil liberties implications associated with Covert Use. Agencies should also review social media sites' information for law enforcement authorities and terms of service for additional information on undercover profiles.

Authorization levels for Covert Use activities should be clearly identified and could be compared to authorization levels needed for any undercover investigative activity (such as undercover narcotics investigations).

Action: An agency's social media policy should identify the agency's defined levels of engagement that will be utilized by agency personnel, the types of activity associated with these levels, and direct authorization requirements, if any,

13 For additional information on blogs, please visit http://www.IACPsocialmedia.org/blogfactsheet.

associated with each level from use as a part of official law enforcement activities (e.g., the checking of social media sites is built into the analytic product development process) or direct supervisor approval requirements (such as development of an undercover profile to interact with a criminal subject). For example, if an agency uses social media to gather or disseminate information regarding a First Amendment-related event that has become violent in other jurisdictions, it is essential to clearly define any limits on the collection and use of information from social media.[14]

Element 4 Specify that information obtained from social media resources will undergo evaluation to determine confidence levels (source reliability and content validity).

Background: The evaluation of information—be it for criminal intelligence purposes or for criminal investigative purposes—may have differences. With regard to criminal intelligence, information should be assessed to determine its validity and reliability, and products produced as a result of this information should include proper caveats. In some instances, it may be difficult to determine the validity of information obtained from a social media site (e.g., a citizen submits a tip about a video posted on YouTube depicting a robbery); however, that information may still be considered a potentially valid tip and should be documented as such.

In the case of a criminal investigation, information obtained from a social media site should be further evaluated to ensure that the information is authentic. For example, a video posted on YouTube shows individuals allegedly robbing a convenience store; law enforcement personnel should obtain a subpoena to determine what IP address was used to upload the video and identify to whom the IP address is registered. Information obtained from social media sites can be a valuable tool; however, comprehensive evaluation and authentication are crucial to ensure the reliability and validity of the information and ensure proper caveats are included, as necessary.

Case law has recently been established regarding authentication of information obtained by law enforcement. In ***Griffin v. Maryland***, 2011 Md. LEXIS 226 (Md. 2011), the appeals court ruled that MySpace pages were erroneously admitted into evidence because they had not been properly authenticated. The trial court admitted the postings based on a police officer's testimony that the picture in the profile was of the purported owner and that they had the same location and date of birth. The picture, location, and birth date did not constitute sufficient "distinctive characteristics" to properly authenticate the MySpace printouts of the profile and posting because of the possibility that someone else could have made the profile or had access to it to make the posting. The court stated that there are different concerns when authenticating printouts from social media sites that go beyond the authentication concerns of e-mails, Internet chats, and text messages. Some suggested approaches to the social media authentication issue include an admission by the purported profile owner that it is his or her profile and he or she made the postings in question, a search of the person's computer and Internet history that links the subject to the profile or post, or information obtained directly from the social media site that identifies the person as the profile's owner and the individual with control over it, possibly including IP address identification information. This case demonstrates the need to validate information obtained from social media sites. ***As a source of information for lead development and follow-up, social media can be a valuable tool, but law enforcement personnel should always authenticate and validate any information captured from a social media Web site***.

Action: A social media policy should articulate that any information obtained from social media sites be evaluated to determine accuracy, validity, and/or authenticity. Social media interaction and usage are based on user uploads and updates and therefore should not serve as a primary/sole source for information gathering and verification. As with all sources of information, independent validation is important to determine accuracy and, more important, to protect individuals

14 See *Recommendations for First Amendment-Protected Events for State and Local Law Enforcement Agencies* for additional information on law enforcement's role regarding First Amendment-protected events.

from being incorrectly identified, possibly leading to privacy violations and/or other inappropriate actions. Agencies may also refer to other policies and procedures related to criminal intelligence and investigative activities (and sources of information) as a part of the evaluation and authentication processes of information obtained from social media sites.

Element 5 Specify the documentation, storage, and retention requirements related to information obtained from social media resources.

Background: Based on the purpose for gathering information via social media resources (e.g., intelligence development, analysis assessment, or criminal investigations), agencies should identify the storage and retention requirements (why and for how long this type of information should be retained).[15] For criminal intelligence development and products, agencies may reference the storage and retention requirements identified in 28 CFR Part 23. For the documentation, storage, and retention requirements of information obtained from social media sites that is being utilized for a criminal investigation, agencies should refer to their investigative policies and procedures (and applicable laws and regulations).

If personally identifiable information (PII) (such as a name, a date of birth, or a picture) is identified and collected from social media sites, agencies should be sensitive to the documentation and retention of this information. If the information is part of criminal intelligence development, it is recommended that the tenets of 28 CFR Part 23 be followed; if the information is part of a criminal investigation, it is recommended that agency policy and procedures related to the dissemination of investigative information be referenced.

The documentation of this type of information should specify the purpose of the information use (regardless of the source of information), what information was collected (photos, status updates, friends), when the information was accessed and/or collected, where the information was accessed (identify the Web site), and how the information was collected (open search, nongovernmental IP address, undercover identity, etc.). Copies of the information obtained from the sites should also be documented. Additionally, as law enforcement personnel access social media sites, the reason for the use of the information obtained and the site utilized should be specified in the case or intelligence file.

For analysis assessments, the storage and retention period will be contingent on the assessment findings and whether a valid law enforcement purpose was identified. For example, a local law enforcement agency sends a request for information to the state fusion center to determine whether there are any threats or potential criminal activity associated with an upcoming demonstration. The fusion center creates an awareness assessment and references information obtained from social media resources that articulates that there are no threats identified. Further, the demonstration was peaceful, with no arrests. No potential criminal predicate or criminal nexus was identified either in the assessment itself or during the event, and therefore there is no articulable reason to store the information that was obtained as part of the analysis assessment.

For intelligence development purposes, the requirements of 28 CFR Part 23 should be followed regarding storage and retention of all information, whether collected from social media sites or other information sources. Though not all intelligence systems are required to adhere to 28 CFR Part 23, it has become a de facto national standard,[16] and as such, agencies are strongly encouraged to incorporate the tenets of this regulation into their policies and procedures regarding all criminal intelligence-related information.

15 For additional information on file guidelines for criminal intelligence, please refer to the LEIU *Criminal Intelligence File Guidelines*, http://it.ojp.gov/documents/ncisp/criminal_intel_file_guidelines.pdf.

16 See the *National Criminal Intelligence Sharing Plan*, Recommendation 9, http://it.ojp.gov/documents/NCISP_Plan.pdf.

If information from a social media site was gathered as part of a criminal investigation—such as a photo, identification of associates, or other PII—law enforcement personnel should adhere to agency policies and procedures regarding the documentation and storage of such information, carefully noting when and where the information was gathered.[17] A policy should also address the need to print or record the information gathered from the site to include in the case file for evidentiary purposes, due to the ease of changing social media information (users deleting information, changing their settings, etc.).

Action: The documentation, storage, and retention requirements for information obtained from social media resources should be articulated and defined in a social media policy. This section of the policy should be comparable to other investigative and/or intelligence policies regarding information documentation, storage, and retention.

Element 6 Identify the reasons and purpose, if any, for off-duty personnel to use social media information in connection with their law enforcement responsibilities, as well as how and when personal equipment may be utilized for an authorized law enforcement purpose.

Background: The ease and accessibility of social media resources (including the use of applications [or apps] for smartphones and tablet computers) may affect how law enforcement personnel access social media when off duty,[18] as well as the use of personal equipment and personal accounts for official agency purposes. The information that is collected may result in criminal intelligence or lead to an active investigation; therefore, it is important to include a provision in the social media policy to address using information from social media sites for a law enforcement purpose by off-duty personnel and using nonagency equipment for official law enforcement purposes. With greater access to information through social media sites, it may be easier to identify criminal subjects and/or criminal activity, but it is also imperative to identify approved uses and access to the information.

For example, a law enforcement officer is off duty and is posting an update on his Twitter page. As part of his accessing Twitter on his personal computer, he notices a trending topic for his city about a robbery at a jewelry store. The agency's social media policy might require that the officer report this issue to dispatch and conduct a follow-up field incident report, documenting what he viewed, the site where he viewed the information, when he viewed it, and any action based on the information. In another example, an analyst is viewing her friends' status updates on Google+ and notices one friend expressing outrage at recent government policies (the friend does not make any threats, just articulates dissatisfaction). This posting is part of her friend's First Amendment right to free speech, and therefore no law enforcement documentation or other action should take place.

In another example, an intelligence officer who is focused on gang-related crime uses his personal Twitter account to "follow" a subject-matter expert (SME) in the field of gang identification and trends, as authorized in the agency's policy, which includes the provision for law enforcement officers to access social media sites, via personal accounts, as a part of their authorized law enforcement mission. The officer regularly updates his supervisor and intelligence unit members of trends identified by the SME and how these trends may be carried out in the jurisdiction.

Because of the widespread use of social media, agency policy must articulate when and how it is acceptable for off-duty personnel to use information from social media sites as part of their law enforcement mission. Law enforcement personnel

17 It is important to note that the gathering of information from a social media site may be the result of a court-ordered lawful intercept. As such, there may be specific instructions regarding the gathering and storage of information.

18 The IACP's Center for Social Media identifies five key policy considerations for agency policies regarding the use of social media, including the use of social media for personal use. See http://www.iacpsocialmedia.org/GettingStarted/PolicyDevelopment.aspx.

must adhere to law enforcement principles, whether on duty or at home surfing the Internet for a law enforcement purpose.

Action: A policy that addresses social media information should specify whether or not off-duty personnel may, as a part of an authorized law enforcement purpose, access social media sites and the reason(s) (if any) and requirements for access. If authorized, the policy should address the parameters in regards to accessing information that is viewed and gathered by off-duty personnel (for an authorized purpose), restrictions on the use of work equipment and/or personal equipment in an official law enforcement capacity while off-duty, and how to document and report the information that is gathered from the social media site. [19]

The policy should also specify whether or not law enforcement personnel may, when carrying out their authorized law enforcement mission and function, use personal equipment (including personal accounts) to access information via social media sites and the reason(s) and requirements associated with the use of personal equipment for this purpose. If the policy indicates that it is acceptable to use personal equipment for official agency purposes, then the policy should also direct personnel to document how information was obtained, the type of information obtained, the reason the information was obtained, and any follow-up action.

Element 7 Identify dissemination procedures for criminal intelligence and investigative products that contain information obtained from social media sites, including appropriate limitations on the dissemination of personally identifiable information.

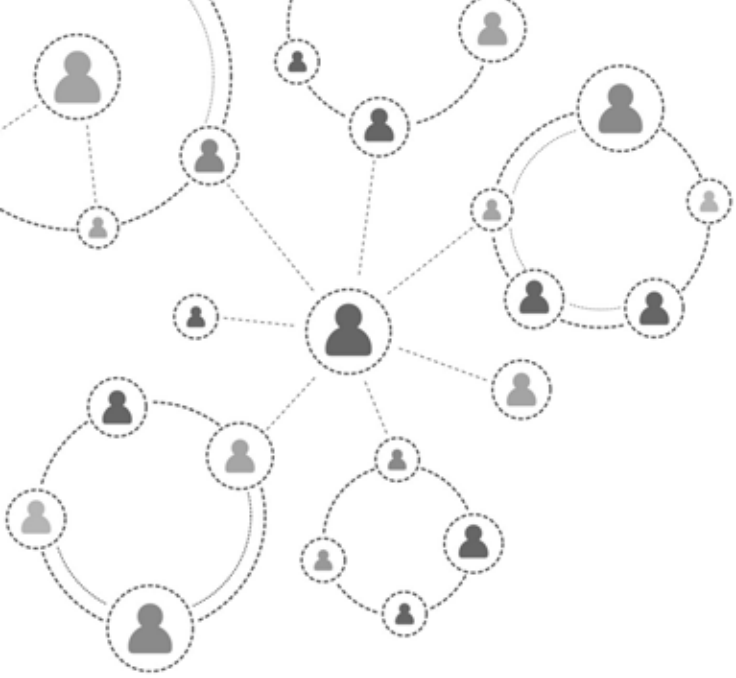
Background: Because of the open nature of many types of information obtained from social media sites, it is important to articulate dissemination procedures of products, reports, and requests for information that include information from social media sites.[20]

Additionally, the use of social media sites that focus on advocating greater information sharing among law enforcement agencies and personnel should be addressed in a policy. These sites offer greater access and information sharing capabilities; however, sharing any type of law enforcement information should be limited to nationally recognized sensitive but unclassified (SBU) networks (e.g., Regional Information Sharing Systems® [RISS], Law Enforcement Online [LEO], Homeland Security Information Network [HSIN]) and not social media/open source, commercially developed platforms.

Action: A social media policy should address dissemination protocols (who to disseminate to, timeline restrictions, how to disseminate information) for law enforcement reports, products, bulletins, and other types of information that may include information obtained from social media sites (and contain criminal intelligence information, criminal investigative information, and other information containing PII). Additionally, because of the sensitive nature of this type of information, the policy should address the incorporation of a review from a privacy officer and/or general counsel when disseminating products that include information from a social media site (including biographical information, photos, locations of subjects, etc.). A policy should also address dissemination mechanisms, such as using secure e-mail and SBU systems (not open source systems) to share criminal intelligence versus the use of social media sites to post bulletins to educate the public about criminal activity in the community.

19 The IACP's Center for Social Media further addresses employee personal use of social media.

20 For example, the validity and reliability of PII (e.g., photos, videos, and biographical information on a subject) that was obtained from social media sites may be unknown.



Conclusion

Social media sites and resources may be a helpful tool for law enforcement personnel in the prevention, identification, investigation, and prosecution of crimes. Though social media sites are a relatively new resource for law enforcement, the same principles that govern all law enforcement activities should be adhered to as personnel access, view, collect, use, store, retain, and disseminate information from these types of sites; the same procedures and prohibitions that are placed on law enforcement officers when patrolling the community or conducting an investigation should be in place when law enforcement personnel utilize social media as a part of their public safety function.

Though social media sites are a relatively new resource for law enforcement, the same principles that govern all law enforcement activities should be adhered to as personnel access, view, collect, use, store, retain, and disseminate information from these types of sites.

As with other law enforcement tools—such as uniform patrol, undercover activities, and search warrants—it is important to have a policy that articulates the how, when, and why of accessing, viewing, collecting, using, storing, and disseminating information obtained from social media sites, highlighting the privacy, civil rights, and civil liberties protections that are in place, regardless of the information source.

Appendix A—Cases and Authorities

These cases and authorities were relied on in the construction of the *Developing a Policy on the Use of Social Media in Intelligence and Investigative Activities: Guidance and Recommendations* document. While these may be persuasive, it is always prudent to have agency legal counsel examine them in light of the controlling legal authorities in your jurisdiction.

Fourth Amendment Privacy Law and the Internet

Expectation of Privacy in Internet Communications, 92 A.L.R.5th 15, contains a good summary of current law regarding many forms of Internet communication, including e-mail messages and inboxes, chat rooms, Web site content, and social-networking sites. Many cases cited within are summarized below.

Smith v. Maryland, 442 U.S. 735 (1979), forms the basis of the "third-party exposure" doctrine of electronic privacy law. In *Smith*, the government used pen register technology to record the numbers dialed out from a certain phone number. This information was used to convict the defendant of robbery. The defendant challenged the use of the pen register as an illegal search under the Fourth Amendment. The court ruled that the defendant did not have a reasonable expectation of privacy in the phone record information because the information was automatically turned over to a third party, the phone company. Even if the defendant had an expectation of privacy in the numbers dialed, it was not one society recognized as reasonable—therefore, there was no Fourth Amendment violation. This case has been analogized to Internet subscriber information, such as account existence and information on who the registered user of the account is because this information is automatically exposed to a third party, the Internet service provider.

United States v. Jones, 132 S. Ct. 945 (2012), is a case involving law enforcement's placement of a Global Positioning System (GPS) device on a subject's car and use of the device to monitor the vehicle's movement on public streets for a four-week period (which extended beyond the period of time and place authorized by a search warrant). The Supreme Court Justices unanimously agreed that use of the GPS device constituted a search within the meaning of the Fourth Amendment. The majority explained that a physical intrusion into a constitutionally protected area, coupled with an attempt to obtain information, can constitute a violation of the Fourth Amendment based upon a theory of common law trespass. The majority explained that "the use of longer-term GPS monitoring in investigations of most offenses impinges on expectations of privacy." Additionally, in a separate opinion, one justice suggested that it may be time to rethink all police use of tracking technology, not just long-term GPS, reasoning that "GPS monitoring generates a precise, comprehensive record of a person's public movement that reflects a wealth of detail about her familial, political, religious, and sexual associations…. The government can store such records and efficiently mine them for years to come." The reasoning expressed by the justices in Jones could have broad implications for law enforcement use of social media in such areas as law enforcement personnel access to information from social media sites and the determination as to whether the social media user has a reasonable expectation of privacy due to privacy controls set up by the user.

United States v. Kennedy, 81 F. Supp. 2d 1103 (D. Kan. 2000). Relying on *Smith* (above), the District Court of Kansas ruled that the defendant did not have a reasonable expectation of privacy in information knowingly turned over to his Internet service provider, including Internet subscriber information and information associated with his Internet Protocol (IP) address. Divulgence of this information to law enforcement by Road Runner cable did not violate defendant's Fourth Amendment rights. See also ***United States v. Ohnesorge***, 60 M.J. 946 (N.M. Ct. Crim. App. 2005) (the court did not abuse its discretion in refusing to suppress Internet service provider information, specifically subscription information to a news and file access sharing Web site obtained without a warrant. The defendant did not have a reasonable expectation of privacy in the information; the subscription information was never confidential, and the defendant acknowledged that the information could be shared in the terms of service agreement with the site).

Social Media and Privacy Law

Nathan Petrashek Comment, "**The Fourth Amendment and the Brave New World of Online Social Networking**," 93 Marq. L. Rev. 1495 (summer 2010). This law review article provides a thorough background on social-networking sites and how the two largest, MySpace and Facebook, operate. A current case law summary is provided as well as an explanation of different privacy doctrines and how they can be applied to the social media setting.

Katz v. United States, 389 U.S. 347 (1967), provides the foundation for most federal court privacy rulings and doctrines. *Katz* moved away from previous Supreme Court privacy jurisprudence in holding that the Fourth Amendment protects people and not places, overruling the previous "trespass" doctrine of Fourth Amendment protection. Fourth Amendment considerations no longer require a physical invasion or trespass. In this case, police eavesdropped on private conversations from a public telephone booth, and the court found that even though no physical invasion of the phone booth occurred, this was not necessary to constitute a search for purposes of the Fourth Amendment. Police violated the defendant's Fourth Amendment privacy interests by listening to the content of the conversations without a proper warrant. *Katz* established a two-prong test to determine whether the Fourth Amendment is implicated and a search has occurred. If a person, like Katz, has manifested an intent to make the information private *and* society accepts that expectation of privacy as reasonable, then that privacy expectation cannot be violated without following Fourth Amendment warrant requirements.

Minnesota v. Olson, 495 U.S. 91 (1990), further explained the application of *Katz* and the two-prong expectation of privacy test. As an overnight guest, the defendant did have an expectation of privacy in the dwelling, and that expectation is recognized by society as reasonable.

Courtright v. Madigan, 2009 U.S. Dist. LEXIS 102544 (S.D. Ill. 2009). The defendant was convicted of three separate offenses of producing, possessing, and receipt of child pornography by a repeat offender. The case initiated through a subpoena served on MySpace.com by the Illinois Attorney General's Office in an effort to learn whether any registered sex offenders were using that site. Upon learning the defendant had a MySpace account, investigators took further steps to discover his IP address and learned that this address had offered pornographic images on the file-sharing site Limewire. These discoveries formed the basis of a warrant that uncovered evidence that was used to convict the defendant. The defendant argued that the initial information gathered from MySpace regarding his account violated his protection against unreasonable searches and seizures under the Fourth Amendment. For other procedural reasons, the defendant's appeal was denied, but the court addressed the search issue and, relying on multiple other courts, held that the defendant had no privacy expectation in Internet subscriber information based on the third-party exposure doctrine. The defendant had no expectation of privacy in the fact that his MySpace account existed, so the request for information on that matter did not violate his Fourth Amendment rights.

Commonwealth v. Proetto, 771 A.2d 823 (Pa. Super. Ct. 2001). In *Proetto*, the defendant was brought to the attention of police after a 15-year-old female who had been contacted by the defendant in a public chat room turned over logs of chats that contained explicit information and solicited sexual activity from the underage girl. Police asked the informant to cease communication with the defendant but inform them when he was online again. When police were informed that the defendant was online, they entered the chat room the defendant was in, posing as a 15-year-old girl. The defendant made sexually suggestive comments to the "underage female," which law enforcement officers logged. The defendant challenged use of the chat room logs and e-mail messages under the Fourth Amendment and Pennsylvania Wiretap Act. First, for the communication forwarded to police from the underage informant, the court analogized the e-mail and chat communications to letters and found a limited privacy right. As with letters, the expectation of privacy in the information was reasonable until the intended recipient received the information. After that, because the information could easily be forwarded to others, there remains no reasonable expectation of privacy; therefore, there was no Fourth Amendment violation. For the chats, the defendant did not know exactly whom he was speaking to so he did not have a reasonable expectation of privacy. Communications made directly to the undercover officer survive Fourth Amendment challenges under the same reasoning in that the defendant has only limited privacy interests in e-mail communications. Because the defendant communicated freely with the undercover officer and could not verify the officer's identity, he had no reasonable expectation of privacy in the chat communications. The fact that the officer did not identify himself as law enforcement is of no consequence. The Pennsylvania Wiretap Act was not violated because the informant and the police were both the intended recipients and parties to the communication and recorded the messages concurrently with the communication. For similar case law, see ***United States v. Maxwell***, 45 M.J. 406 (C.A.A.F. 1996) (no expectation of privacy found in e-mail communications in child pornography case); ***United States v. Charbonneau***, 979 F. Supp. 1177 (S.D. Ohio 1997) (explaining chat room and privacy expectations around Internet service providers, finding no reasonable expectation of privacy); and ***Ohio v. Turner***, 156 Ohio App. 3d 177 (Ohio Ct. App. 2004) (no expectation of privacy in chat room conversations with undercover agent posing as underage boy).

Guest v. Leis, 255 F.3d 325 (6th Cir. 2001). After receiving a tip regarding online obscenity, police began investigating two electronic bulletin board systems. Police assumed an undercover identity to receive a password to the bulletin board, which enabled them to send e-mails to members, post messages, and share pictures, among other things. After viewing pornographic activity, the police obtained subscriber information from the bulletin boards. Defendants filed a class-

action suit citing violation of their Fourth Amendment rights when the police accessed subscriber information for the bulletin boards, which included the subscribers' name, address, birth date, and password. The court concluded that, like other information provided to a third party, this information was not protected by the Fourth Amendment and there is no reasonable expectation of privacy attached to it.

J.S. v. Bethlehem Area School District, 757 A.2d 412 (Pa. Commw. Ct. 2000), involved a student's off-campus Web site postings. A student created a Web site with derogatory comments about a teacher and the school administration. As a result of these postings, the student was expelled. The court found that the school did not violate the student's privacy rights when accessing the materials posted on the Web site. The Web site was not password-protected and was available to anyone that came across it on the Internet. The court reasoned that once material is published on a Web site, it is open to the public. If the creator does not take any steps to protect the Web site content and make it private, no expectation of privacy can be said to exist. See also ***Konop v. Hawaiian Airlines, Inc.***, 236 F.3d 1035 (9th Cir. 2001) (employer did not violate employee's privacy rights by accessing public, unprotected Web site postings. *Konop* held there is no expectation of privacy in information posted to public Web sites).

United States v. Drew, 259 F.R.D. 449 (C.D. Cal. 2009). This case involved use of a fake MySpace profile that was created and used in violation of the Web site's terms of service contract agreed to by all users. The Central District of California's court found that in some instances, the violation of a terms of service agreement could constitute a misdemeanor offense under the Computer Fraud and Abuse Act. The court vacated the conviction, however, because the statute did not pass the constitutionality void for vagueness test based on the absence of guidelines in the statutory scheme to guide law enforcement and an actual notice requirement. Although involving civilian use of social media, the reasoning and analysis could be useful to guide law enforcement officers who are using social media and fake profiles in undercover investigations.

Documenting Social Media During an Investigation

Todd G. Shipley, ***Collecting Legally Defensible Online Evidence: Creating a Standard Framework for Internet Forensic Investigations***. Vere Software Investigative Tools. December 2001. Available at http://veresoftware.com/uploads/CollectingLegallyDefensibleOnlineEvidence.pdf. Last accessed June 9, 2011. This document explains the difference between Internet evidence gathering and traditional computer-based evidence gathering. The collection, preservation, and presentation technique for gathering Internet evidence is explained in the document. References to outside sources and summaries of some documentation techniques are also included.

Kyllo v. United States, 533 U.S. 27 (2001), establishes the Supreme Court rule on advanced technology use in searches. In *Kyllo*, the police suspected the defendant of growing marijuana inside his residence. They utilized thermal imaging equipment to "peer through" the walls of the home and determine the defendant was growing marijuana. The court of appeals upheld the search on the basis that the defendant did not make any effort to conceal the heat emanating from his home and therefore did not have a reasonable expectation of privacy under the Fourth Amendment. The Supreme Court reversed, holding that the thermal imaging infiltrated the home and did constitute a search under the Fourth Amendment. The Supreme Court ruled that it was a search in violation of the Fourth Amendment because the thermal imaging gained information, through technology not generally used by the public, that could not have otherwise been gained without physical intrusion of the home, a constitutionally protected area without a warrant.

Hubbard v. MySpace, Inc., 2011 U.S. Dist. LEXIS 58249 (S.D. N.Y. 2011), establishes that social-networking sites, such as MySpace, can provide account user information, IP address information, IP address use date and time logs, *and* contents of the user's private messages and sent-message folders to law enforcement in response to a valid subpoena or warrant under the Electronic Communications Privacy Act.

Authenticating Social Media Evidence

Authentication of Electronically Stored Evidence, Including Text Messages and E-Mail, 34 A.L.R.6th 253. This document outlines the state of case law regarding authentication of various electronic communications, including text messages, e-mails, chat and instant messages, and others. This source provides general background on authentication issues with electronically stored communications; however, the agency or office will need to check the jurisdiction's specific requirements.

Griffin v. Maryland, 2011 Md. LEXIS 226 (Md. 2011). In a case involving evidence of witness intimidation obtained from a MySpace profile purported to be that of the defendant's girlfriend, the court relied upon officer testimony. Based on the picture on the profile, the defendant's girlfriend's birthday and profile birthday being the same, and the location listed on the profile, it was determined that this was the profile of the defendant's girlfriend. The trial court authenticated the evidence solely on officer testimony regarding the profile's information and admitted it into evidence. On appeal, the court found error because no extrinsic evidence was used to authenticate the profile or posting. The court reasoned that the picture, location, and birth date alone are not sufficient "distinctive characteristics" to authenticate a MySpace profile printout because someone else could have created the page and made the posting.

Lorraine v. Markel American Insurance Company, 241 F.R.D. 534 (D. Md. 2007), outlines the various ways digital and Internet-based evidence can be authenticated in court. The opinion analyzes the applicable federal rules of evidence and how they can be applied to electronically stored evidence. The opinion provides a good guide for law enforcement with respect to the type of information needed for the authentication of Internet-based evidence. Specifically, the opinion explores identifying and authenticating characteristics of e-mail messages, Internet Web site postings, text messages and chat room content, computer-stored and -generated data, and digital photographs. Citations to cases in other jurisdictions explaining electronic evidence authentication are also included.

Successful Use of Social Media Evidence in Investigations and Trials

U.S. v. Underwood, 2010 U.S. Dist. LEXIS 134543 (W.D. Ky. 2010), is a case regarding child pornography and enticing a minor charges. The charges originated from an undercover police investigation conducted online with an officer posing as a 13-year-old boy. The investigation was initiated after an anonymous caller to the police tip line reported a possible pedophile operating on the MySpace social-networking Web site. The police officer then created an undercover profile purporting to be a 13-year-old boy and sent a friend request to the defendant. The defendant engaged the undercover officer in communication on the MySpace and Yahoo! Web sites, with much of the conversation having a sexual nature. Based on this initial investigation, subpoenas were served on the Web sites and various Internet service providers, which resulted in identification of the defendant as the various accounts' holder, the IP addresses associated with those accounts, and his home address. This was used to apply for a search warrant of the defendant's house. Evidence was suppressed because the warrant issued was for evidence of child pornography, while the affidavit accompanying the application referred only to the crime of enticing a minor. In this case, redaction of the warrant and partial suppression were not an adequate remedy; however, probable cause had been established by the social media evidence for a warrant to search for evidence of enticing a minor. If not for the discrepancy in the request to search for evidence and a warrant issued for child pornography crimes and the probable cause listed in the application for enticing a minor, the social media evidence would have provided valid probable cause to issue a warrant. See also ***U.S. v. Lee***, 603 F.3d 904 (11th Cir. 2010) (evidence from a social-networking site was sufficient to uphold convictions of attempted enticement of a minor, attempted production of child pornography, and knowing receipt of child pornography even though communications through the site were with an adult and the children were fictitious. Evidence consisted of multiple online conversations between an undercover postal inspector and the defendant and one recorded phone call); ***U.S. v. Schene***, 543 F.3d 627 (10th Cir. 2008) (social media

investigation evidence and computer account activity used to confirm that the defendant was in fact the person at the IP address who received child pornography).

In the Interest of F.P., 878 A.2d 91 (Pa. Super. Ct. 2005), is a case involving a juvenile delinquency charge resulting from an assault. Evidence used to support a finding of delinquency included instant messages sent from the delinquent juvenile to the victim. The juvenile challenged their admission based on improper authentication because no evidence of their source from the Internet service provider or by a computer forensics expert was provided. The court upheld the finding of delinquency and ruled the authentication was proper based on the circumstantial evidence provided at the adjudication hearing. The basis for authenticating the instant messages rested on the facts that the juvenile identified himself with his first name in the conversations, made accusations in the conversations that were consistent with testimony of other witnesses, and referenced the victim reporting the threats to school officials. Moreover, the character of the messages and conversations was consistent with other testimony regarding the juvenile's feelings and actions towards the victim. These circumstantial facts were sufficient to authenticate the instant messages as coming from the delinquent juvenile.

A.B. v. Indiana, 885 N.E. 2d 1223 (Ind. 2008), involves alleged threats made by a student against her principal on the MySpace social-networking site. The opinion does not address authentication issues but does provide an overview on how the MySpace site functions and explains the difference between "public" and "private" profiles, groups, and postings. Authentication issues were resolved by student testimony and permission to access the MySpace postings from their profile, which was "friends" with the appellant student's admitted profile.

Munoz v. State, 2009 Tex. App. LEXIS 256 (Tex. App. 2009). The defendant challenged, among other things, a criminal street gang enhancement charge. During the course of an assault trial resulting from a drive-by shooting incident, an investigator with the district attorney's office testified as to how to identify gang members and that based on his investigation, the defendant was a gang member. Several MySpace pictures the investigator used to form his opinion on gang involvement were admitted into evidence. The investigator, who maintained a local gang database and was knowledgeable on local gang activity, provided testimony and evidence from his MySpace investigations of the defendant. This testimony, coupled with testimony from other witnesses and evidence recovered from the defendant's room, formed a legally sufficient basis to convict the defendant on the criminal gang enhancement charge.

People v. Chavez, 2010 Cal. App. Unpub. LEXIS 6186 (Cal. Ct. App. 2010),[21] upheld information charging the defendant's involvement with a criminal street gang. An investigator from the district attorney's office was qualified as a gang expert at trial and testified to common characteristics of gang members and how to identify them. As part of the expert's conclusion that the defendant was an active gang member, the expert relied on a MySpace posting containing a picture of the defendant, the name of the gang, and the defendant's gang moniker. The MySpace evidence and testimony of the expert provided enough of a basis for the information to survive dismissal challenges. See also ***People v. Corleone***, 2009 Cal. App. Unpub. LEXIS 3107 (Cal. Ct. App. 2009)[22] (stalking and criminal threat convictions upheld based on MySpace, e-mail, and text-message evidence); ***People v. Abusharif***, 2011 Ill. App. Unpub. LEXIS 853 (Ill. App. Ct. 2011)[23] (trial court did not abuse discretion in admitting text message and MySpace message evidence in murder trial).

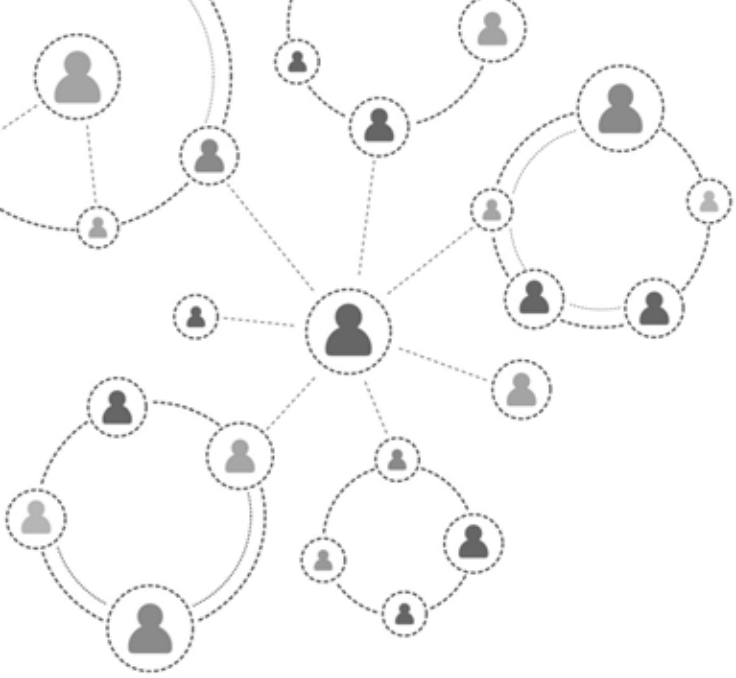
U.S. v. McNamara-Harvey, 2010 U.S. Dist. LEXIS 106141 (E. D. Pa. 2010). Anonymous tips that the defendant posted pro-Palestinian/anti-Israeli videos on his Facebook page, as well as personal admissions from the defendant to the Federal Bureau of Investigation (FBI) that he had posted disturbing and/or extremist videos, helped form the basis of a warrant for computer-based evidence of potential terroristic acts.

---

21 This is an unpublished opinion. Please check local court rules when relying on this opinion as authority.
22 See Footnote 21.
23 See Footnote 21.

Griffin v. Maryland, 2011 Md. LEXIS 226 (Md. 2011). The appeals court ruled that MySpace pages were erroneously admitted into evidence because they had not been properly authenticated. The trial court admitted the postings based on a police officer's testimony that the picture in the profile was of the purported owner and they had the same location and date of birth. The picture, location, and birth date did not constitute sufficient "distinctive characteristics" to properly authenticate the MySpace printouts of the profile and posting because of the possibility that someone else could have made the profile or had access to it to make the posting. The court stated that there are different concerns when authenticating printouts from social media sites that go beyond the authentication concerns of e-mails, Internet chats, and text messages. Some suggested approaches to the social media authentication issue include an admission of the purported profile owner that it is his or her profile and he/she made the postings in question, a search of the person's computer and Internet history that links the subject to the profile or post, or information obtained directly from the social media site that identifies the person as the profile's owner and individual with control over it, possibly including IP address identification information.

B099



Appendix B—Georgia Bureau of Investigation Social Media Policy

Georgia Bureau Of Investigation Investigative Division
Directive 8-6-5

Title: Guidelines For The Use Of Social Media By The Investigative Division

Date: October 26, 2012

Reviewed: October 26, 2012

Authority: R. E. Andrews
Deputy Director For Investigations

Page 1 of 12

Purpose: To establish guidelines for the use of social media in pre-employment background investigations, crime analysis and situational assessments, criminal intelligence development, and criminal investigations.

Definitions

Crime Analysis and Situational Assessment Reports—Analytic activities to enable GBI to identify and understand trends, causes, and potential indicia of criminal activity, including terrorism.

Criminal Intelligence Information—Data which meets criminal intelligence collection criteria and which has been evaluated and determined to be relevant to the identification of criminal activity engaged in by individuals who or organizations which are reasonably suspected of involvement in criminal activity.

Criminal Nexus—Established when behavior or circumstances are related to an individual or organization's involvement or planned involvement in criminal activity or enterprise.

Online Alias—An online identity encompassing identifiers, such as name and date of birth, differing from the employee's actual identifiers, that uses a nongovernmental Internet Protocol address. Online alias may be used to monitor activity on social media websites or to engage in authorized online undercover activity.

Online Undercover Activity—The utilization of an online alias to engage in interactions with a person via social media sites that may or may not be in the public domain (i.e. "friending a person on Facebook").

Public Domain—Any Internet resource that is open and available to anyone.

Social Media—A category of Internet-based resources that integrate user-generated content and user participation. This includes, but is not limited to, social media networking sites (Facebook, MySpace), micro blogging sites (Twitter), photo- and video-sharing sites (Flickr, YouTube), wikis (Wikipedia), blogs, and news sites (Digg, Reddit).

Social Media Monitoring Tool—A tool used to capture data and monitor social media sites by utilizing automated tools such as web crawlers and word search functions to make predictive analysis, develop trends, or collect information. Examples include Netbase, Twitterfall, Trackur, Tweetdeck, Socialmention, Socialpointer, and Plancast.

Social Media Websites—Sites which focus on building online communities of people who share interests and activities and/or exploring the interests and activities of others. Social media websites are further categorized by Internet-based resources that integrate user-generated content and user participation. This includes, but is not limited to, social networking sites (Facebook, MySpace), micro blogging sites (Twitter, Nixle), photo-and video-sharing sites (Flickr, YouTube), wikis (Wikipedia), blogs, and news sites (Digg, Reddit). The absence of an explicit reference to a specific social media website does not limit the application of this policy.

Valid Law Enforcement Purpose—A purpose for information/intelligence gathering development, or collection, use, retention, or sharing that furthers the authorized functions and activities of a law enforcement agency, which may include the prevention of crime, ensuring the safety of the public, furthering officer safety, and homeland and national security, while adhering to law and agency policy designed to protect the privacy, civil rights, and civil liberties of Americans.

I. GENERAL

Social media may be a valuable investigative tool to detect and prevent criminal activity. Social media has been used for community outreach events such as providing crime prevention tips, providing crime maps, and soliciting tips about unsolved crimes. Social media may also be used to make time sensitive notifications regarding special events, weather emergencies, or missing or endangered persons. While social media is a new resource for law enforcement, employees must adhere to this policy to protect individuals' privacy, civil rights, and civil liberties and to prevent employee misconduct.

II. UTILIZATION OF SOCIAL MEDIA

A. Social media may be used by Investigative Division personnel for a valid law enforcement purpose. The following are valid law enforcement purposes:

1. Pre-employment background investigations;
2. Crime analysis and situational assessment reports;
3. Criminal intelligence development; and
4. Criminal investigations.

B. While on duty, employees will utilize social media, access social media websites, online aliases, and social media monitoring tools only for a valid law enforcement purpose. The utilization of an online alias or social media monitoring tool for personal use is prohibited and is considered employee misconduct.

C. Employees will only utilize social media to seek or retain information that:

1. Is based upon a criminal predicate or threat to public safety; or
2. Is based upon reasonable suspicion that an identifiable individual, regardless of citizenship or U.S. residency status, or organization has committed an identifiable criminal offense or is involved in or is planning criminal conduct or activity that presents a threat to any individual, the community, or the nation and the information is relevant to the criminal conduct or activity (criminal intelligence information); or
3. Is relevant to the investigation and prosecution of suspected criminal incidents; the resulting justice system response; the enforcement of sanctions, orders, or sentences; or the prevention of crime; or
4. Is useful in crime analysis or situational assessment reports for the administration of criminal justice and public safety; or
5. Is relevant to pre-employment background investigations.

D. The GBI will not utilize social media to seek or retain information about:

1. Individuals or organizations solely on the basis of their religious, political, social views or activities; or
2. An individual's participation in a particular non-criminal organization or lawful event; or
3. An individual's race, ethnicity, citizenship, place of origin, disability, gender, or sexual orientation unless such information is relevant to the individual's criminal conduct or activity or if required to identify the individual; or
4. An individual's age other than to determine if someone is a minor.

E. The GBI will not directly or indirectly receive, seek, accept, or retain information from:

1. An individual or nongovernmental information provider who may or may not receive a fee or benefit for providing the information if there is reason to believe that the information provider is legally prohibited from obtaining or disclosing the information; or
2. A source that used prohibited means to gather the information.

III. AUTHORIZATION TO ACCESS SOCIAL MEDIA WEBSITES

This section addresses the authorization necessary to utilize social media and access social media websites for crime analysis and situational awareness/assessment reports; intelligence development; and criminal investigations.

A. Public Domain

No authorization is necessary for general research, topical information or other law enforcement uses that do not require the acquisition of an online alias.

B. Online Alias

An online alias may only be used to seek or retain information that:

1. Is based upon a criminal predicate or threat to public safety; or

2. Is based upon reasonable suspicion that an identifiable individual, regardless of citizenship or U.S. residency status, or organization has committed a criminal offense or is involved in or is planning criminal conduct or activity that presents a threat to any individual, the community, or the nation and the information is relevant to the criminal conduct or activity; or
3. Is relevant to the investigation and prosecution of suspected criminal incidents; the resulting justice system response; the enforcement of sanctions, orders, or sentences; or the prevention of crime; or
4. Is useful in crime analysis or situational assessment reports for the administration of criminal justice and public safety.

C. Authorization for Online Aliases

Sworn agents or criminal intelligence analysts must submit a request for an online alias. No other Investigative Division personnel are authorized to submit requests for an online alias or to use an online alias in the performance of their official duties.

The request must contain the following information:

1. Purpose for the request (i.e. type of investigative activity);
2. Username;
3. Identifiers and pedigree to be utilized for the online alias, such as email address, username and date of birth. Do not include password(s) for online aliases and ensure password(s) are secured at all times; and
4. Photograph to be used with online alias, if applicable.

The work unit supervisor must evaluate the request to determine whether an online alias would serve a valid law enforcement purpose. The work unit supervisor must maintain the requests for online alias and their status (approved/denied) for two years from the date of deactivation of the online alias.

Investigative Division personnel with an approved online alias may use their online alias to make false representations in concealment of personal identity in order to establish social media accounts (i.e. a Facebook account). The establishment of a social media account with an approved online alias must be documented.

D. Authorization for Online Undercover Activity

1. A sworn agent who has an authorized online alias may also request authorization to engage in online undercover activity. Only agents will be authorized to engage in online undercover activity utilizing the online alias.
2. Online undercover activity occurs when the agent utilizing the online alias interacts with a person via social media. Online undercover operations will only be utilized when there is reason to believe that criminal offenses have been, will be or are being committed (e.g. internet chat rooms where child exploitation occurs).
3. Employees must submit a request to engage in online undercover activity. The request must contain the following information:
    a. Online alias(es) to be used in the online undercover activity;
    b. Social media accounts utilized;
    c. Valid law enforcement purpose; and
    d. Anticipated duration for the online undercover activity.

4. The work unit supervisor must evaluate the request to determine whether online undercover activity is appropriate. If the request is approved, the authorization must be maintained in the file containing the record of the online undercover activity.
5. In situations involving exigent circumstances, the work unit supervisor may provide verbal authorization for online undercover activity. The work unit supervisor should provide written documentation of the request, the exigent circumstances, and the circumstances of the verbal authorization as soon as practical.
6. A record will be maintained of all online undercover activity.
7. Once authorized to engage in online undercover activity, the agent should utilize the appropriate deconfliction system.
8. All approved online undercover activity requests will be reviewed monthly by the work unit supervisor to ensure continued need for the online undercover activity. Approved online undercover activity that does not provide information regarding a valid law enforcement purpose within thirty (30) days will be discontinued.
9. A summary will be placed in the file indicating the date of termination of the online undercover activity. The online alias may be maintained if it is anticipated that it will be utilized again.

IV. AUTHORIZATION TO UTILIZE SOCIAL MEDIA MONITORING TOOLS

A. Prior to utilizing a social media monitoring tool, the work unit supervisor will submit a request through the chain of command to the Deputy Director for Investigations for authorization to use the social media monitoring tool. The social media monitoring tool may be utilized in criminal investigations; criminal intelligence development; and crime analysis and situational assessment reports (e.g. during sporting events, demonstrations or other large gatherings that require a law enforcement presence to ensure the safety of the public). The request must contain the following:

1. A description of the social media monitoring tool;
2. Its purpose and intended use;
3. The social media websites the tool will access;
4. Whether the tool is accessing information in the public domain or information protected by privacy settings; and
5. Whether information will be retained by the GBI and if so, the applicable retention period for such information.

B. The request must be reviewed by the GBI Privacy Officer prior to approval.

C. In exigent circumstances, the work unit supervisor may obtain verbal authorization to utilize the social media monitoring tool and provide written documentation as soon as practical. The written documentation should include a description of the exigent circumstances and the verbal authorization, as well as the required information for the request.

D. If approved, the social media monitoring tool may be utilized for a period of ninety (90) days or, in the case of situational assessments such as an event or large gathering, until the conclusion of the law enforcement activity related to the event. After ninety (90) days, the work unit supervisor must submit a summary describing the law enforcement actions that resulted from the use of the social media monitoring tool.

If continued use is needed, the summary may also contain a request to continue using the social media monitoring tool. The process to approve the request is the same as the original request.

V. SOURCE RELIABILITY AND CONTENT VALIDITY

Information developed from social media sites should be corroborated using traditional investigative tools including interviews, verification of address, verification of internet protocol address information, or other lawful means.

VI. DOCUMENTATION AND RETENTION

Other than crime analysis and situational assessment reports, all information obtained from social media websites shall be placed within a case file, suspicious activity report, or intelligence report. At no time should Investigative Division personnel maintain any social media files outside of these authorized files.

Crime analysis and situational assessment reports may be prepared for special events management, including First Amendment-protected activities. At the conclusion of the situation requiring the report or First Amendment-protected event where there was no criminal activity related to the information gathered, the information obtained from the social media monitoring tool will be retained for no more than fourteen (14) days. Information from the social media monitoring tool that does indicate a criminal nexus will be retained in an intelligence report, suspicious activity report, or case investigative file as directed by the State of Georgia retention schedule.

Information identified as criminal in nature that is obtained in the course of an investigation from a social media site will be collected and retained using screen shots, printouts of chat logs, copying uniform resource locators (URL's) for subpoena or investigatory purposes, or storing the information via secure digital means. When possible, employees will utilize investigative computer systems and software intended to record data from social media sites.

VII. OFF DUTY CONDUCT

A. An employee who becomes aware of potential criminal activity via the Internet while off duty shall contact their supervisor or CEACC if the activity involves a minor child or exigent circumstances to determine the best course of action.

B. As soon as practical following awareness of the potential criminal activity, the employee should prepare detailed notes to document a complete description of the information observed and specifics as to the events that occurred or action taken.

C. Employees shall act to preserve and maintain proper custody of images, texts, photographs, or other potential evidence.

VIII. PERSONAL EQUIPMENT AND PERSONAL SOCIAL MEDIA WEBSITES AND PASSWORDS

Given the ease with which information can be gathered from public internet searches, tracking services, and other computer analytic technology, the use of employee's personal or family internet accounts, social media, or internet service for official GBI business is prohibited.

IX. DISSEMINATION

Retention and dissemination of social media information will be the same as the type of file, whether a paper or electronic file, in which the information is located. For example, retention and dissemination of social media

information within an intelligence file will be treated in the same manner as an intelligence file. Information developed during the course of a criminal investigation will be located in the investigative case file and retained and disseminated in the same manner as the investigative case file.

X. EMPLOYMENT BACKGROUND INVESTIGATIONS

As part of its employment background process, Investigative Division personnel will conduct a search of social media websites and profiles in the public domain regarding the applicant. Applicants will be notified that this search will be conducted. Applicants are not required to disclose passwords to social media sites or profiles to the GBI. In the event an applicant discloses their password, the GBI will not utilize the password to log into the applicant's social media site or profile. Employees will not search or attempt to gain access to private social media profiles.

All searches of applicant social media pages and profiles will only search information that is in the public domain.

Online aliases will not be used to conduct employment background investigations.

Only criminal comments or images will be collected as part of the background investigatory process. Employees will not collect or maintain information about the political, religious, or social views, associations or activities of any individual or any group unless such information directly relates to criminal conduct or activity.

During the course of a background investigation, if a reference, supervisor, or colleague of the applicant provides negative information on the applicant related to a social media site, the agent will prepare an investigative summary outlining the information provided by the reference.

XI. SANCTIONS FOR MISUSE

Any employee who violates the provisions of this directive will be subject to disciplinary action, up to and including termination.

XII. COMPLAINTS AND INFORMATION QUALITY ASSURANCE

Employees will report violations or suspected violations of this directive to the Privacy Officer in accordance with the GBI Privacy Policy, Directive 7-6 Criminal Intelligence and Privacy Protections, Section VI (D).

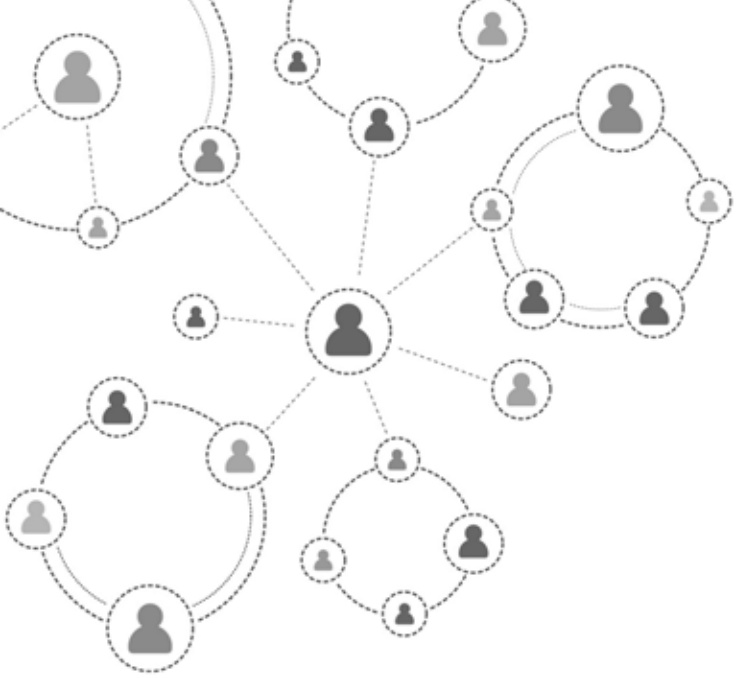
Complaints from the public regarding information obtained from social media websites will be submitted to the Privacy Officer and handled in accordance with the GBI Privacy Policy. If the information is determined to be erroneous, the information will be corrected or deleted.

XIII. AUDIT

As part of the GBI annual privacy audit, compliance with this directive will be verified by a GBI inspection team led by the Privacy Officer.

XIV. ANNUAL REVIEW

The GBI Privacy Officer will review this directive at least annually and direct the updating of the policy and procedures as necessary.



Appendix C—Dunwoody Police Department Social Media Policy

Dunwoody Police Department Standard Operating Procedure

Subject	Social Media
Effective Date	November 15, 2011
Sop #	A-50
Reference	Social Media Pages, Blogs, Twitter, Departmental Material, Agency And Personnel Electronic Devices
Special Instructions	Annual Review
Distribution	All Personnel
# Pages	4

I. PURPOSE

The department endorses the use of social media to enhance communication, collaboration, and information exchange; streamline processes; and foster productivity. This policy establishes the department's position on the utility of social media, including management, administration, and oversight. This policy is intended to address social media in general, not a particular form of social media.

II. POLICY

Social media provides a potentially valuable means of assisting the department and department personnel in meeting community outreach, problem-solving, investigative, crime prevention, and related goals of the department. This policy identifies potential uses that may be explored or expanded upon as directed by the Chief of Police. The personal use of social media can have a bearing on department personnel in their official capacity. As such, this policy provides information of a precautionary nature as well as prohibitions on the use of social media by department personnel.

III. DEFINITIONS

Blog—A self-published commentary on a particular topic that may allow visitors to post responses, reactions, or comments. This term is short for "Web log."

Page—The specific portion of a social media website where content is displayed and managed by an individual or individuals.

Post—Content an individual shares on a social media site or the act of publishing content on a site.

Profile—Information that a user shares about himself or herself on a social networking site.

Social Media—A category of Internet-based resources that integrate user-generated content and user participation. This includes, but is not limited to, social networking sites (Facebook, MySpace), microblogging sites (Twitter, Nixle), photo- and video-sharing sites (Flicker, YouTube), wikis (Wikipedia), blogs, and news sites (Digg, Reddit).

Social Networks—Online platforms where users can create profiles, share information, and socialize with others user a range of techniques.

Speech—Expression or communication of thoughts or opinions in spoken words, in writing, by expressive conduct, symbolism, photographs, videotape, or related forms of communication.

Electronic Communications—Electronic Communications include, among other things, messages, images, data or any other information used in e-mail, instant messages, voice mail, fax machines, computers, personnel digital assistants (including Blackberry or similar text messaging devices), pagers, telephones, cellular and mobile phones including those with cameras, intranet, Internet, back-up storage, information on a memory or flash key or card, jump or zip drive, any other type of internal or external removable storage drives or any other technology tool. In the remainder of this policy, all of these communication devices are collectively referred to as "Systems."

IV. PROCEDURES

A. On-the-Job Use / Social Media

Department-Sanctioned Presence:

1. All department social media sites or pages shall be approved by the Chief of Police in accordance with City of Dunwoody policies.
2. Social media pages shall clearly indicate they are maintained by the department and shall have department contact information displayed.
3. Social media content shall adhere to applicable laws, regulations, and policies, including information technology and records management policies.
4. Content of social media pages is subject to Open Records laws.
5. Department personnel representing the department via social media outlets shall conduct themselves as representatives of the department and the City of Dunwoody and shall adhere to all department and City standards of conduct. They shall identify themselves as members of the department; not make comments regarding the guilt or innocence of suspects or arrestees; not make comments concerning pending prosecutions and not post, transmit or otherwise disseminate confidential information, including pictures, videos, evidence, or other materials in the department relating to training, work assignments, and enforcement efforts without the express written permission of the Chief of Police.
6. Department personnel shall not conduct political activities or private business on departmental social media.
7. The use of departmental computers, telephones, and other electronic communications devices to access social media is prohibited without the authorization of the Chief of Police.

8. Department personnel shall use personal electronic communications devices and computers to manage the department's social media sites only with the express written permission of the Chief of Police.
9. Department personnel shall observe and abide by all copyright, trademark, and service mark restrictions in posting materials to electronic media.

Social media is a valuable tool when seeking evidence or information regarding missing persons, wanted persons, gang activity, crimes perpetrated online, photographs or videos of a crime posted by a participant or observer.

10. Social media can be used for community outreach by providing crime prevention tips, offering online reporting opportunities, sharing crime maps and data, and soliciting tips about unsolved crimes.
11. Social media may be used for time-sensitive notifications of road closures, special events, weather emergencies, and missing or endangered persons.

B. Personal Use / Social Media

Precautions and Prohibitions:

1. Department personnel are free to express themselves as private citizens on social media sites to the degree that their speech does not impair the work of the department for which confidentiality is important and does not impede the performance of duties.
2. Department personnel are cautioned that representing themselves as employees of the department in their off duty social networking may bring about targeting of the employee. The targeting of law enforcement personnel through social networking sites as a form of retaliation is documented.
3. Department personnel are cautioned that when using social media, their speech becomes part of worldwide electronic domain. Posting of personal photographs and other personal information by departmental personnel may subject them to becoming targets of criminal acts, harassment, or other forms of abuse due to their employment.
4. Department personnel shall adhere to the Code of Conduct when representing themselves as members of the department. They shall not post obscene or sexually explicit language, images, or acts and statements or other forms of speech that ridicule, malign, disparage, or otherwise express bias against any race, any religion, or any protected class of individuals.
5. Department personnel may not divulge information gained by reason of their authority; make statements, speeches, appearances, and endorsements; or publish materials that could reasonably be considered to represent the views or positions of this department without express authorization of the Chief of Police.

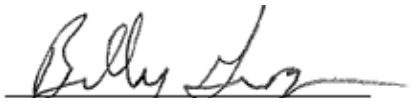
C. Agency and Personnel Electronic Devices

Personal Computers, Cell Phones, and Recording Devices:

1. Department personnel and system users may not use personal laptops within any City building or leased space. Additionally, employees and system users may not use personal laptops to gain access to City network resources. Department personnel may have extenuating reasons for using a personal laptop, which must be approved by the Chief of Police.
2. Although incidental and occasional personal use of Systems that does not interfere or conflict with productivity or the City's business or violate City policy is permitted, personal communications in our Systems are treated the same as all other Electronic Communications and will be used, accessed, recorded, monitored, and disclosed by the City at any time without further notice. Since all Electronic Communications and Systems can be accessed without advance notice, employees and system users

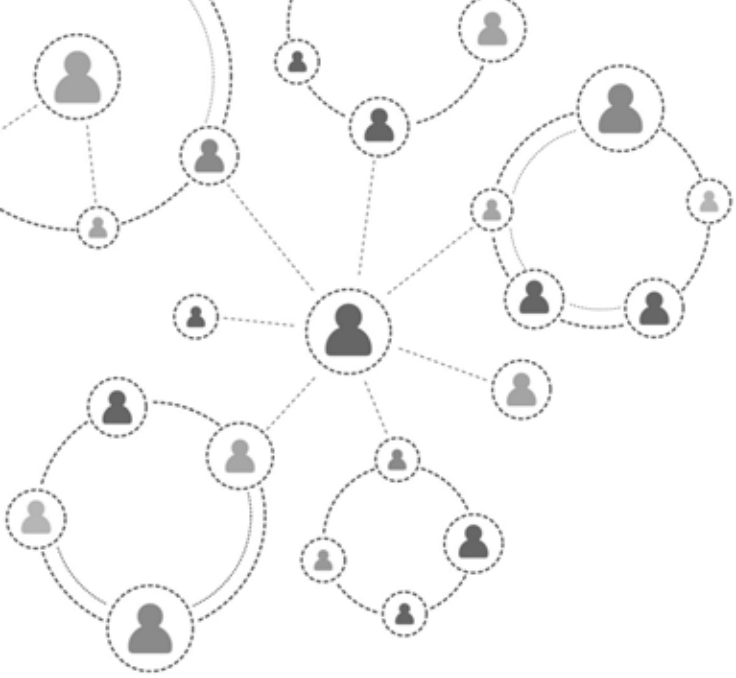
should not use our Systems for communication or information that they would not want revealed to third parties. Employees, therefor, shall not have any expectation of privacy regarding the use of our Systems.

3. The use of personal audio / visual recording devices while on duty and for the performance of assigned duties and responsibilities is prohibited unless otherwise authorized in writing by the Chief of Police.



Billy Grogan, Chief of Police
Dunwoody Police Department

First Reading:	091111
Final Adoption	101311
Distribution Date	101411
Effective Date	111511



Appendix D—New York City Police Department Social Media Policy

Data contained within social network sites may assist law enforcement in gathering timely information in furtherance of crime prevention, preservation of public order, and the investigation of criminal activity, including suspected terrorist activity. These guidelines are promulgated, in part, to instill the proper balance between the investigative potential of social network sites and privacy expectations.

Therefore, effective immediately, when a member of the service requires the use of social network websites to conduct investigations or research, the following procedure will be complied with:

I. Purpose

To conduct social network-based investigations and research.

II. Scope

Data contained on the Internet within social network sites may assist law enforcement in gathering timely information in furtherance of crime prevention, including the preservation of public order and the investigation of criminal activity, including suspected terrorist activity. To effectively fulfill these duties, it may be necessary for members of the service to access social network sites using an online alias. No prior authorization is ever required for information contained on publicly available internet sources.

III. Definitions

Exigent Circumstances—For the purpose of this procedure, circumstances requiring action before authorization can be obtained, in order to protect life or substantial property interest; to apprehend or identify a fleeing offender; to prevent the hiding, destruction or alteration of evidence; or to avoid other serious impairment or hindrance of an investigation.

Online Alias—An online identity encompassing identifiers, such as name and date of birth, differing from the user's actual name, date of birth, or other identifiers.

Online Alias Access—Internet-based searches involving the search and acquisition of information from sites that require an email address, password, or other identifiers for which an online alias is utilized.

Public Domain Data—Information accessible through the Internet for which no password, email address, or other identifier is necessary to acquire access to view or collect such information.

Social Network Site—Online platform where users can create profiles, share information, or socialize with others using a range of technologies.

Procedure	**When a member of the service requires access to a social network website for investigative or research purposes:**
Member of the Service	**1. Confer with supervisor, if access to public domain data requires the use of an online alias/online alias access.** a. No conferral or authorization is required for general research, topical information or other general uses that do not require the acquisition of an online alias/online alias access.
	If application for online alias does not involve suspected terrorist activity:
Supervisor	**2. Evaluate request to determine whether an online alias would serve an investigative purpose, and if so, prepare Typed Letterhead requesting an online alias to bureau chief/ deputy commissioner concerned.**
	2. Include on Typed Letterhead: a. Purpose for the request (i.e., type of investigation, etc.) b. Tax registry number of requesting member c. Username (online alias) d. Identifiers and pedigree to be utilized for the online alias, such as email address, username and date of birth. e. Do not include password(s) for online alias and ensure password(s) are secured at all times. f. Indicate whether there is a need to requisition a Department laptop with aircard.
	4. Review photograph to be used in conjunction with online alias, if applicable. a. Consider the purpose for which the photograph is being used and the source of the photograph. b. Attach a copy of the approved photograph and indicate on Typed Letterhead how photograph was obtained.
	5. Forward request to commanding officer for review.
Commanding Officer	**6. Review request(s) and consider the purpose and whether granting approval would serve an investigative purpose.**
	7. Endorse request(s) indicating APPROVAL/DISAPPROVAL within one day of original request and if APPROVED, immediately forward approval to bureau chief/deputy commissioner concerned, through channels, for informational purposes.
	8. File copies of requests in command.

Member of the Service	**9. Maintain record of online alias in case records management systems or appropriate Department records.**
Bureau Chief/Deputy Commissioner	**10. Maintain folder for each APPROVED online alias.** a. Designate an administrator for the online alias.
	If application for online alias involves suspected terrorist activity:
Supervisor	**11. Immediately contact Intelligence Division, Operations Desk supervisor and provide details regarding proposed investigation.**
Intelligence Division, Operations Desk Supervisor	**12. Determine if investigation should be conducted by the Intelligence Division and proceed accordingly.** **13. Notify requesting supervisor to proceed with investigation if it has been determined that the investigation will not be conducted by the Intelligence Division.**
Supervisor	**14. Comply with steps "2" through "10", as appropriate, if investigation will not be conducted by the Intelligence Division.**
	When exigent circumstances exist that would warrant the immediate use of an online alias:
Supervisor	**15. Confer with Intelligence Division, Operations Desk supervisor, if there is concern that the investigation may involve suspected terrorist activity.** a. Comply with instructions from Intelligence Division, Operations Desk supervisor. **16. Confer with commanding officer/executive officer, if investigation does not involve suspected terrorist activity.** **17. Instruct member of the service to proceed with investigation upon receiving APPROVAL from commanding officer/executive officer.** a. Comply with steps "2" through "10", as appropriate, and include in Typed Letterhead, the circumstances that led to the determination of exigent circumstances.

Additional Data

Legal Considerations

During the course of an investigation, a member of service may need access to information regarding online accounts maintained by service providers. The federal Electronic Communications Privacy Act (ECPA) governs seizures of electronic evidence. Some information may be obtained with a subpoena; other information requires a special court order; and still other information requires a search warrant. Pertinent sections of the ECPA are as follows:

a. A subpoena is generally deemed sufficient to obtain information such as user information and payment records.

b. Electronic communications, such as email content, in electronic storage for 180 days or less may be obtained only after the issuance of a search warrant, and delayed notification to the subscriber or customer may be ordered if specifically requested in the search warrant application.

c. Electronic communications in electronic storage for more than 180 days may be obtained with a subpoena signed by a judge; however, notice must be provided to the subscriber or customer unless the electronic communications are obtained after the issuance of a search warrant allowing for delayed notification.

Additional Data (continued)

d. In anticipation of the issuance of a search warrant, a member of the service may send a request known as a "preservation letter" to an electronic service provider requesting the preservation of electronic records for 90 days, and extend the request for an additional 90 day period.

Note that particular service providers are known to ignore non-disclosure orders (i.e., some service providers will disclose the existence of a search warrant or subpoenas to a subject subscriber or customer.) In general, members of the service should consult with the Legal Bureau before seeking electronic communication through a search warrant or otherwise.

Data obtained through a grand jury subpoena or court order cannot be shared with other law enforcement agencies unless otherwise authorized.

Operational Considerations

When a member of the service accesses any social media site using a Department network connection, there is a risk that the Department can be identified as the user of the social media. Given this possibility of identification during an investigation, members of the service should be aware that Department issued laptops with aircards have been configured to avoid detection and are available from the Management Information Systems Division (MISD). A confidential Internet connection (e.g., Department laptop with aircard) will aid in maintaining confidentiality during an investigation. Members who require a laptop with aircard to complete the investigation shall contact MISD Help Desk, upon APPROVAL of investigation, and provide required information.

In addition to using a Department laptop with aircard, members of the service are urged to take the following precautionary measures:

a. Avoid the use of a username or password that can be traced back to the member of the service or the Department;

b. Exercise caution when clicking on links in tweets, posts, and online advertisements;

c. Delete "spam" email without opening the email; and

d. Never open attachments to email unless the sender is known to the member of the service.

Furthermore, recognizing the ease with which information can be gathered from minimal effort from an Internet search, the Department advises members against the use of personal, family, or other non-Department Internet accounts or ISP access for Department business. Such access creates the possibility that the member's identity may be exposed to others through simple search and counter-surveillance techniques.

Department Policy

The "Handschu Consent Decree" and "Guidelines for Investigations Involving Political Activity" (see Appendix "A" and "B" of Interim Order 58, series 2004, "Revision to Patrol Guide 212-72, 'Guidelines for Uniformed Members of the Service Conducting Investigations of Unlawful Political Activities'") require that any investigation, including investigations on social networks, by the New York City Police Department involving political activity shall be initiated by and conducted only under the supervision of the Intelligence Division. Accordingly, members of the service shall not conduct investigations on social networks involving political activity without the express written approval of the Deputy Commissioner, Intelligence. Any member of the service who is uncertain whether a particular investigation constitutes an "investigation involving political activity" shall consult with the Legal Bureau.

Members of the service who have created and used online aliases prior to the promulgation of this procedure must submit a request to continue utilizing the alias in accordance with this procedure.

Related Procedures

- Citywide Intelligence Reporting System (P.G. 212-12)
- Guidelines for Uniformed Members of the Service Conducting Investigations of Unlawful Political Activities (Interim Order 58, series 2004)

Forms and Reports Typed Letterhead

Commanding officers will ensure that the contents of this Order are brought to the attention of members of their commands.

By Direction Of The Police Commissioner

Distribution

All Commands

About the Global Advisory Committee

The Global Advisory Committee (GAC) serves as a Federal Advisory Committee to the U.S. Attorney General. Through recommendations to the Bureau of Justice Assistance (BJA), the GAC supports standards-based electronic information exchanges that provide justice and public safety communities with timely, accurate, complete, and accessible information, appropriately shared in a secure and trusted environment. GAC recommendations support the mission of the U.S. Department of Justice, initiatives sponsored by BJA, and related activities sponsored by BJA's Global Justice Information Sharing Initiative (Global). BJA engages GAC-member organizations and the constituents they serve through collaborative efforts, such as Global working groups, to help address critical justice information sharing issues for the benefit of practitioners in the field.

B119 Issued 02/13

U.S. Department of Homeland Security

Office of Intelligence and Analysis
Mission Support Division

Intelligence Training Branch

Open Source Practitioners Course (OSINT)

STUDENT GUIDE

October 2015

(U) Warning: This product may contain U.S. person information that has been deemed necessary for the intended recipient to understand, assess, or act on the information provided. U.S. person Information is highlighted with the label USPER and should be protected in accordance with constitutional requirements and all federal and state privacy and civil liberties laws.

Lesson 1 – The Fundamentals of Open Source

1.1 LESSON OVERVIEW

Lesson 1: The Fundamentals of Open Source provides students with the foundational knowledge and skills to successfully navigate unclassified open sources for intelligence information. Students learn the different types of Open Source; the evolution, size, and scope of the Internet and the World Wide Web; the value of OSINT to law enforcement and intelligence operations; and how to assess Web sources. This lesson describes the legal authorities and restrictions that apply to open source research in the Intelligence Community and law enforcement. It will cover how analysts and law enforcement officers must protect US Person and Personally Identifiable Information, be aware of copyright restrictions, and abide by the websites' terms of service.

1.2 TOPICS COVERED

- Open source overview
- Types of open source information
- Why open source information is crucial to law enforcement
- Your Legal Authorities
- Copyright and Terms of Service
- Assessing the reliability and credibility of online information

1.3 LEARNING OBJECTIVES

Enabling Objectives:

- Given a classroom environment, define Open Source and describe types of open source information to a minimum of 75% accuracy.
- Given a classroom environment, describe the evolution, size, and scope of the Internet and World Wide Web.
- Given a classroom environment, discuss the value of Open Source to law enforcement and intelligence operations to a minimum of 75% accuracy.
- Identify the laws, regulations, and directives that govern open source research.
- Protect Personally Identifiable Information (PII).
- Describe how to handle copyrighted information.
- Given a classroom environment, describe how to assess the reliability and credibility of online sources.

B121

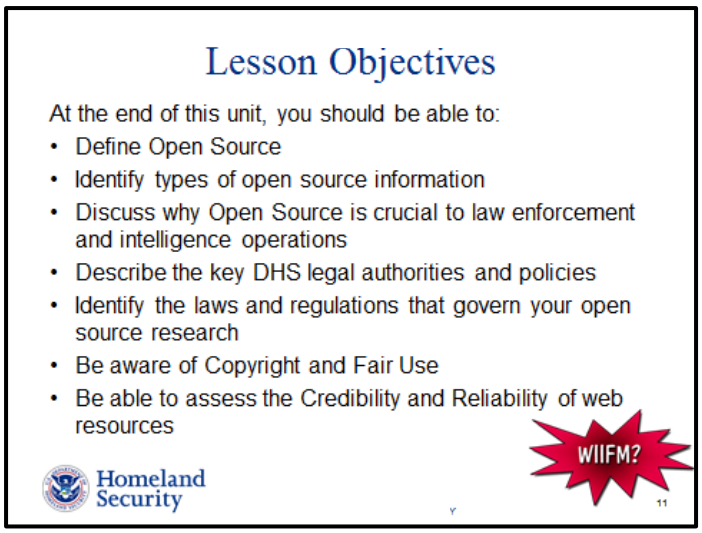
1.4 INTRODUCTION

1.4.1 Objectives

At the end of this unit, you should be able to:

- Define Open Source
- Identify types of open source information
- Discuss why Open Source is crucial to law enforcement and intelligence operations
- Describe the key DHS legal authorities and policies
- Identify the laws and regulations that govern your open source research
- Be aware of Copyright and Fair Use
- Be able to assess the Credibility and Reliability of web resources

- WIIFM = What's In It For Me? It's important to understand what Open Source is before you can effectively exploit it.

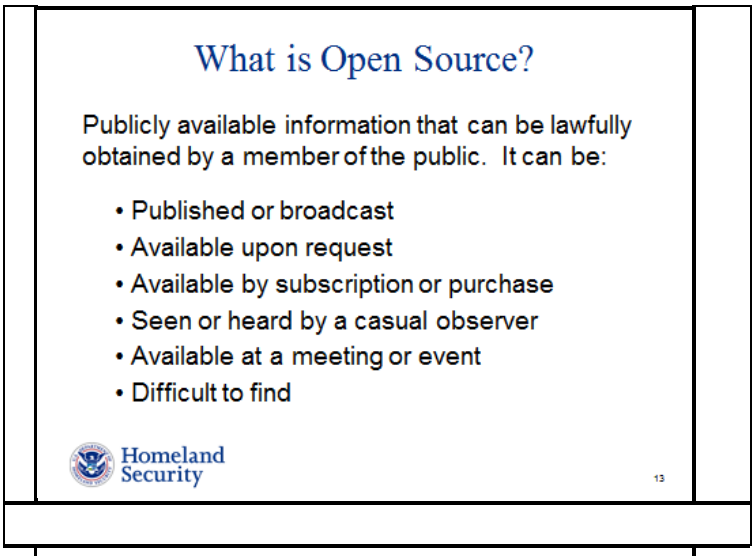


1.5 WHAT IS OPEN SOURCE

In this first section, we'll define Open Source; describe different types of open source information; and discuss why Open Source is so crucial to law enforcement and intelligence operations.

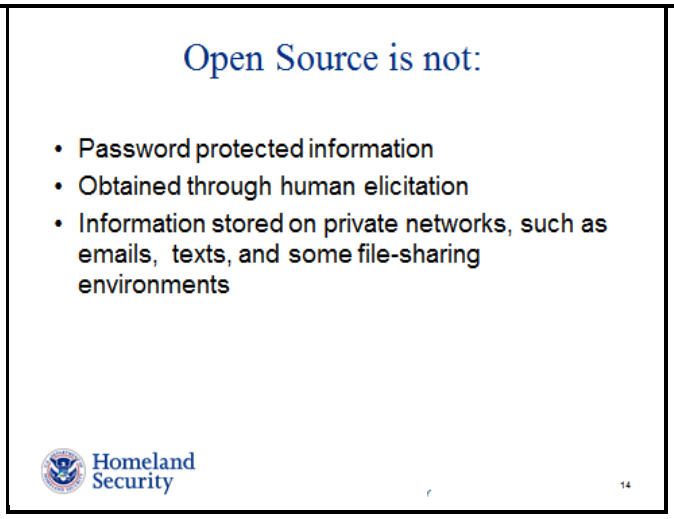
1.5.1 What Is Open Source?

Open source is defined as publicly available information that can be lawfully obtained by a member of the public.



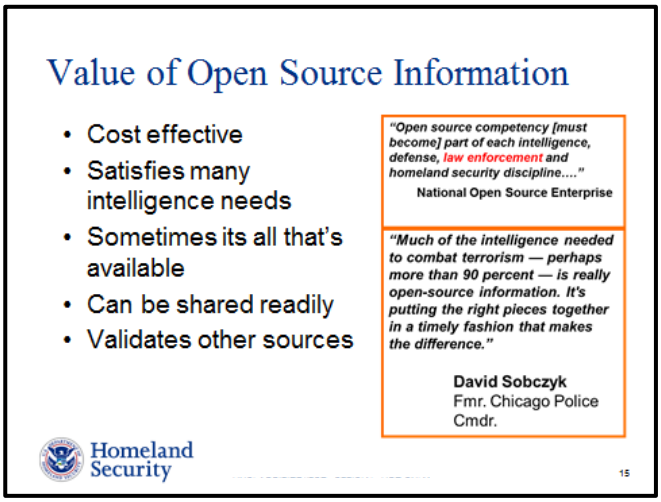
1.5.2 Open Source is not:

Much of the information that passes through the internet is not open source.



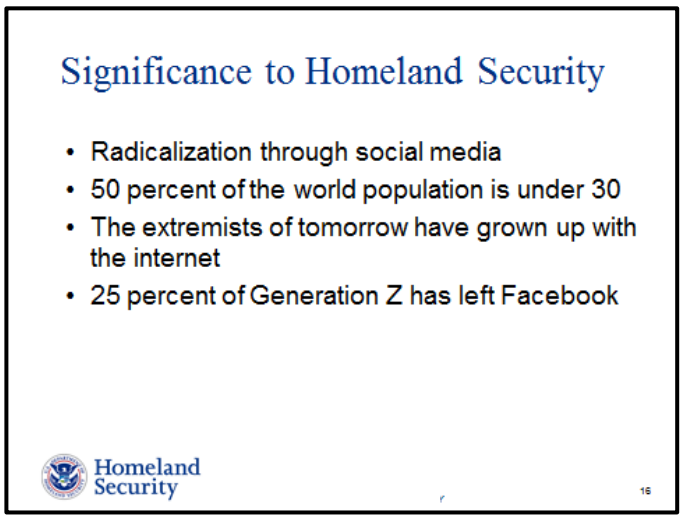
1.5.3 The Value of Open Source Information

The rapid growth of Open Source is increasing its value as a source of intelligence.



1.5.4 Significance to Homeland Security

50 percent of the world population is under 30 and increasingly technology savvy. Radicalization toward extremism occurs through social media. Extremists of tomorrow have grown up with the internet.



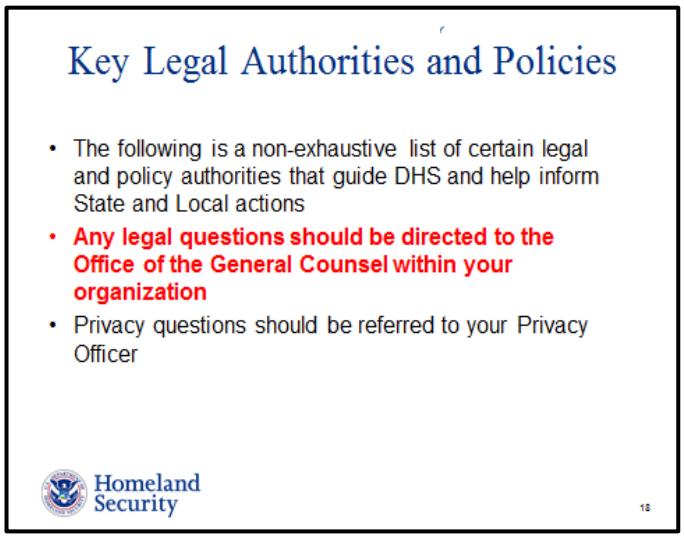
1.5.5 Lesson Outline

In this section, we'll define the key legal authorities and policies that guide DHS and help inform State and Local actions.

1.5.6 Key Legal Authorities and Policies

At the end of this section, you should be able to:

- Describe the National Open Source Enterprise.
- Identify the laws, regulations, and directives that govern open source research.
- Use best practices in handling USPER information.
- Protect Personally Identifiable Information (PII).
- Describe how to handle copyrighted information.
- Abide by websites' terms of service.

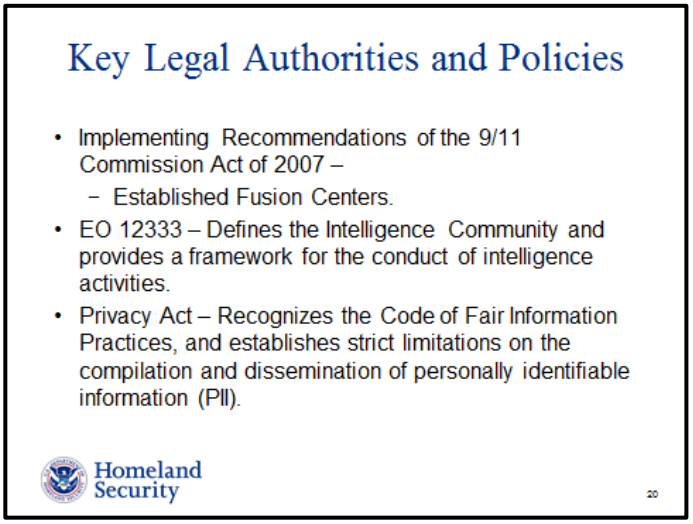


1.5.7 National Open Source Enterprise

The following is a non-exhaustive list of certain legal and policy authorities that guide DHS and help inform State and Local actions. Any legal questions should be directed to the Office of the General Counsel within your organization. Privacy questions should be referred to your Privacy Officer.

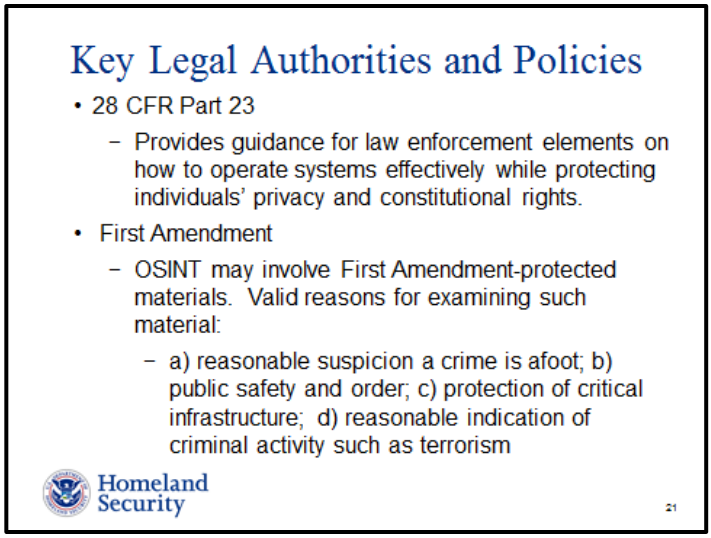
1.5.8 Key Legal Authorities and Polices

Implementing Recommendations of the 9/11 Commission Act of 2007. The Privacy Act details limitations on handling PII, collection and access to information, and the disclosure to third parties. There must be a valid reason for examining First Amendment-protected speech



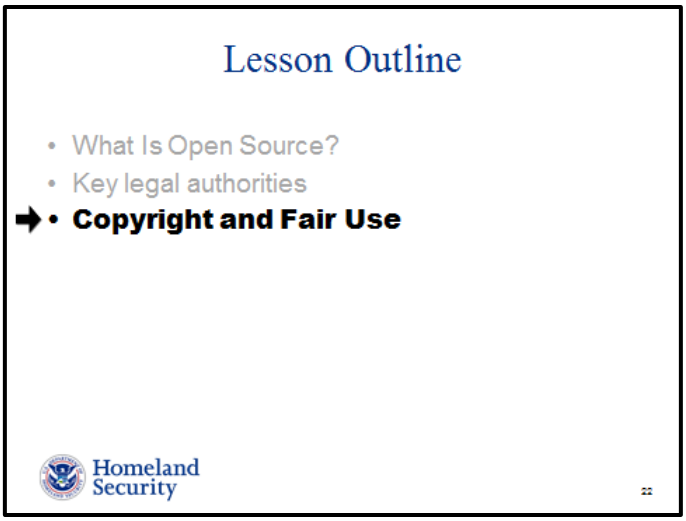
1.5.9 Key Legal Authorities and Polices

OSINT collection and other open source activities are governed by key legal authorities and policies, which also established new guidelines for information sharing.



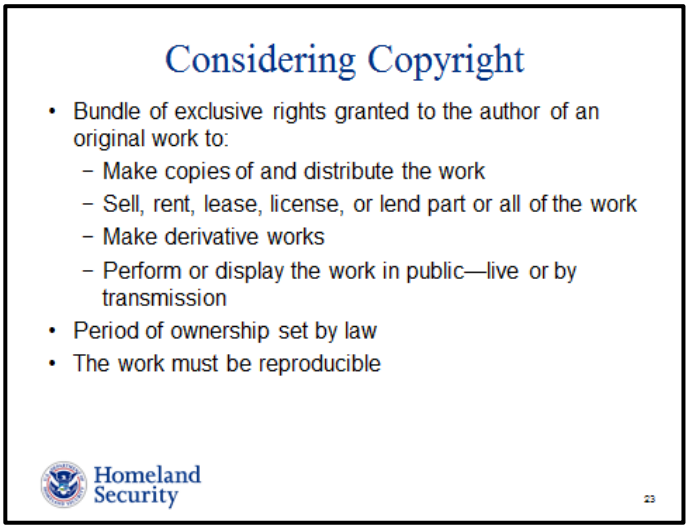
1.5.10 Copyright and Fair Use

In this section, we'll cover the concept of copyright information and the concept of "fair use." Consult your organization's legal office for specific details as they pertain to you.



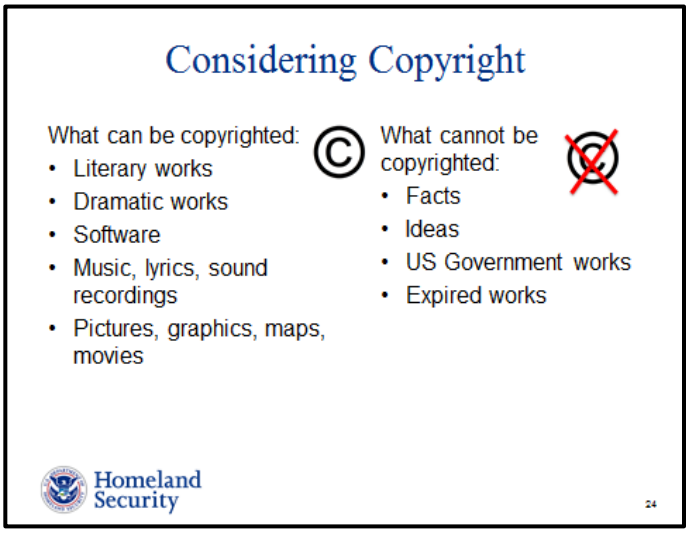
1.5.11 Considering Copyright

A copyright owner has the right to control how the copyrighted work is used. Those rights are limited, however, because every creation is built or based upon something that preceded it.



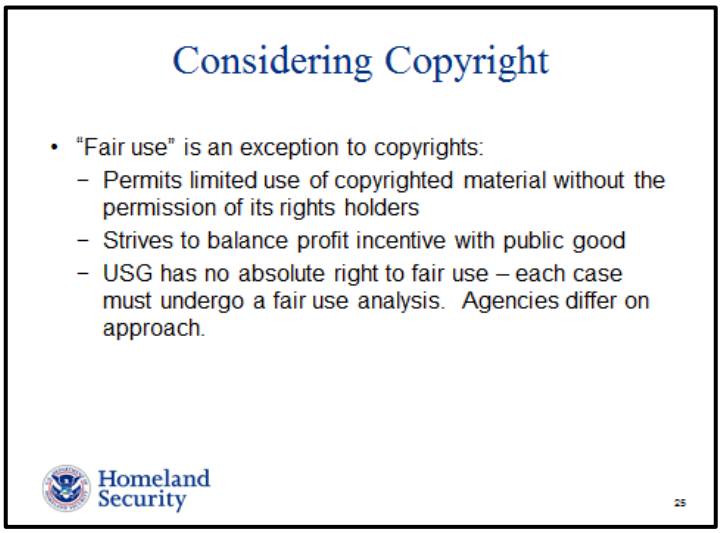
1.5.12 Considering Copyright

Copyright protection subsists in original works of authorship fixed in any tangible medium of expression from which they can be perceived, reproduced, or otherwise communicated. What cannot be copyrighted: facts, ideas, U.S. Government works, and works with expired copyrights.



1.5.13 Considering Copyright: Fair Use

US copyright law states that the "fair use" of a copyrighted work, including such use by reproduction in copies or phone records for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright.

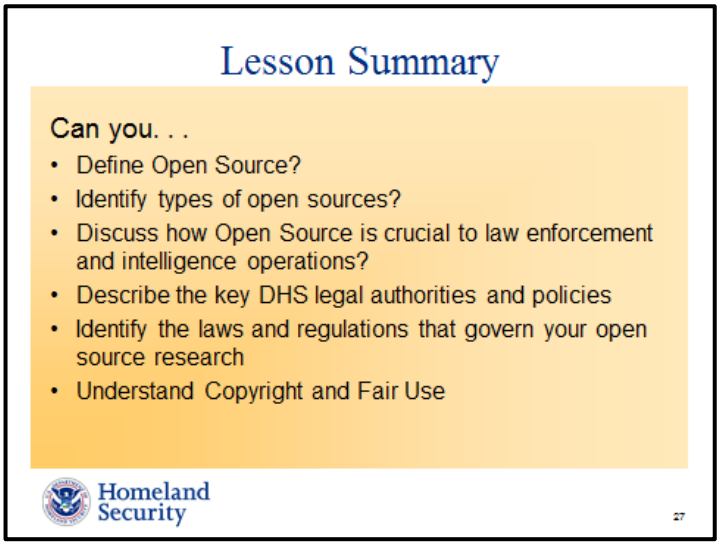


1.5.14 Consult Your Legal Advisor

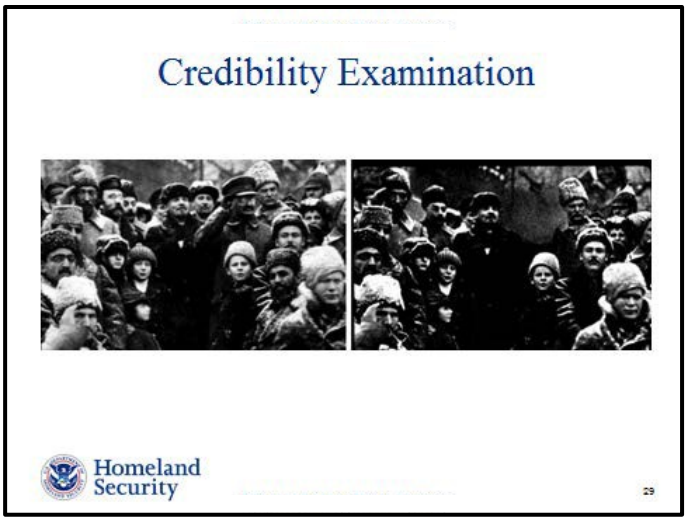
It's important to note that every IC and law enforcement agency has its own specific policies on handling USPER information.

1.5.15 CONCLUSION

- How do you define Open Source? (Answer: any publicly available information that can be obtained lawfully.)
- What are different types of open sources? (Answer: books, magazines, TV, radio, gray literature, graffiti, the Internet.)
- How is Open Source crucial to law enforcement and intelligence operations? (One answer: it can fill information gaps that other sources can't or don't address.)
- What are the key legal authorities and policies that govern how you conduct open source research?
- What is copyright and fair use?

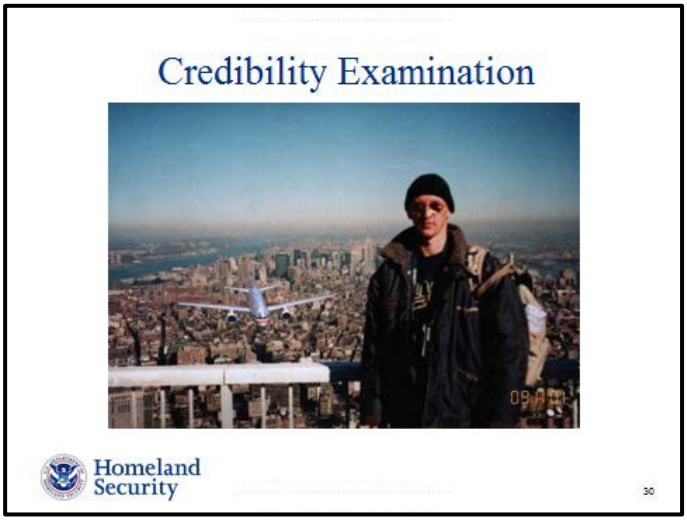


1.6 CREDIBILITY EXAMINATION



1.6.1 Credibility Examination

What questions would one ask to determine if the picture was real?



1.6.2 First to Report

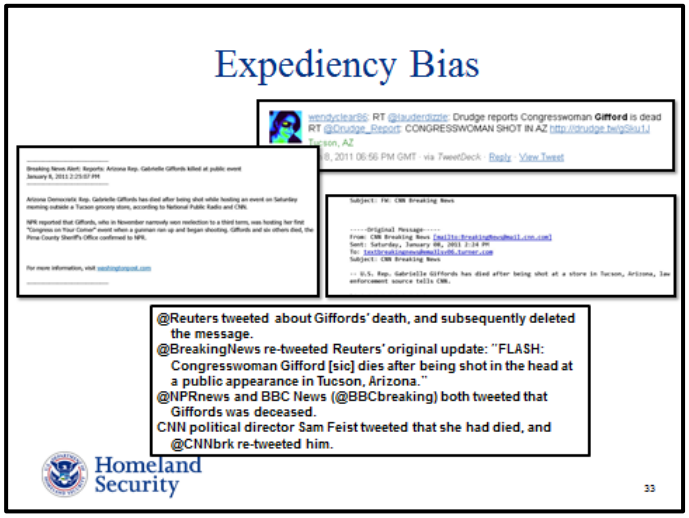
Social media can be an extremely fast method of communication. This includes reporting on major newsworthy events such as the US Airways flight that ditched into the Hudson and the Boston Marathon bombing.

1.6.3 Trustworthiness

Should we trust everything found on the internet? Sources such as Wikipedia, a secondary source, can lead to primary sources of information. Wikipedia, and other secondary sources, can also lead you astray.

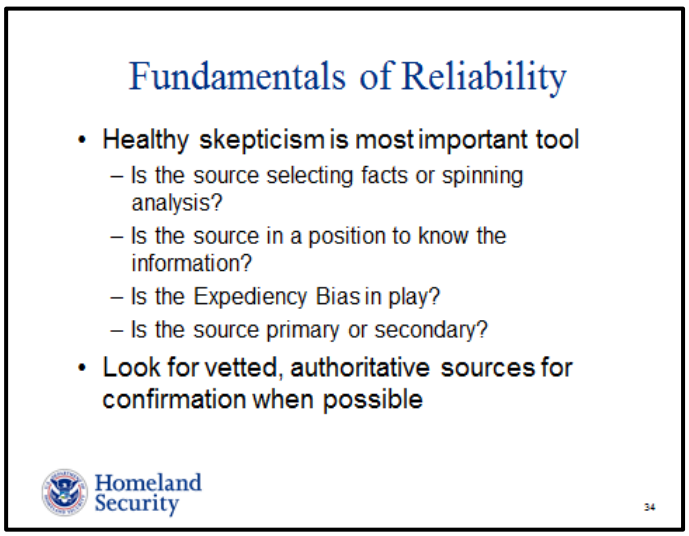
1.6.4 Look for Biases

When assessing the reliability of a Web source, look for apparent bias or prejudice.



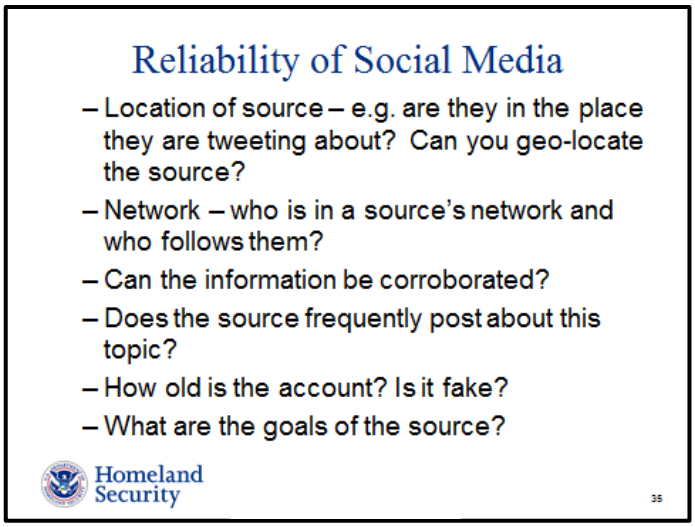
1.6.5 Fundamentals of Reliability

It is important to remember that almost anyone can upload information to the Internet for any reason, including professionals, enthusiasts, amateurs and adversaries. Therefore, a healthy skepticism along with good evaluation techniques is vital to conducting OSINT collection.



1.6.6 Reliability of Social Media

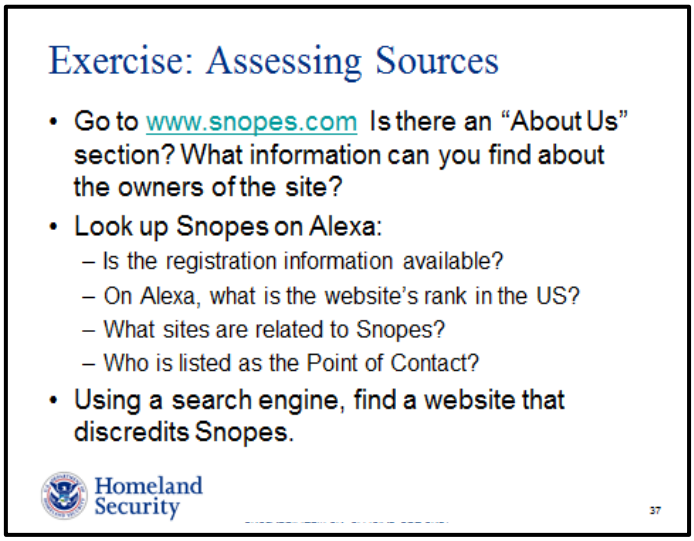
Ask questions to insure the reliability of your sources



1.6.7 Credibility of Websites

When visiting a new website, click on its "About Us" or "Who We Are" link, which usually takes you to a page about the people and/or organization behind the domain or website. Evaluate the attributes of websites by checking its domain name with its stated credentials.

1.6.8 Exercise: Assessing Sources

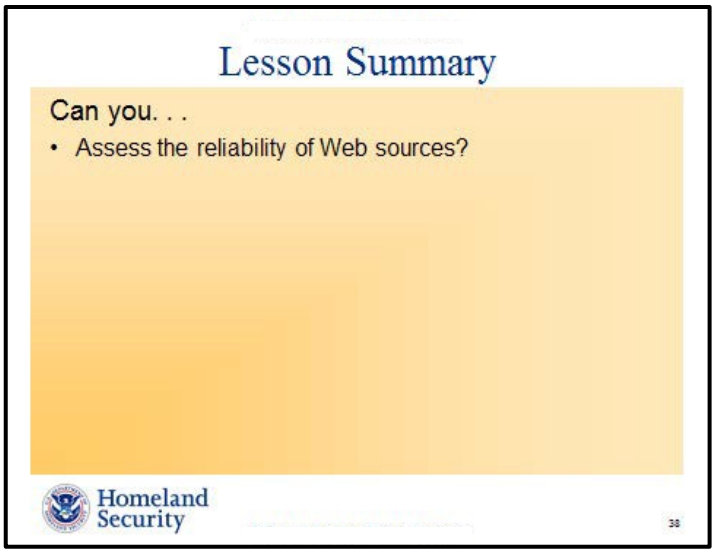


1.6.9 Conclusion

1.6.10 Lesson Review

Review Questions

- What are ways to assess the reliability of a Web source? (Answer: understand its domain, identify its philosophy and ownership, identify whether it's a primary or secondary source, check its track record, look for its biases, and explore its links).



Lesson 2 – Anonymized Collection

2.1 LESSON OVERVIEW

Lesson 3: This lesson focuses on operational security awareness and risk mitigation while navigating the Web. The lesson covers the elements that make up a digital footprint on the Web, which includes a user's online persona; the threats and risks to a user and a user's organization; and techniques to mitigate that risk.

2.2 TOPICS COVERED

- Your Digital Footprint
- Risk Mitigation

2.3 LEARNING OBJECTIVES

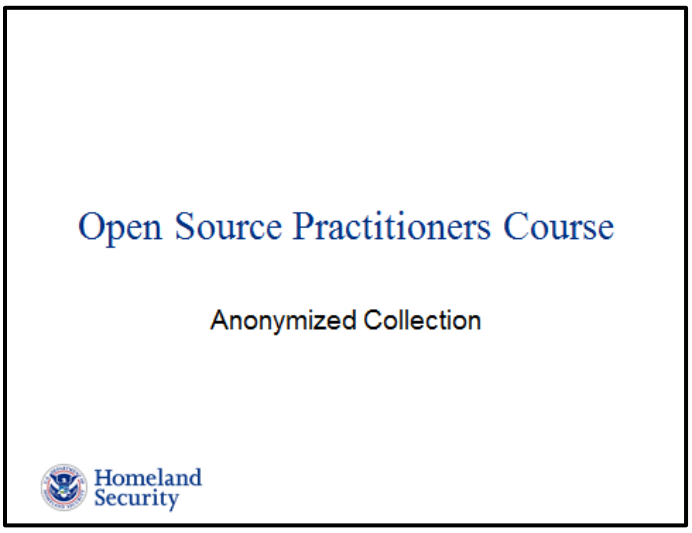
Enabling Objectives:

- Given a classroom environment, describe the elements that make up your digital footprint to a minimum of 75% accuracy.
- Given a classroom environment, describe online threats and how to mitigate them to a minimum of 75% accuracy.
- Given a classroom environment, describe and use anonymization tools to conduct open source research to a minimum of 75% accuracy.

B132

2.4 INTRODUCTION

This lesson focuses on operational security awareness and risk mitigation while navigating the Web. The lesson covers the elements that make up your online persona, the online threats and risks to you and your organization, and tools and techniques you can use to mitigate those risks.

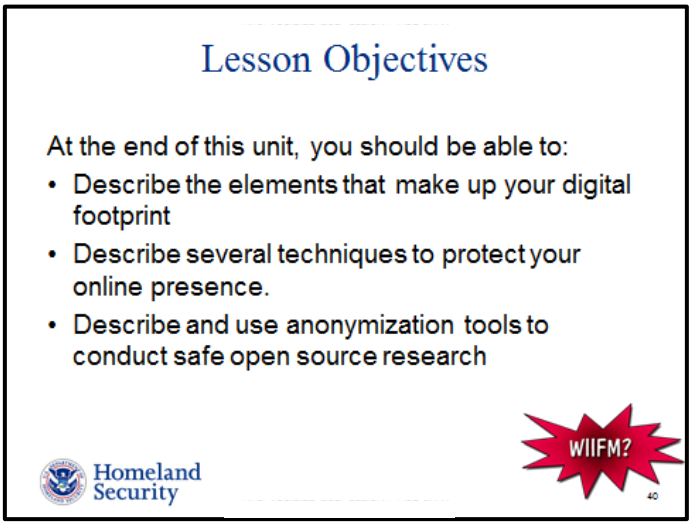


2.4.1 Objectives

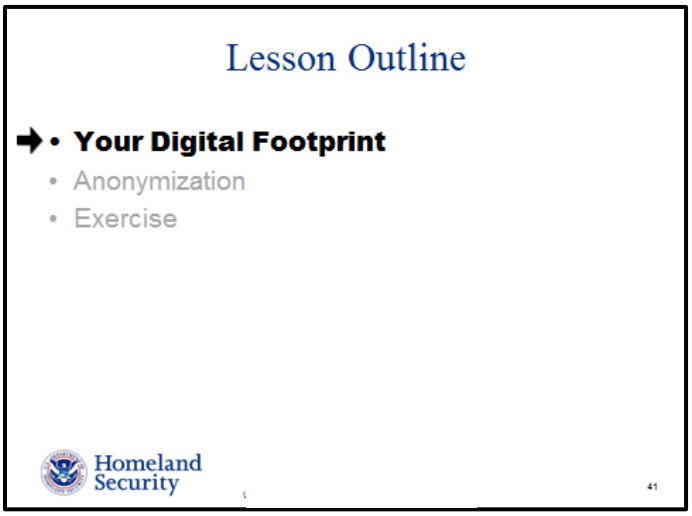
At the end of this unit, you should be able to:

- Describe the elements that make up your digital footprint.
- Describe online threats and how to mitigate them.
- Describe and use anonymization tools to conduct open source research.

WIIFM = What's In It For Me? When conducting open source research, it is important to understand the risks you face and be able to employ ways to mitigate them.



2.4.2 Your Digital Footprint

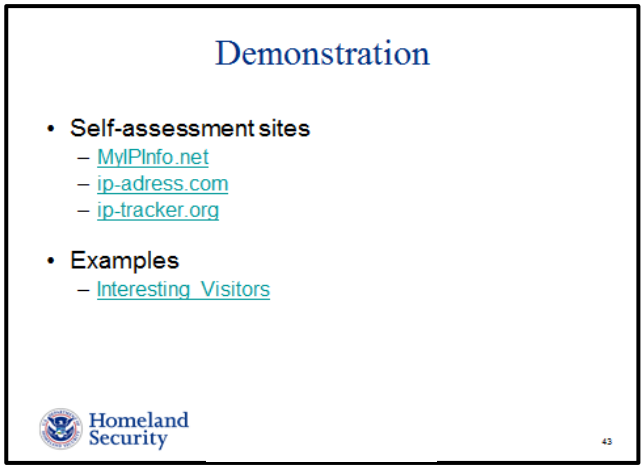


2.4.3 Your Digital Footprint

Your digital footprint can reveal identifying pieces of information about you. It is the electronic trail or "digital exhaust" you leave behind whenever you browse or search the Internet.

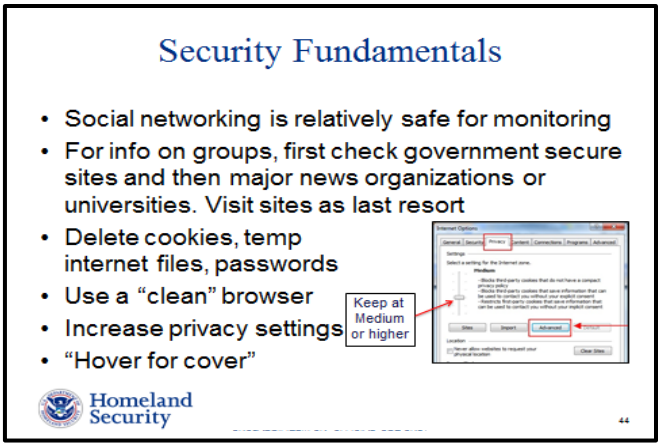
2.4.4 Demonstration

Self-assessment sites can reveal aspects of your digital footprint. See student handout for more websites and tools.

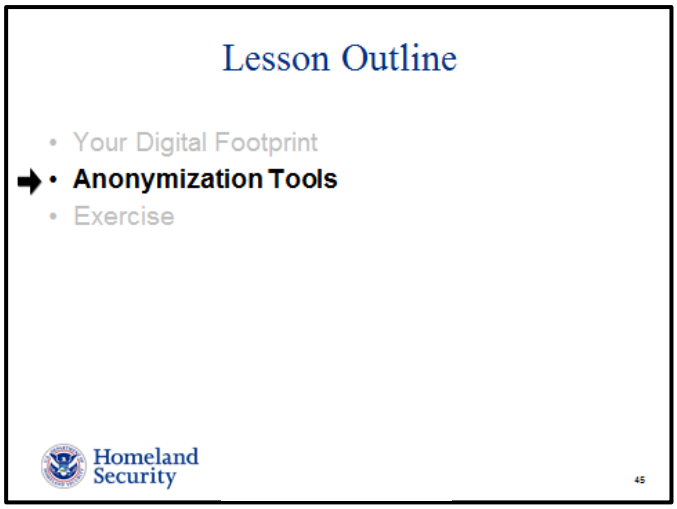


2.4.5 Security Fundamentals

Adversaries, such as foreign intelligence services, hackers, criminals, or terrorists can use any of the methods below to try to get more information about you.

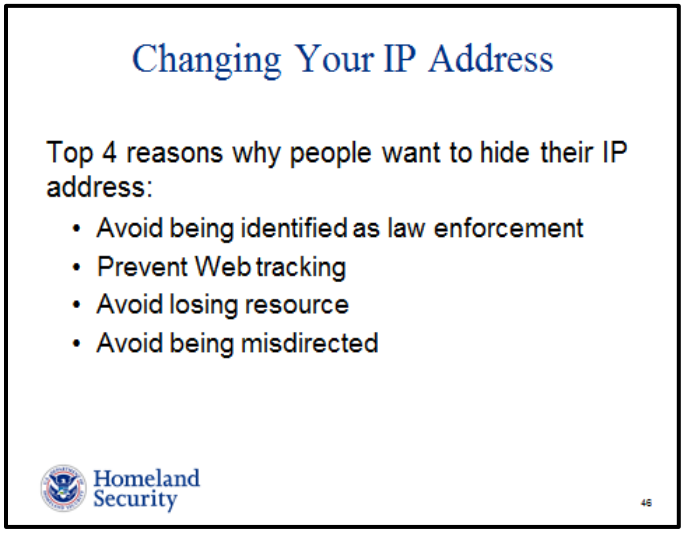


2.4.6 Anonymization Tools



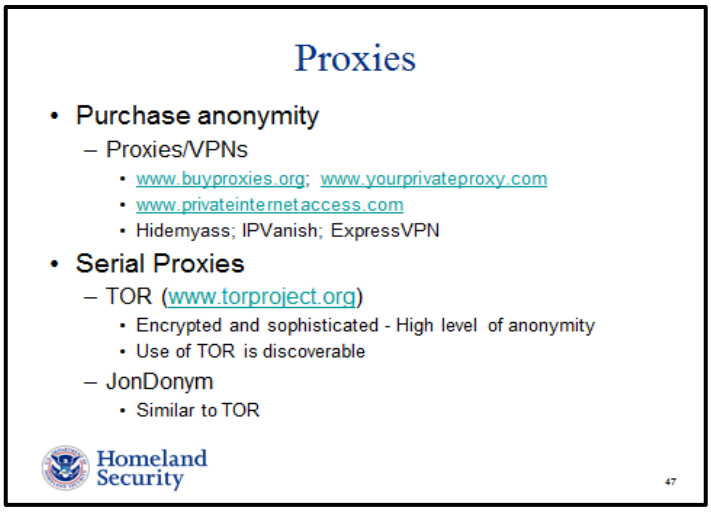
2.4.7 Changing Your IP Address

Because your IP can reveal significant amounts of information about you, hiding or altering your IP address can be an important security countermeasure.



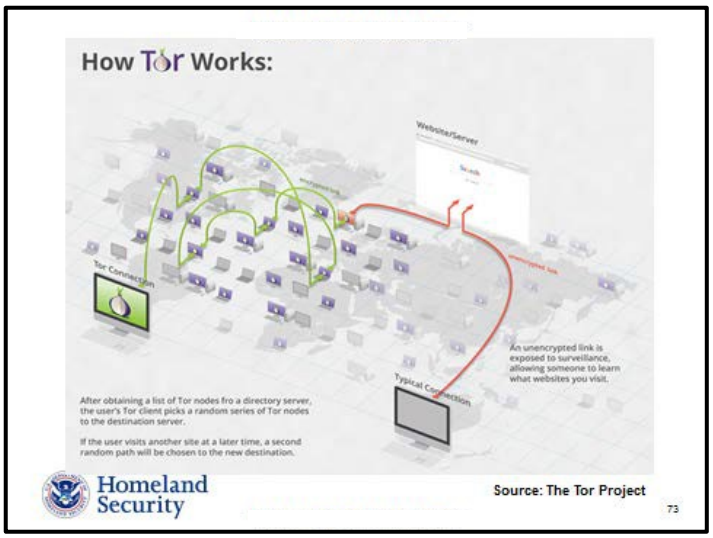
2.4.8 Anonymization Tool: Proxy Servers

A proxy server is a server that acts as an intermediary between a user's workstation and the Internet, communicating with webpages using a different IP address than the user.



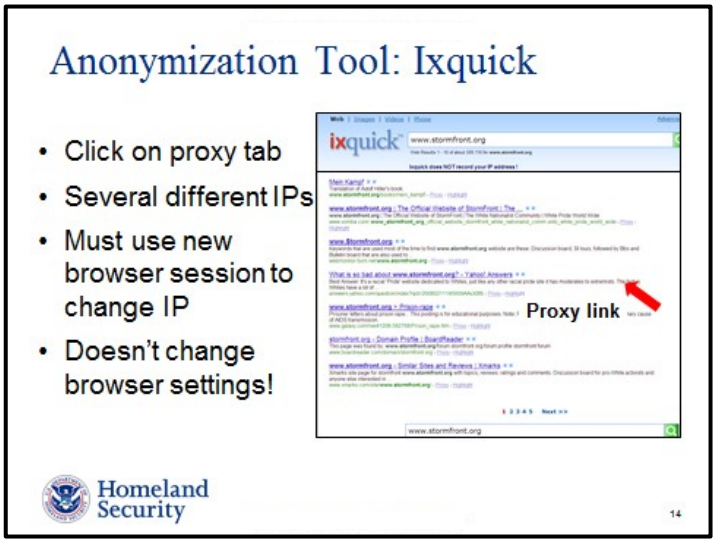
2.4.1 Anonymization Tool: TOR

The Onion Router (TOR) utilizes several intermediary servers in different locations to provide the user a different IP address that is more difficult to trace:



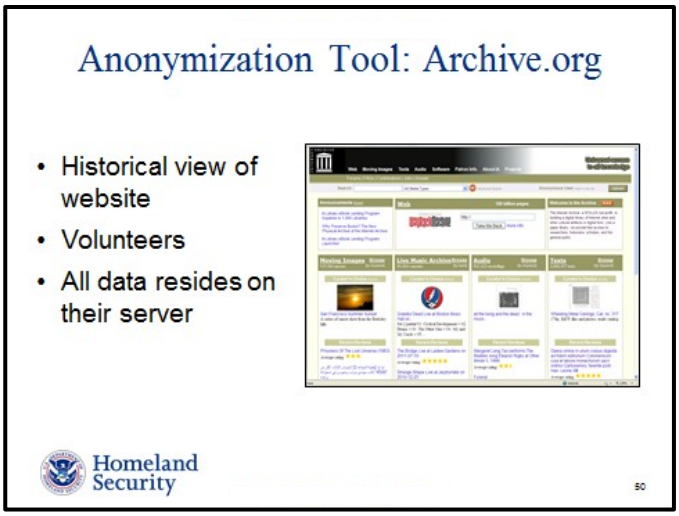
2.4.2 Anonymization Tool: Ixquick

Ixquick (https://ixquick.com) is a privacy-aware search engine (doesn't track your IP address or record search history) that provides a proxy capability.



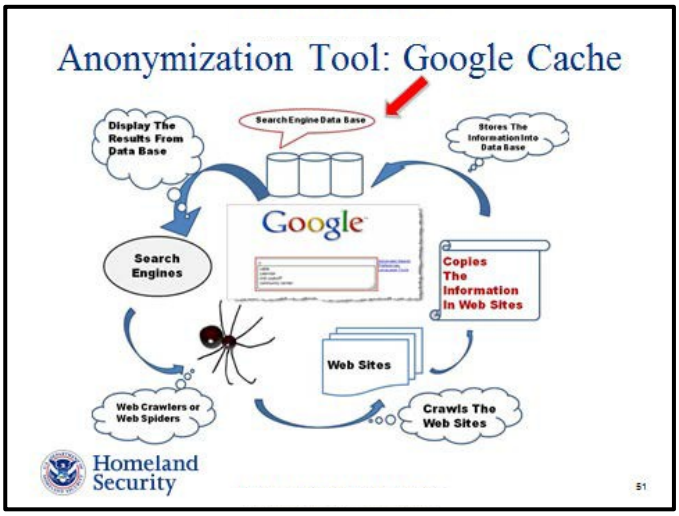
2.4.3 Anonymization Tool: Archive.org

Founded in 1996, Archive.org is a non-profit organization that was created to build an Internet library.



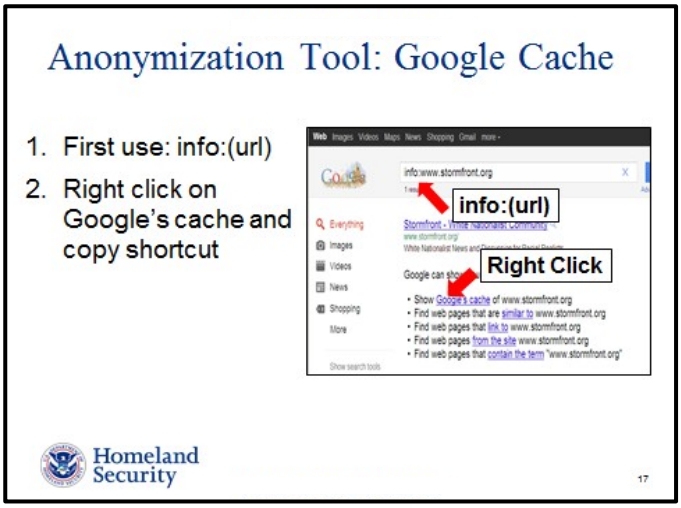
2.4.4 How Search Engines Work

When you do a search on a search engine, you might be surprised to learn that you're not actually searching the Web—you're searching the search engine's picture of the Web, which is called its "index."

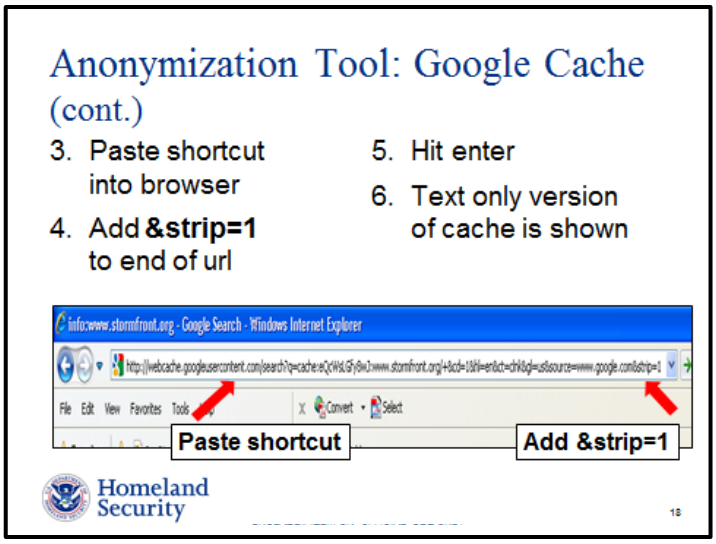


2.4.5 Anonymization Tool: Google Cache

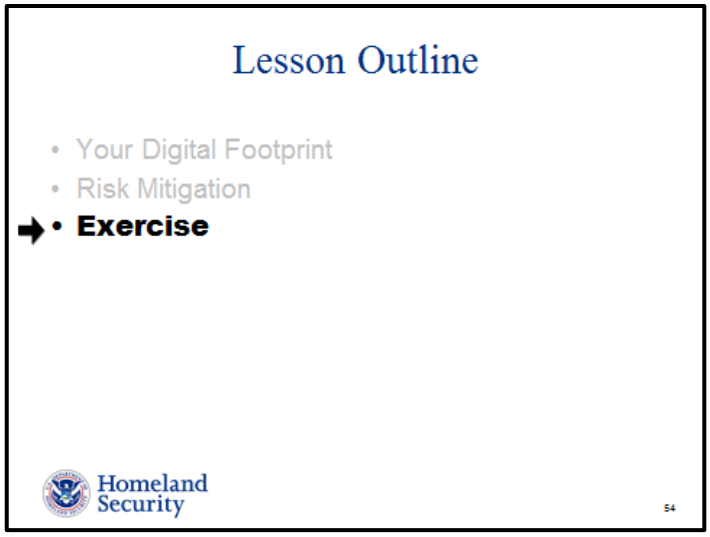
Accessing Google's cache version of a website is also an effective anonymization technique. However, Google does not cache images. Therefore, to view a cache version anonymously, you must "strip" all images from the page.



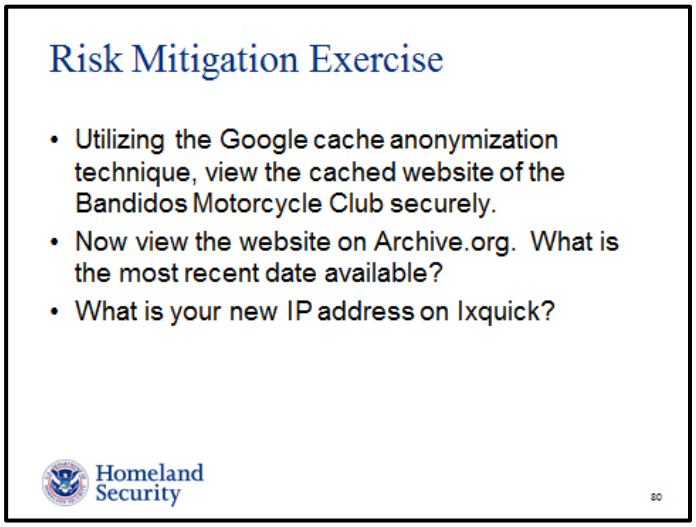
2.4.6 Anonymization Tool: Google Cache (cont.)



2.5 EXERCISE



2.5.1 Exercise: Risk Mitigation

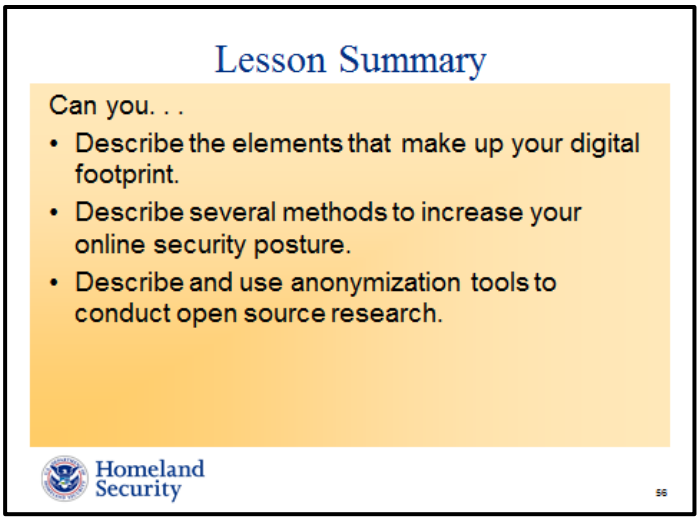


2.6 CONCLUSION

2.6.1 Lesson Review

Review questions:

- Can you describe the elements that make up your digital footprint? What are some of the elements?
- Can you describe how to increase your online security posture?
- Can you describe and use anonymization tools to conduct open source research? What are some anonymization tools and techniques you can use?



Lesson 3 –Web Searching

3.1 LESSON OVERVIEW

This lesson provides students ways to get more out of their online searches. It describes how to use search engines more effectively. It demonstrates the use of Google operators and shortcuts that narrow search results faster and describes the Deep Web and how to search it. It also describes alternate search engines, image searching, people searching, and EXIF viewing.

3.2 TOPICS COVERED

- Search Engine Overview
- Google Searching
- Search Basics and Advanced
- Image, EXIF, People, and Alternate Search Engines.
- Searching the Deep Web

3.3 LEARNING OBJECTIVES

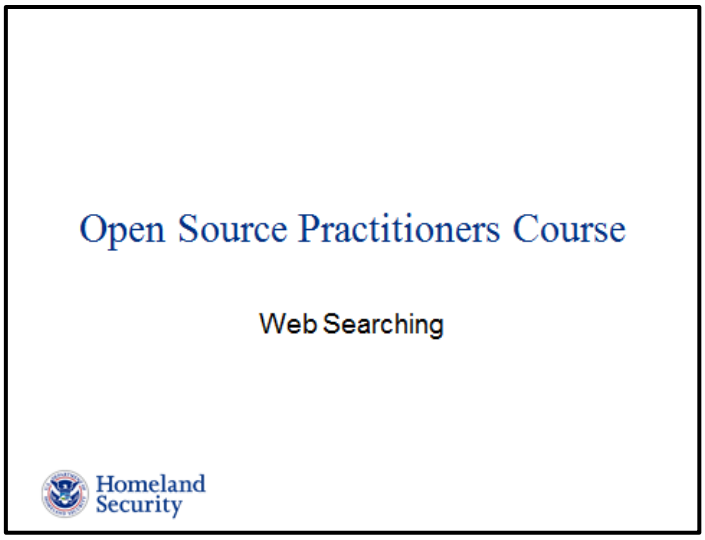
Terminal Objective: Given a research requirement, use Search Tools to conduct Open Source research to a minimum of 75% accuracy.

Enabling Objectives:

- Given the term “search engine,” describe it to a minimum of 75% accuracy.
- Given a research requirement, use search engines to conduct Open Source research to a minimum of 75% accuracy.
- Given search tools, demonstrate querying techniques used to search to a minimum of 75% accuracy.

3.4 INTRODUCTION

This lesson is about how to get the most out of your Web searches. As you'll discover, there's a lot more to searching the Web than just "Googling."

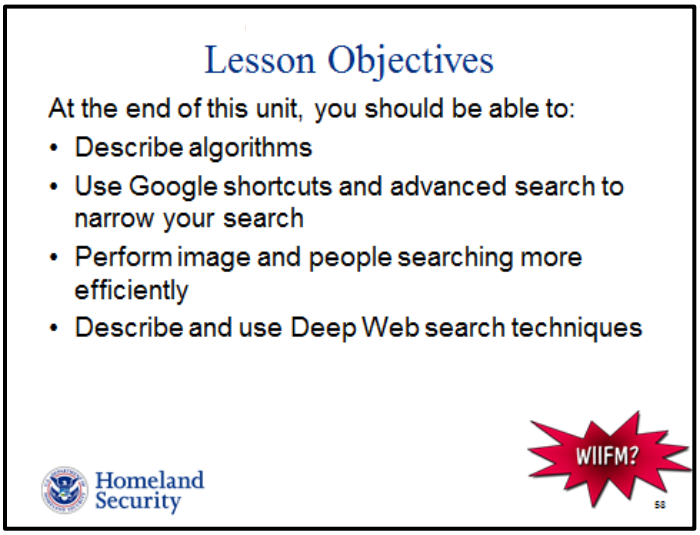


3.4.1 Objectives

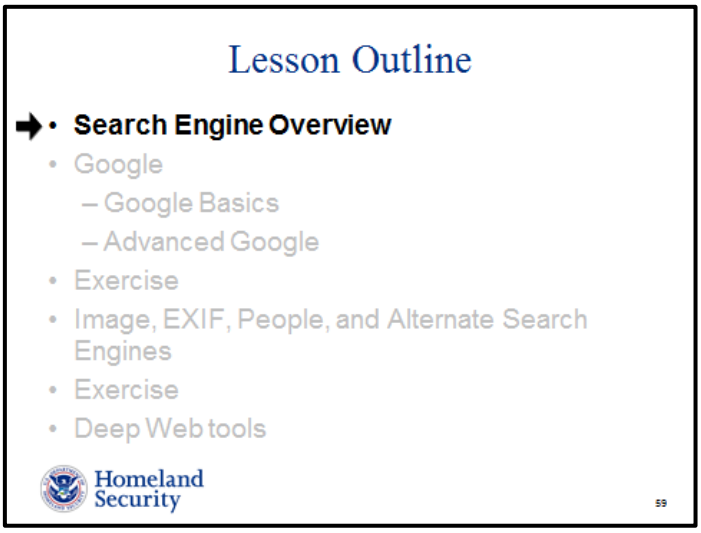
Lesson Objectives:

- Describe a search engine and use search engines more effectively.
- Use Google shortcuts to narrow your search results faster.
- Use techniques to search the Deep Web.

WIIFM = What's In It For Me? – Tools and techniques learned in this lesson will save you a lot of time when searching for information online.

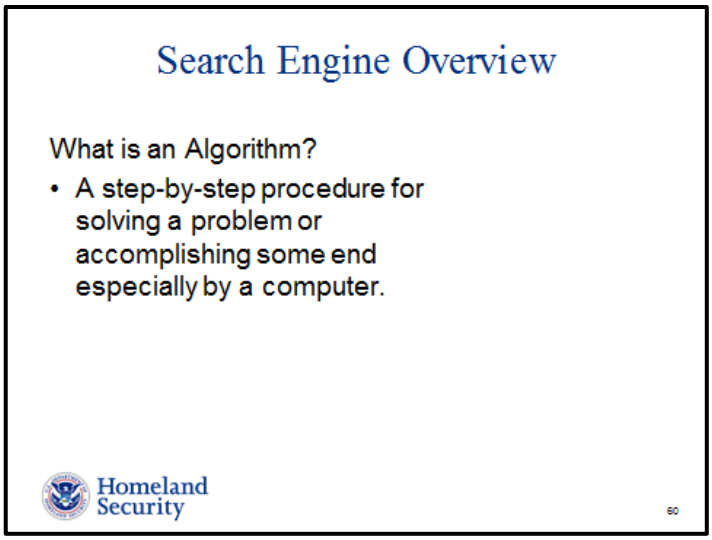


3.4.2 Search Engine Overview



3.4.3 Search Engine Overview

When you are telling the computer *what* to do, you also get to choose *how* it's going to do it. That's where computer algorithms come in. The algorithm is the basic technique used to get the job done.



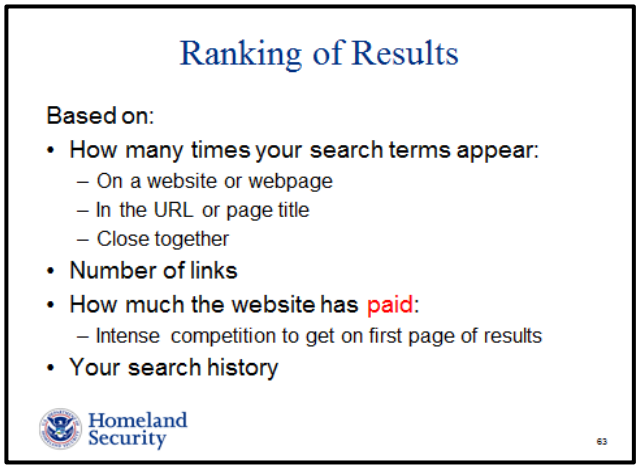
3.4.4 General Search Engines

General search engines dominate the search market; they are what most Web users are familiar with. Many general search engines, particularly Google, Bing, and Exalead, have started to mimic each other in how they allow for categorized searches by images or photos, maps, videos, news, or blogs.

3.4.5 Search: Search Basics & Search Advanced

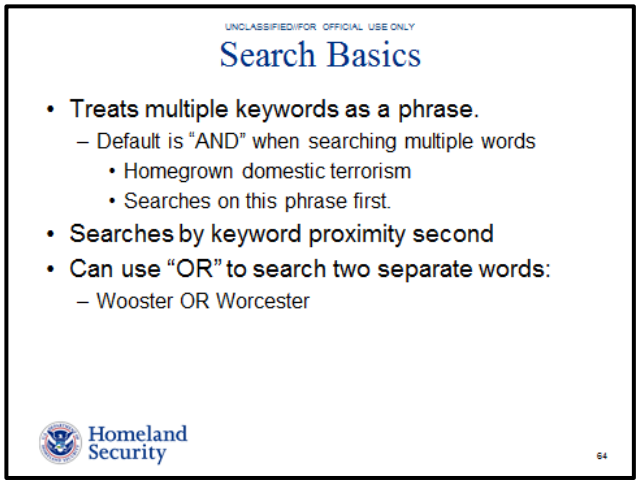
3.4.6 Search Engine's Ranking of Results

Ever wonder why a search engine returns the results of your query in a certain order? Most search engines have their own proprietary algorithms, or mathematical code that decide how to rank your search results. Most search engines use some formulation of these main factors.



3.4.7 Search Basics

Keep Google Search's standard operating procedure (SoP) in mind when entering your search terms.

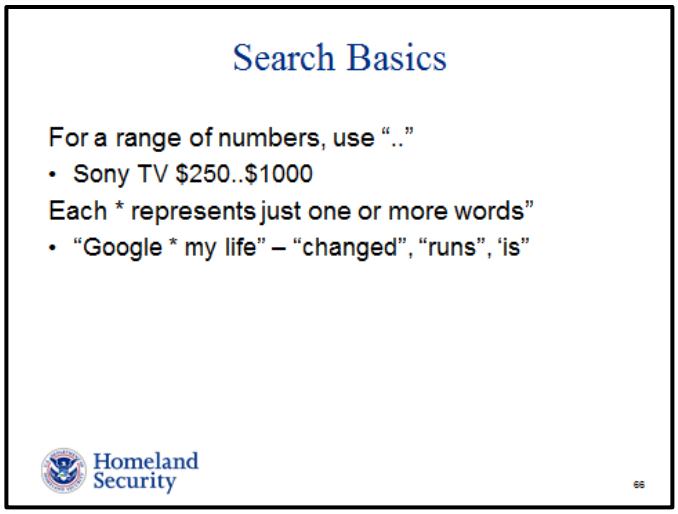


3.4.8 Search Basics

(http://www.google.com/insidesearch/tipstricks/all.html) – can check flight schedules, read public domain books, find public data, and much more.

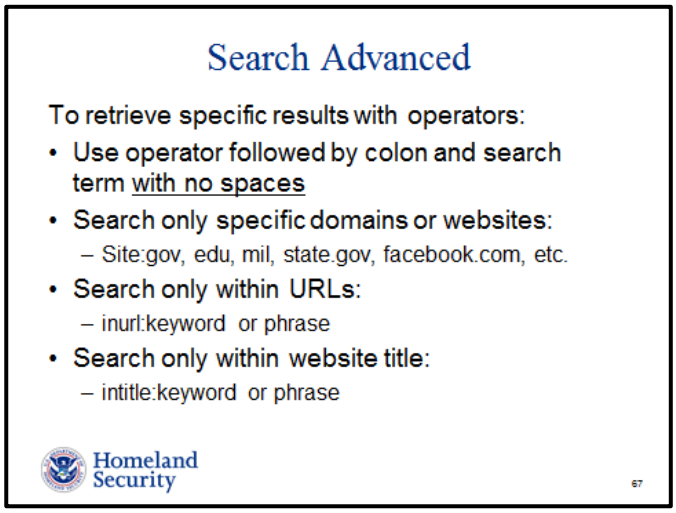
- Several ways to maximize effective searching by using techniques to generate more specific results.

3.4.9 Search Basics (cont.)



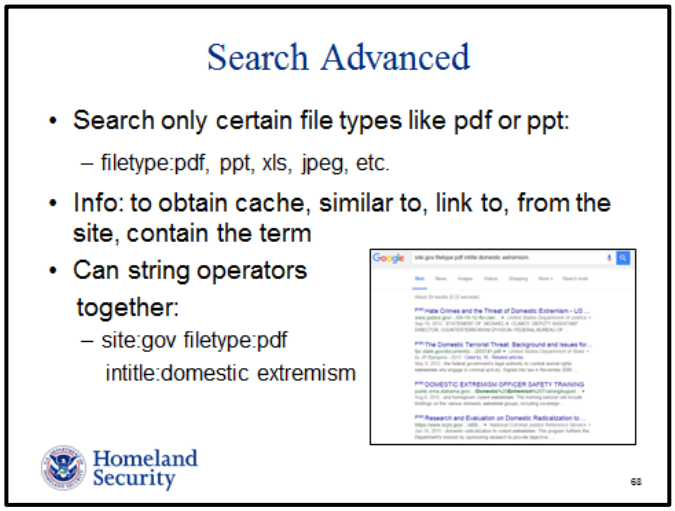
3.4.10 Search Advanced

Google search operators are very helpful for advanced searches and quickly narrowing down searches. Note that there are no space between the operator, the colon and the search term.



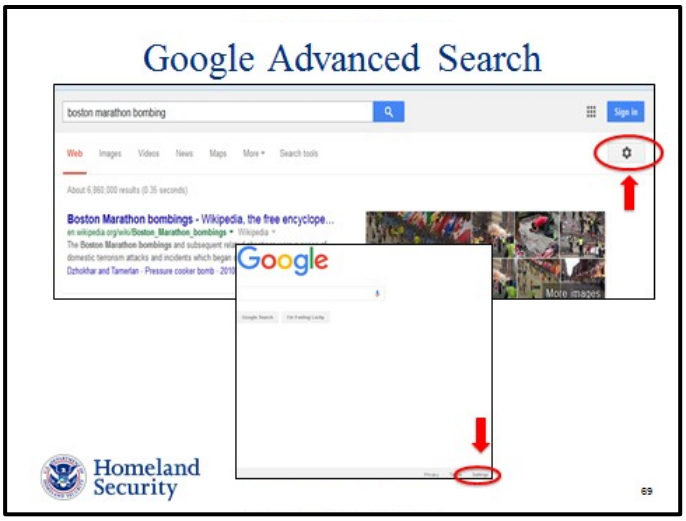
3.4.11 Search Advanced

Other Google search operators.



3.4.12 Google Advanced Search

It's simple to do a more advanced search in Google. Follow these steps.

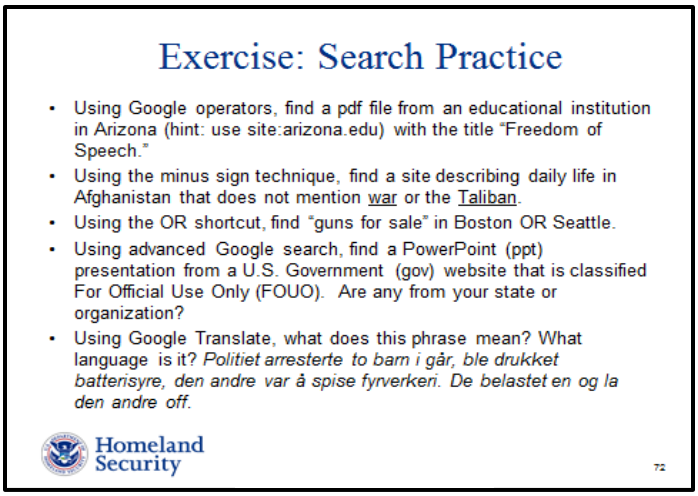


3.4.13 More Google Tools

To see more Google tools, go back to the Google homepage and click on "More" again. Scroll down to the bottom of the menu and click "Even more." This takes you to the full suite of Google products. Come back here often because it's always changing.

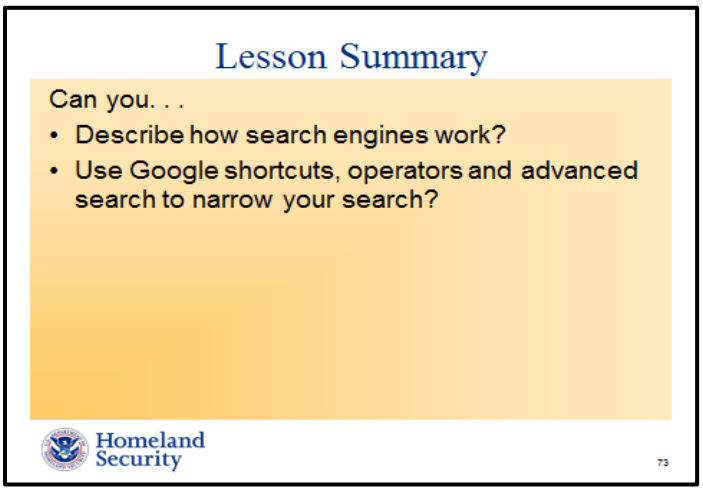
3.4.14 Exercise

3.4.15 Exercise: Search Practice

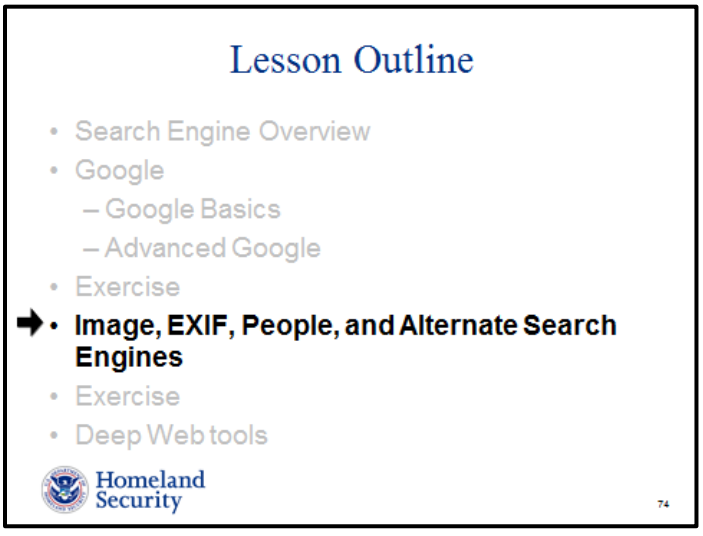


3.4.16 Lesson Summary

Describe how search engines work?
Can you use Google shortcuts and operators to narrow your search?



3.4.17 Image, EXIF, People, and Alternate Search Engines

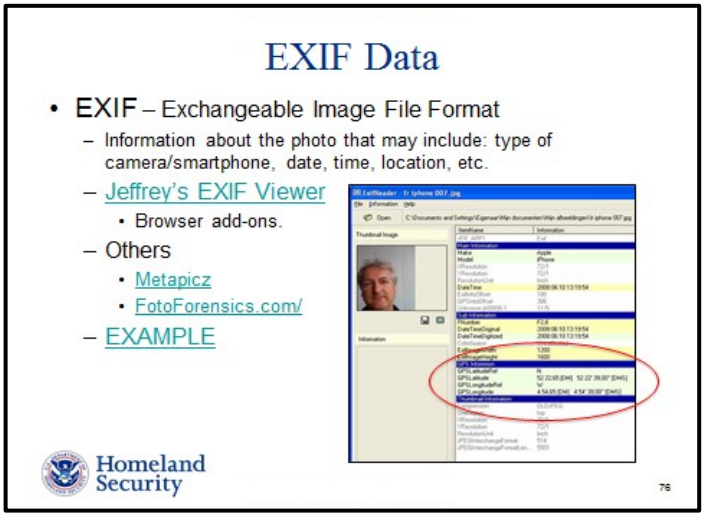


3.4.18 Image Searching

Images searching may help you determine where an image was posted on social media or may help you locate an individual or provide clues to a crime.

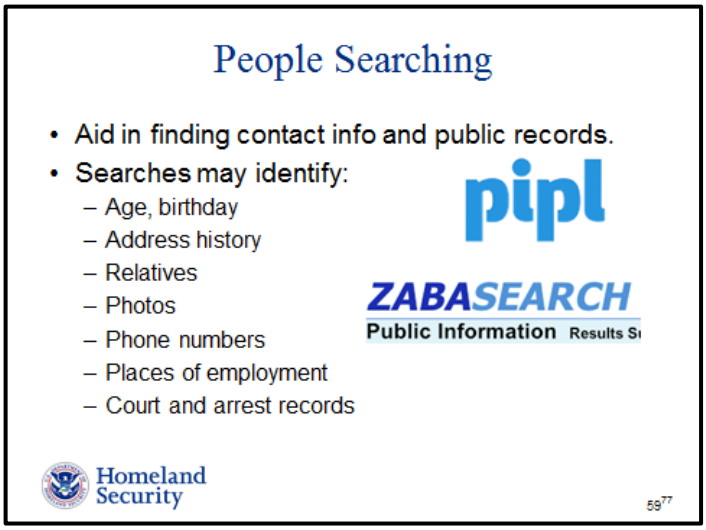
3.4.19 EXIF Data

The EXIF data contained within a photo may help reveal when the photo was taken, where it was taken, and who took the photo.



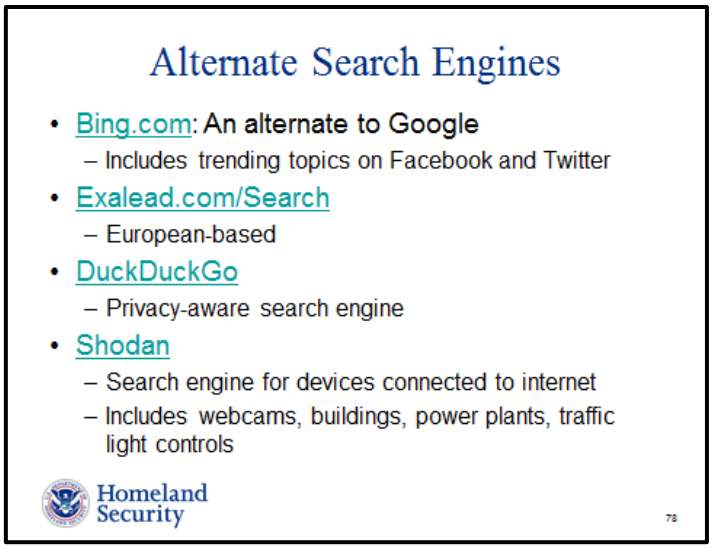
3.4.20 People Search Engines

People search engines comb public records and social networking sites for age and date of birth (DOB), address history, relatives, photos, phone numbers, places of employment, court records, and arrest records.



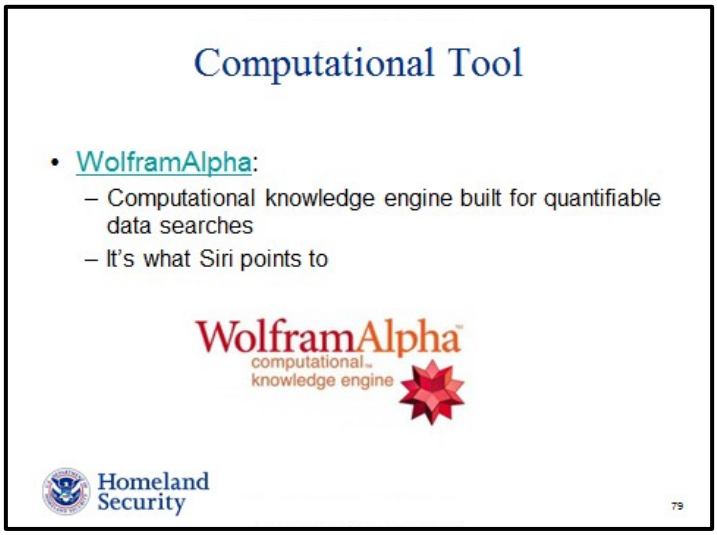
3.4.21 Alternate Search Engines

Although Google maintains primacy, other search engines may provide varying results that do not appear on Google and thereby broaden your search results.

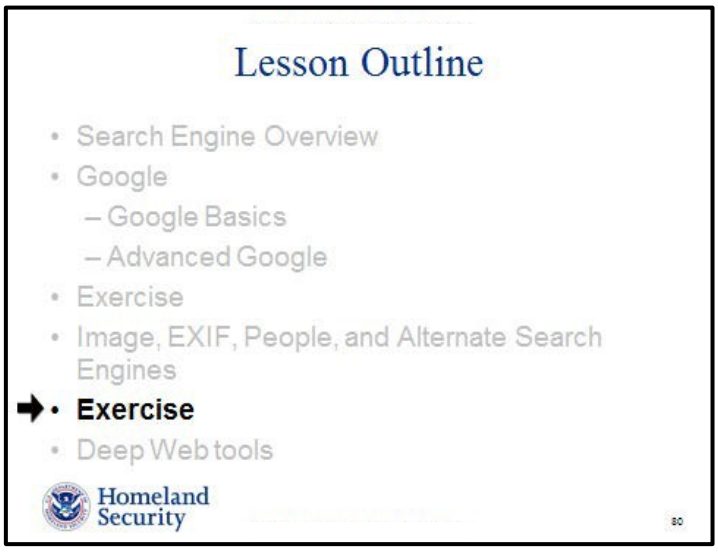


3.4.22 Computational Tool

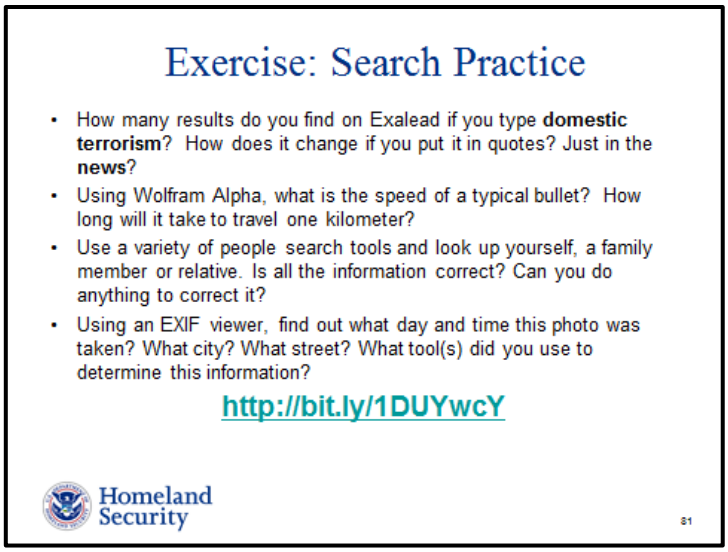
Wolfram Alpha is a computational knowledge engine built for objective and quantifiable data; shows graphical and numerical representations of your search subject.



3.4.23 Exercise

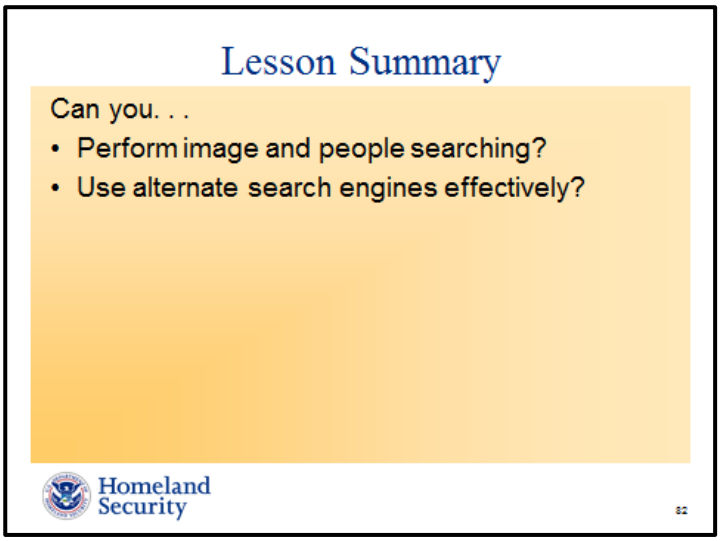


3.4.24 Exercise: Search Practice



3.4.25 Lesson Summary

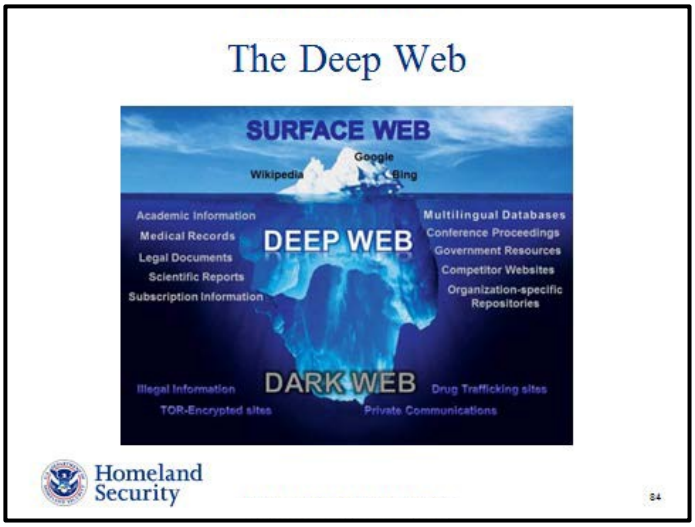
- Perform image and people searching?
- Use alternate search engines effectively?



3.5 DEEP WEB TOOLS

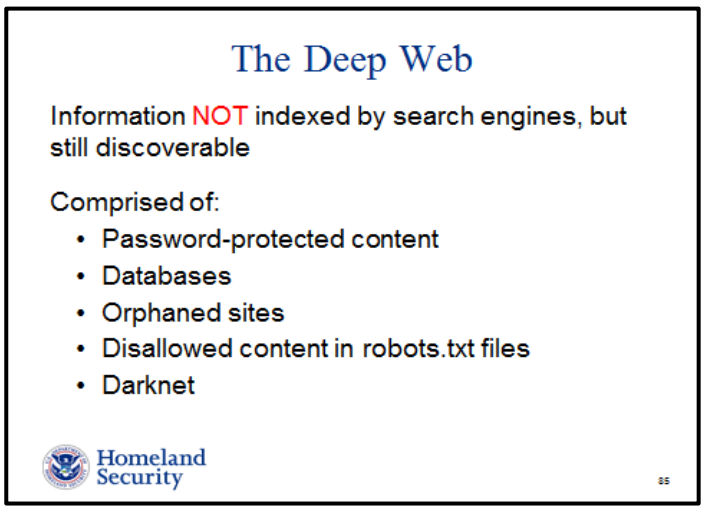
3.5.1 The Deep Web

Search engines can only access the "surface" Web, which by most estimates is a tiny fraction of the Deep Web—everything else that search engines don't see. The figures on the slide graphic are just one estimate.



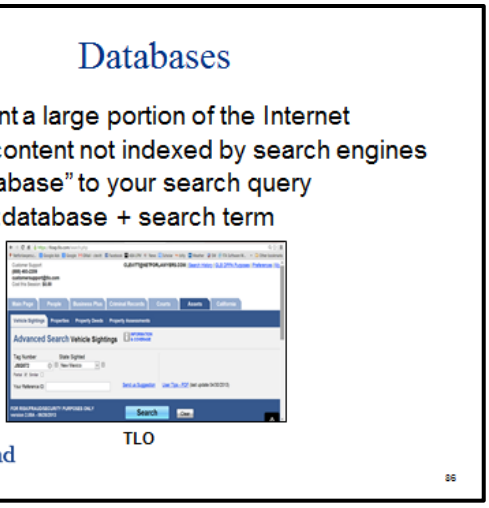
3.5.2 What Search Engines Don't See

What search engines do not index primarily makes up the Deep Web.



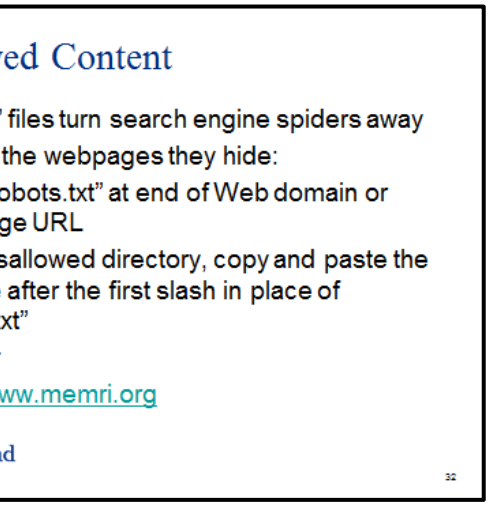
3.5.3 Digging into Databases

The simplest way to uncover databases is to add the word "database" to your search term.



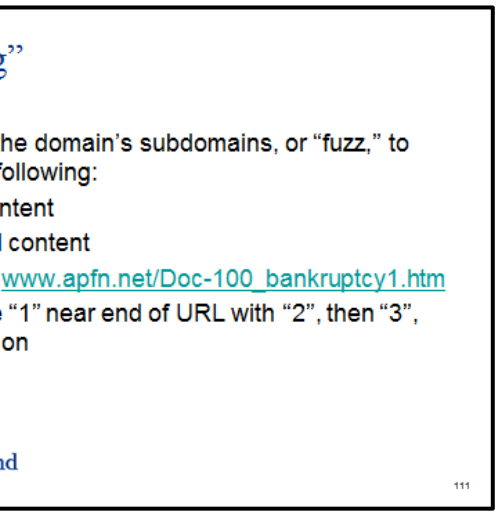
3.5.4 Disallowed Content

Disallowed content is a webpage that a webmaster doesn't want search engines to find, for whatever reason.



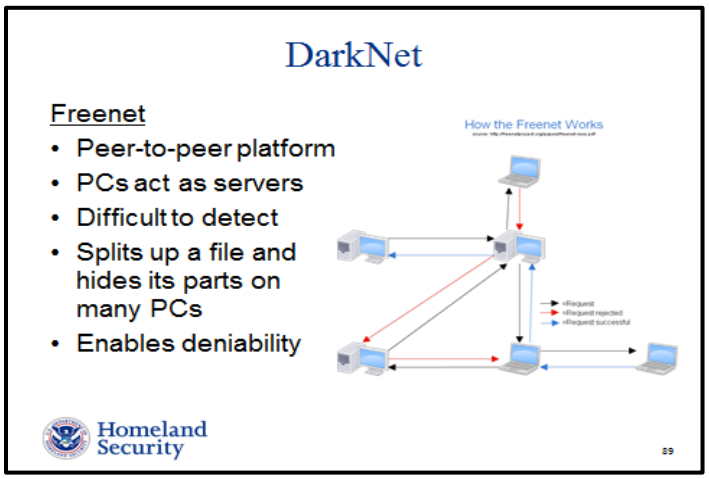
3.5.5 Fuzzing

Fuzzing allows users to sometimes find content that has been moved or does not have an active link. It also allows for navigation around a website to possible disallowed content.



3.5.6 DarkNet

The Freenet is a peer-to-peer platform on the Internet that enables censorship-resistant communication. It has an estimated 2 million users across the globe.



3.5.7 Darknet

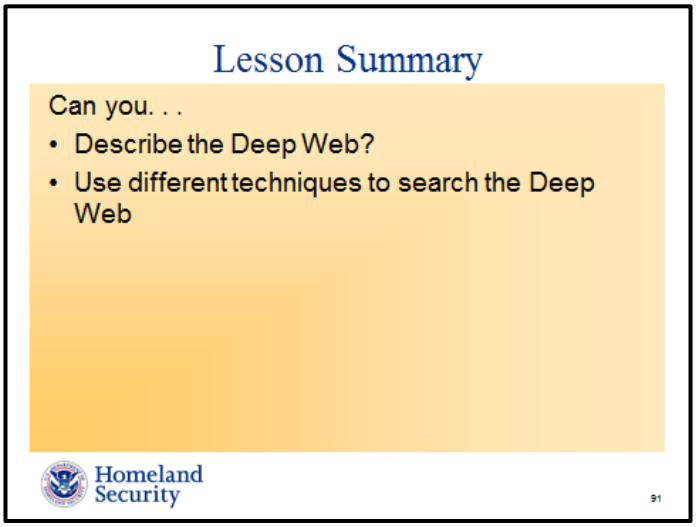
Accessible only through the TOR network, these are sites ending in .onion that are highly anonymous.

3.6 CONCLUSION

3.6.1 Lesson Review

Review questions:

- What are types of information on the Deep Web?
- What are some different techniques to search the Deep Web?



Lesson 4 – Social Networking

4.1 LESSON OVERVIEW

This lesson introduces and describes the major types of social media, including wikis, discussion groups, Twitter, social networking sites like Facebook, and virtual worlds. The lesson provides tools and techniques that learners can use to search common social media. It wraps up by discussing the implications of virtual worlds.

4.2 TOPICS COVERED

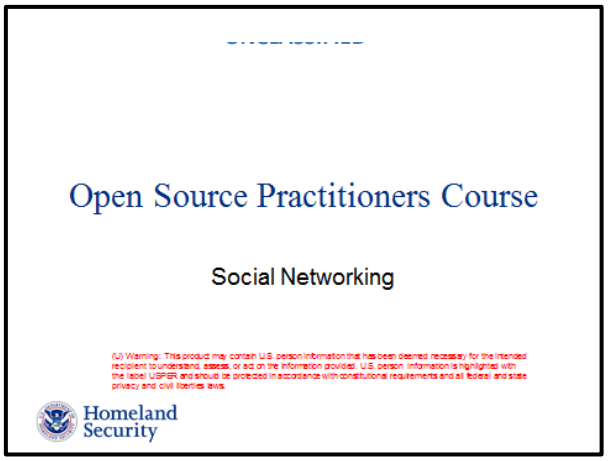
- Twitter
- Social Networking Sites
- Discussion Forums
- Wikis
- Virtual Worlds

4.3 LEARNING OBJECTIVES

Enabling Objectives:

- Given a research requirement, describe the major types of social media to a minimum of 75% accuracy.
- Given a research requirement, describe and search Twitter to a minimum of 75% accuracy.
- Given a research requirement, describe and search social networking sites to a minimum of 75% accuracy.
- Given a research requirement, search discussion groups and forums to a minimum of 75% accuracy.
- Given a research requirement, describe and use wikis to a minimum of 75% accuracy.
- Given a research requirement, describe the implications of virtual worlds for intelligence and law enforcement.

4.3.1 Social Networking

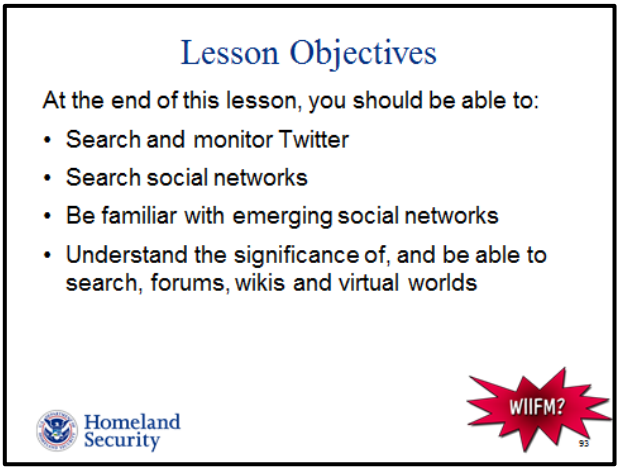


4.3.2 Objectives

Lesson Objectives

- Search and monitor Twitter.
- Search social networks.
- Be familiar with emerging social networks
- Understand the significance of, and be able to search, forums, wikis and virtual worlds

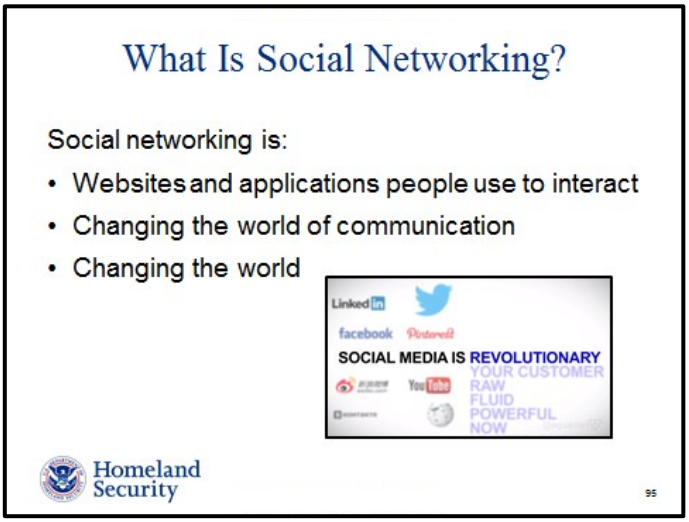
WIIFM = What's In It For Me? – Learning how to research social media will give you insight into what's happening today and foresight for what may happen tomorrow.



4.4 SOCIAL NETWORKING

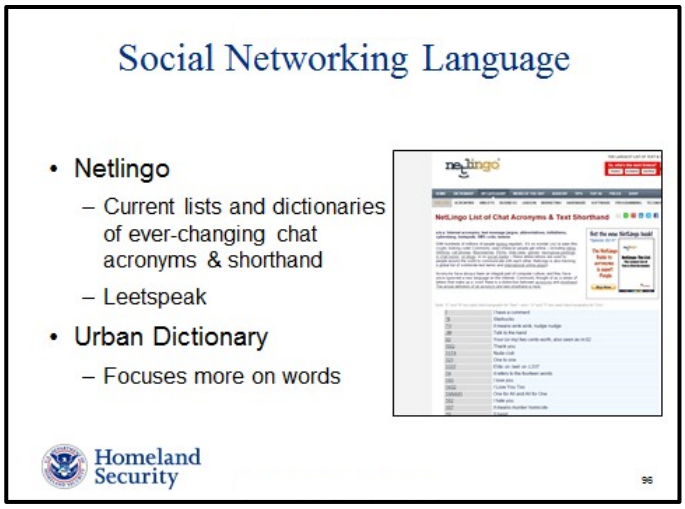
4.4.1 What Is Social Networking?

Social media is any kind of website or application that enables people to interact or share information. It comes in many forms, like online discussion groups, wikis, blogs, social networking sites, Twitter, and virtual worlds.



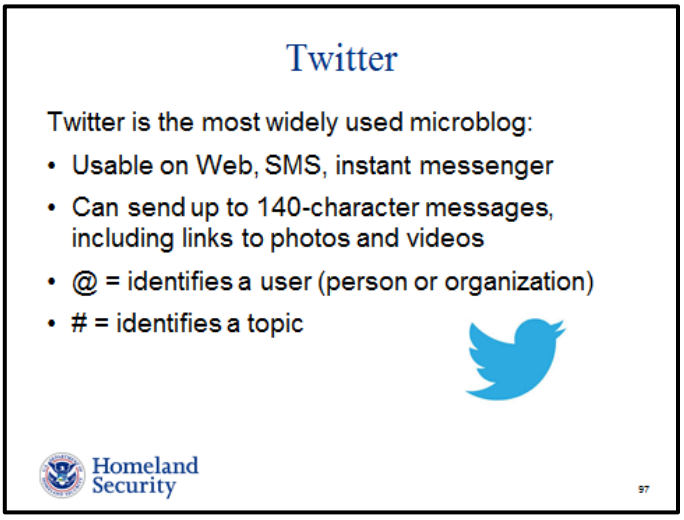
4.4.2 Social Networking Language

Several online services provide monitoring and reporting on the latest acronyms, slang, and abbreviations common on many social networking platforms.



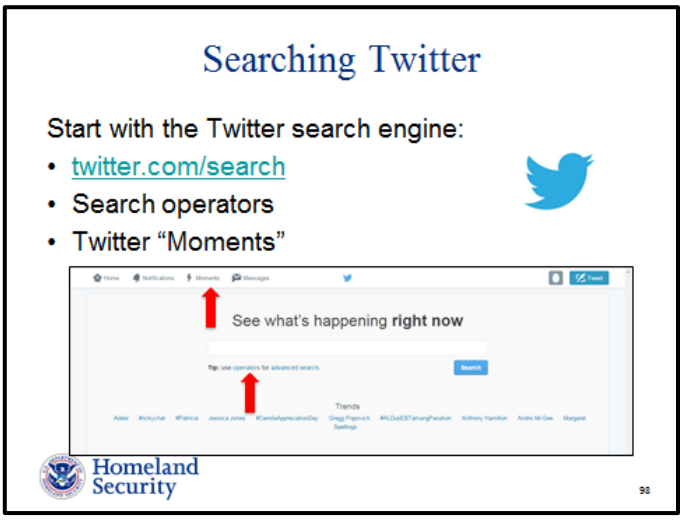
4.4.3 Twitter

Twitter has quickly became the most popular microblogging platform in the world. Microblogging is simply a short-form of blogging in which the posting or message size of users is strictly limited.



4.4.4 Searching Twitter

You don't need a Twitter account to monitor Twitter feeds or search tweets. The simplest way to search Twitter is to search on terms or hashtags from the Twitter search engine at Twitter.com/search.



4.4.5 Searching Twitter: Other Useful Tools

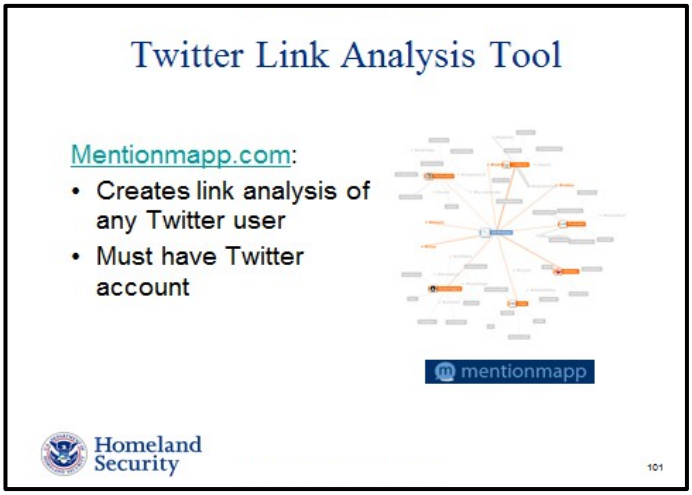
Here are some other useful tools for searching Twitter. Some require being logged into a Twitter account to use.

4.4.6 Monitoring Twitter

Search Twitter using geographic coordinates and Twitter operators.

4.4.7 Twitter Link Analysis Tool Mentionmapp

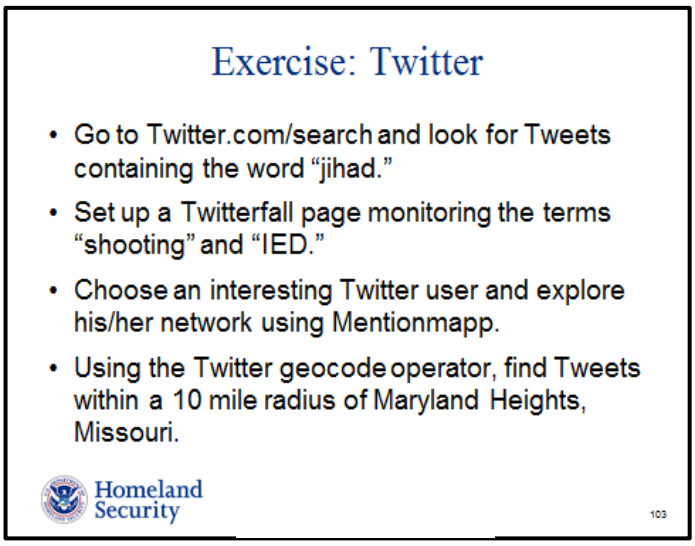
(http://www.mentionmapp.com) creates a link analysis of "mentions" by Twitter users.



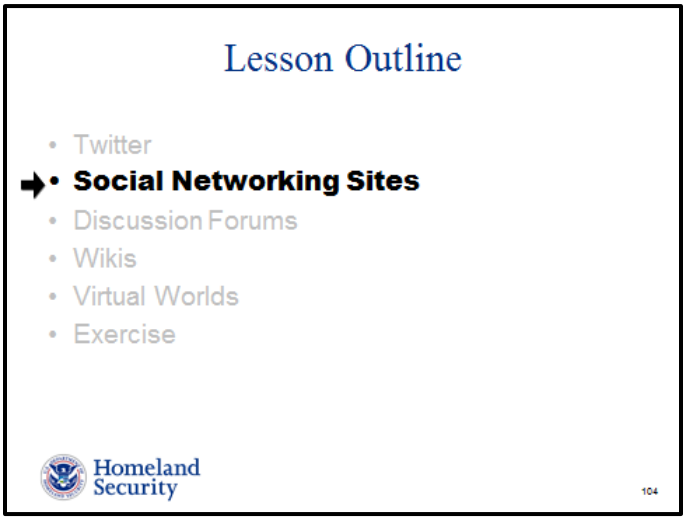
4.4.8 Twipho

(http://www.twipho.net) displays recently uploaded photos from Twitter.

4.4.9 Twitter Exercise

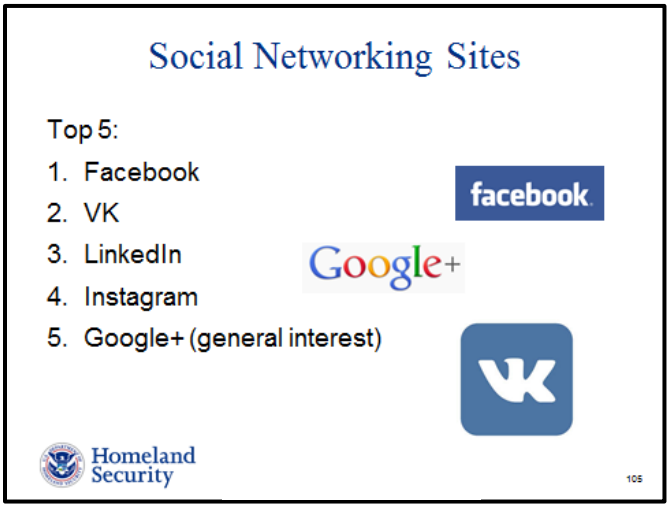


4.5 SOCIAL NETWORKING SITES



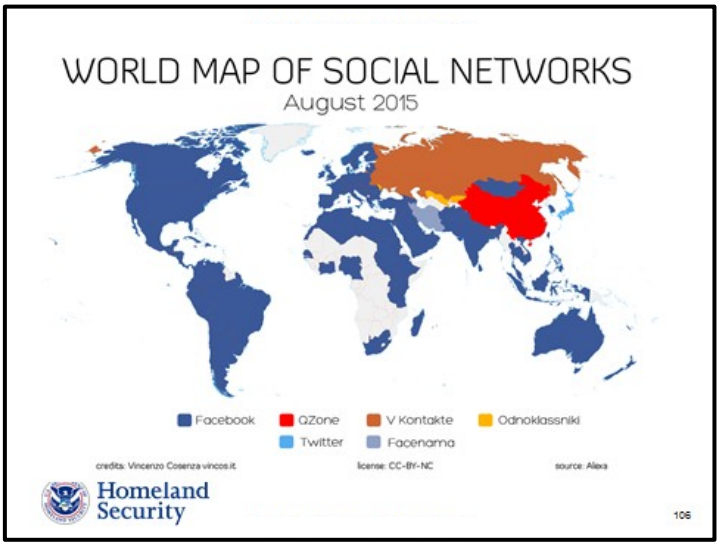
4.5.1 Social Networking Sites

The six most popular social networking sites in the Western world stand well above the rest in terms of total registered users and unique monthly users.



4.5.2 Growth of Facebook

Facebook has grown to dominate social networking, not just in the United States, but the whole world.



4.5.3 Search Facebook

Searching and using Facebook within the open source environment has grown increasingly difficult.

4.5.4 Searching Facebook with known name

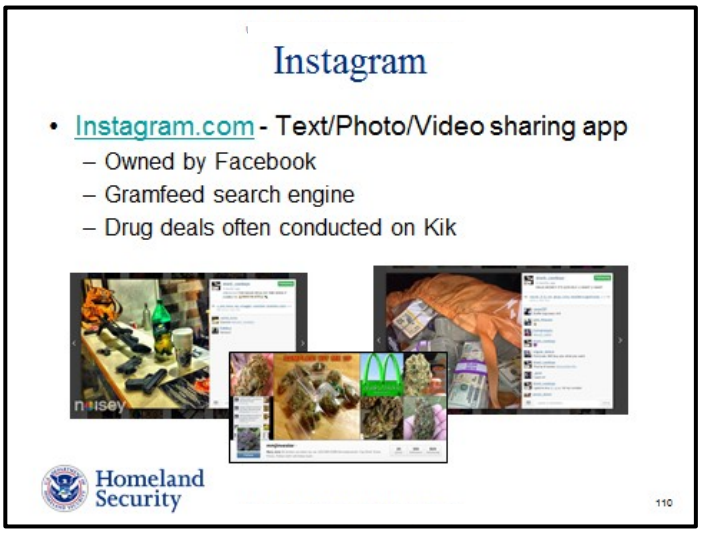
If you have the name of a person you're seeking, use various techniques to find them and their Facebook ID.

4.5.5 Searching Facebook for Keywords

To look for suspicious activity or keywords, use Facebook's search tool or Google.

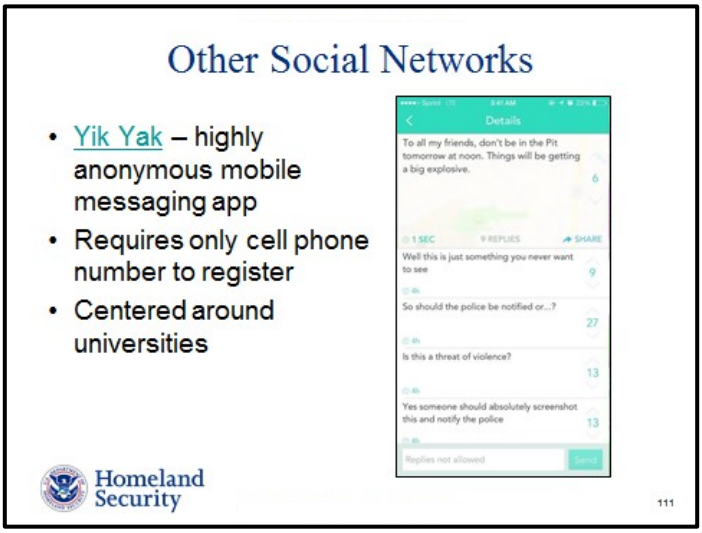
4.5.6 Searching Facebook for Keywords

To look for suspicious activity or keywords, use Facebook's search tool or Google.



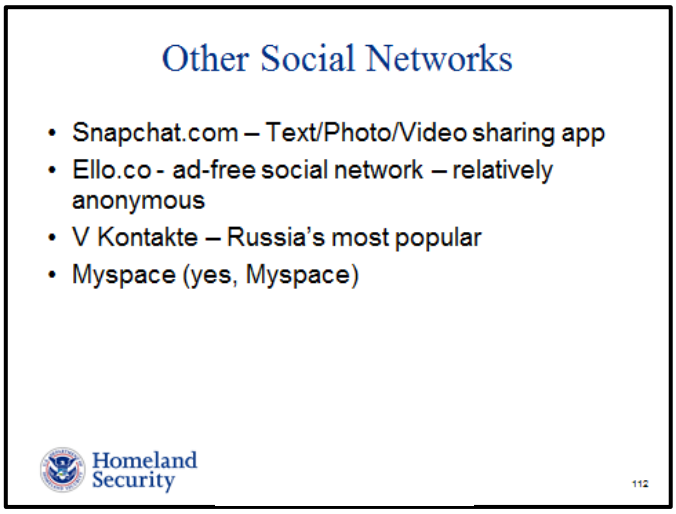
4.5.7 Yik Yak

Yik Yak is a social media app that allows people to anonymously create and view posts within a 10 mile radius depending on how many other users are nearby.



4.5.8 Other Social Networks

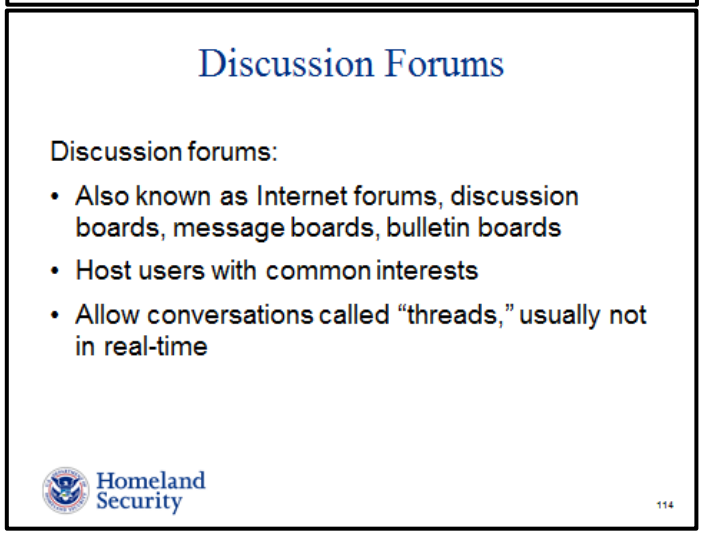
In an ever-changing technological world, social networking sites continue to arise and gain a foothold.



4.6 DISCUSSION FORUMS

4.6.1 Discussion Forums

Allow interactive conversations called "threads," usually not in real-time. This is a key difference with chat rooms, which are real-time.



4.6.2 Searching Discussion Forums

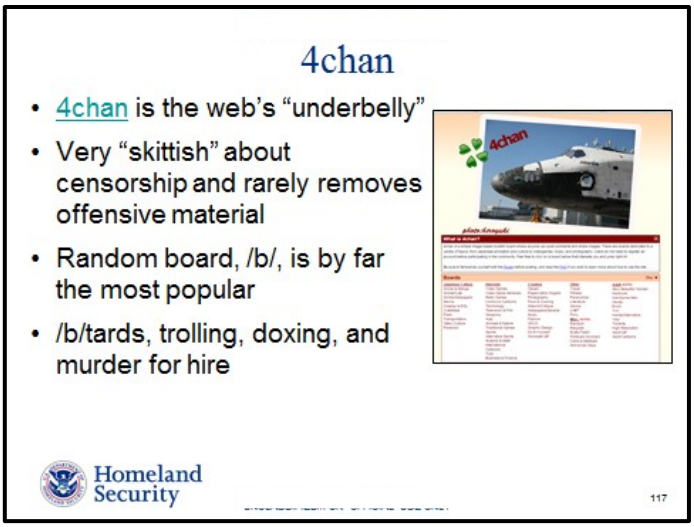
For best results use specialized forum search tools and jargon specific to the age of the group and/or its ideology.

4.6.3 Discussion Forums

Examples of jihadi discussion forums.

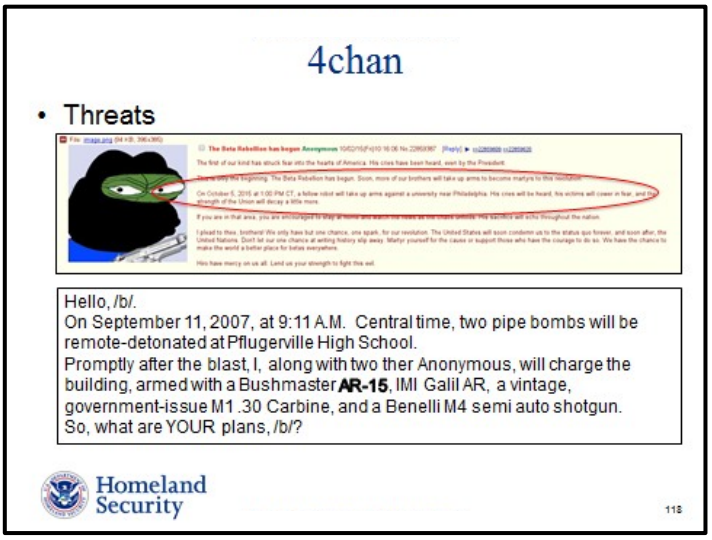
4.6.4 4chan

4chan is a simple image-based bulletin board where anyone can post comments and share images. There are boards dedicated to a variety of topics, from Japanese animation and culture to videogames, music, photography, and criminal activity.



4.6.5 4chan

Examples of threats posted on 4chan.



4.6.6 4chan

Another example of crime being posted on 4chan.

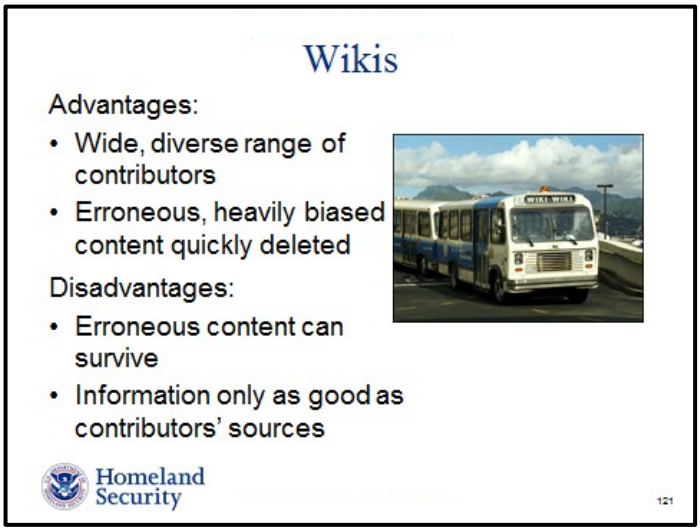
4.7 WIKIS

Let's first talk about wikis, a type of collaboration tool that shares some of the interaction characteristics of other social media.

B163

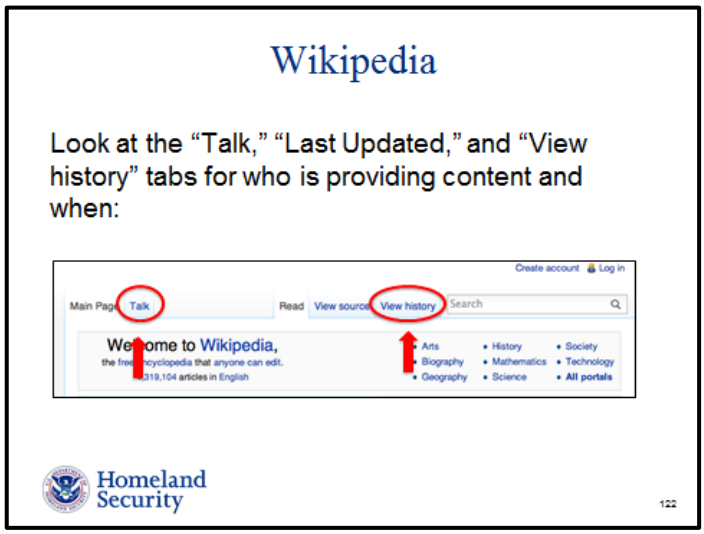
4.7.1 What Are Wikis?

A wiki is usually a web application that allows people to add, modify, or delete content in collaboration with others. A defining characteristic of wiki technology is the ease with which pages can be created and updated.

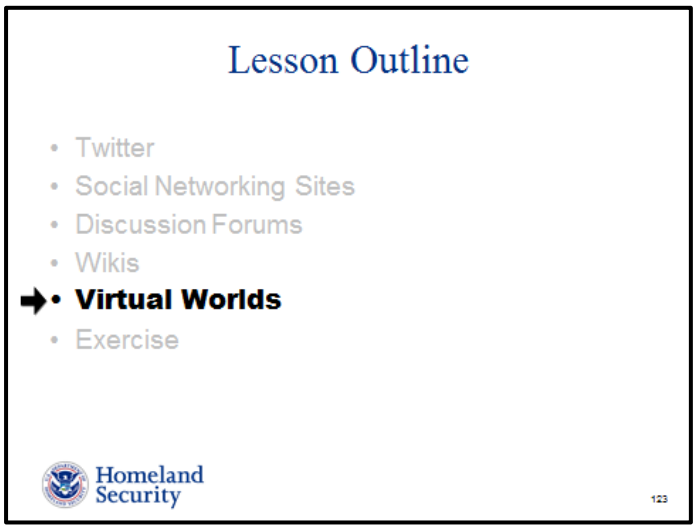


4.7.2 Wikipedia

To get a better idea of the credibility of Wikipedia content, click on the "Talk" tab to see the behind-the-scenes conversations among the content providers on a specific article. Also look at the "View History" tab to see a record of changes made to the article and who's making them.

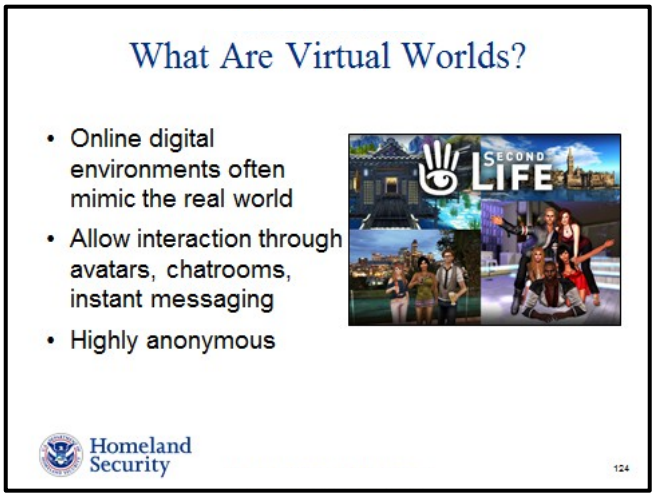


4.8 VIRTUAL WORLDS



4.8.1 What Are Virtual Worlds?

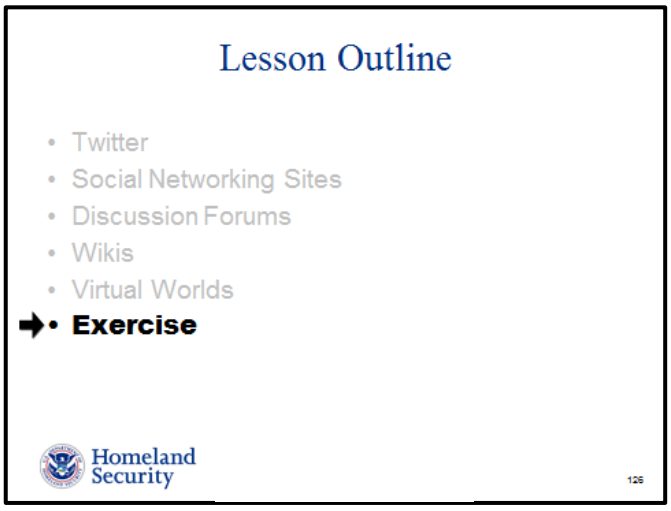
Virtual worlds are online digital environments that often mimic the real world.



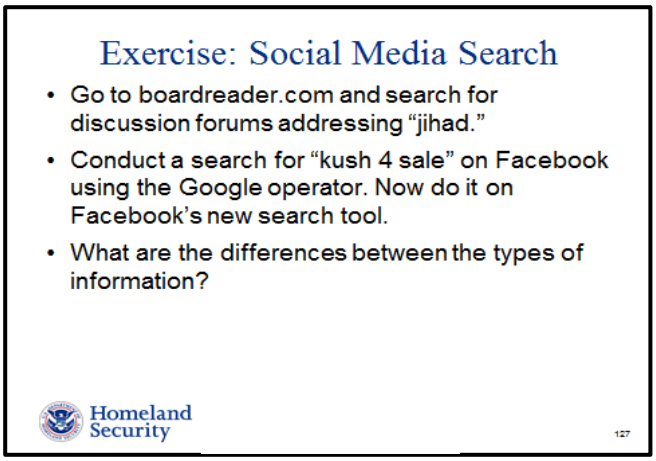
4.8.2 Why Care About Virtual Worlds?

Why should we as intelligence and law enforcement professionals care about virtual worlds?

4.9 EXERCISE



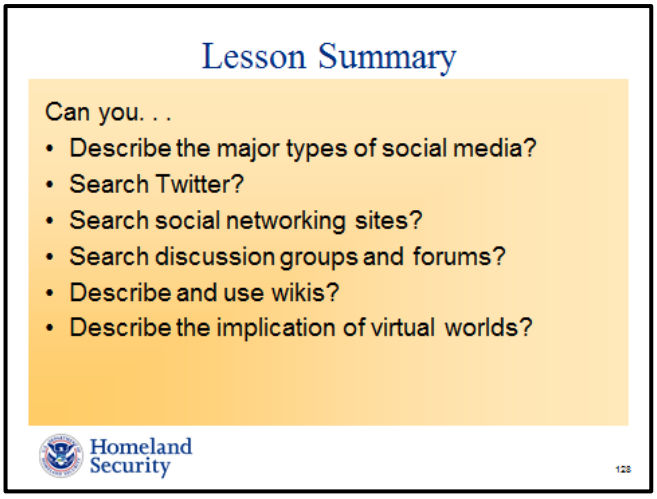
4.9.1 Exercise: Social Media Search



4.9.2 Lesson Summary

Review Questions:

- What are the major types of social media?
- Can you search Twitter?
- Can you search social networking sites?
- Can you search discussion groups and forums?
- Describe and use wikis?
- Describe the implication of virtual worlds?



Lesson 5 – Geographic Information System

5.1 LESSON OVERVIEW

This lesson shows learners how to use and analyze geospatial tools. It also exposes them to geospatial concepts and how they can be utilized in intelligence. The lesson demonstrates how to convert an excel spreadsheet into a KML file for upload to Google Earth in order to plot one's own points on the mapping tool.

5.2 TOPICS COVERED

- Geospatial Overview
- Geospatial Tools
- Keyhole Markup Language (KML) and KML conversions

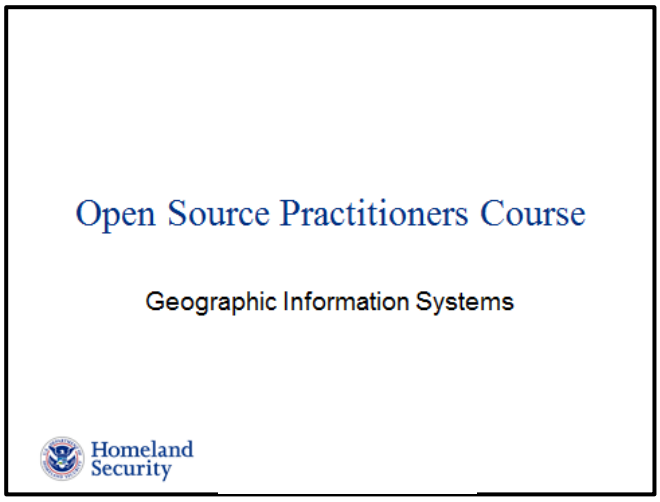
5.3 LEARNING OBJECTIVES

Enabling Objectives:

- Given the term GIS, define it to a minimum of 75% accuracy
- Given a classroom environment, describe geospatial concepts and their relevance to intelligence to a minimum of 75% accuracy.
- Given a classroom environment, analyze Web data using geospatial tools.

B167

5.4 GEOGRAPHIC INFORMATION SYSTEMS (GIS)

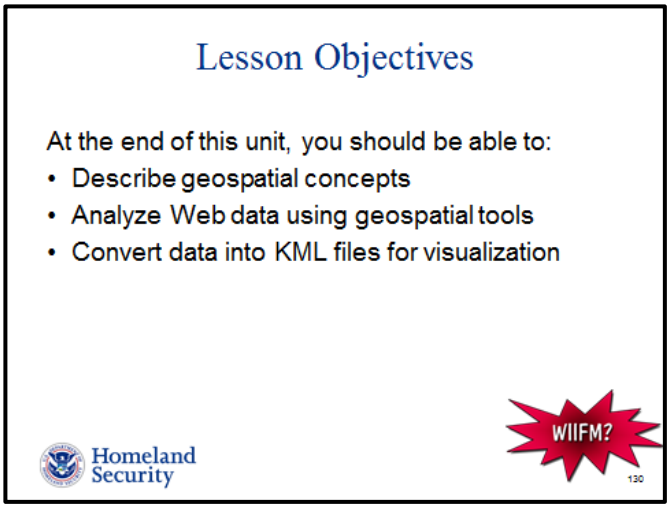


5.4.1 Objectives

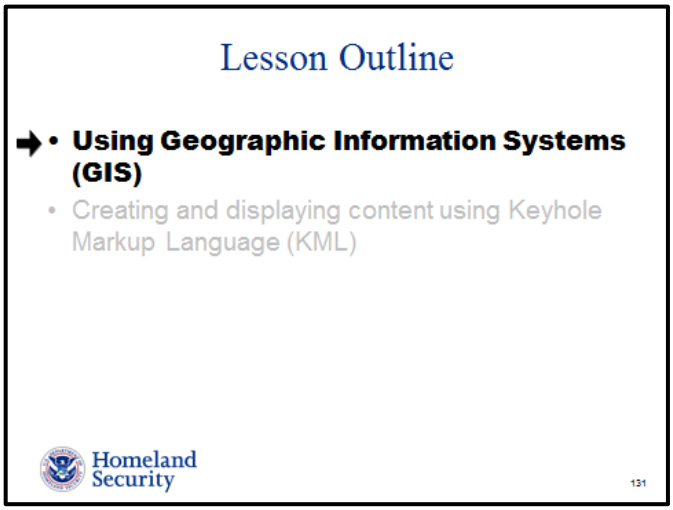
Lesson objectives:

- Describe geospatial concepts
- Analyze Web data using geospatial tools
- Convert data into KML files for visualization

WIIFM – What's In It For Me? – Using data visualization and geospatial tools will greatly enhance your analytic capabilities and help you more quickly communicate your analytic message.

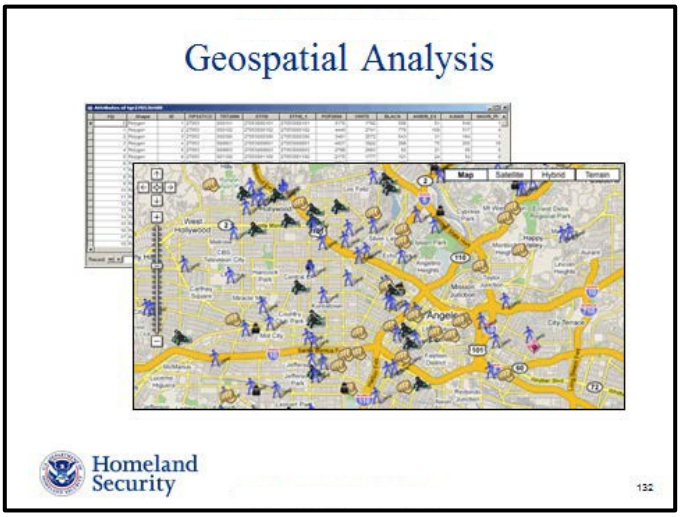


5.5 USING GEOGRAPHICAL IMFORMATION SYSTEMS (GIS)



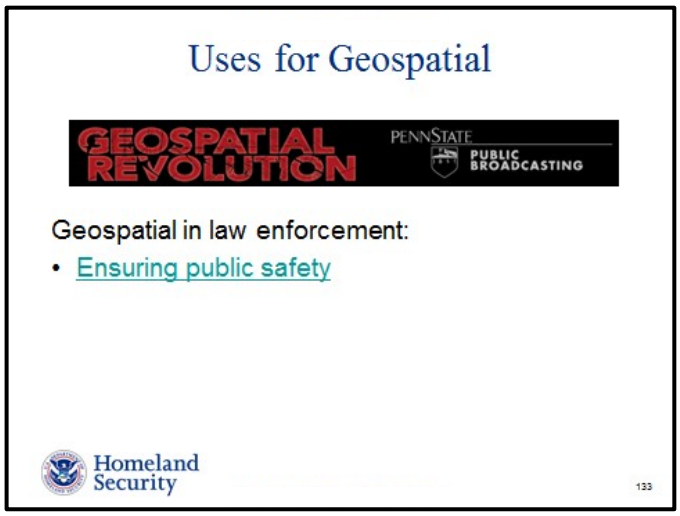
5.5.1 What Is Geospatial Information?

Geospatial information is any data that has a geographic or locational component to it.



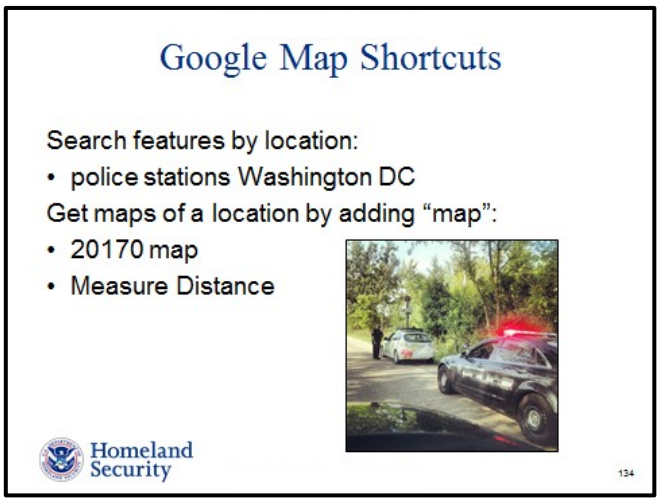
5.5.2 Uses for Geospatial

Geospatial information and analysis is becoming increasingly critical to intelligence and law enforcement efforts. It's evolved far beyond pushing pins into a map board.



5.5.3 Google Map Shortcuts

Like most of Google, shortcuts in Google Maps can help you find important geospatial data quickly.



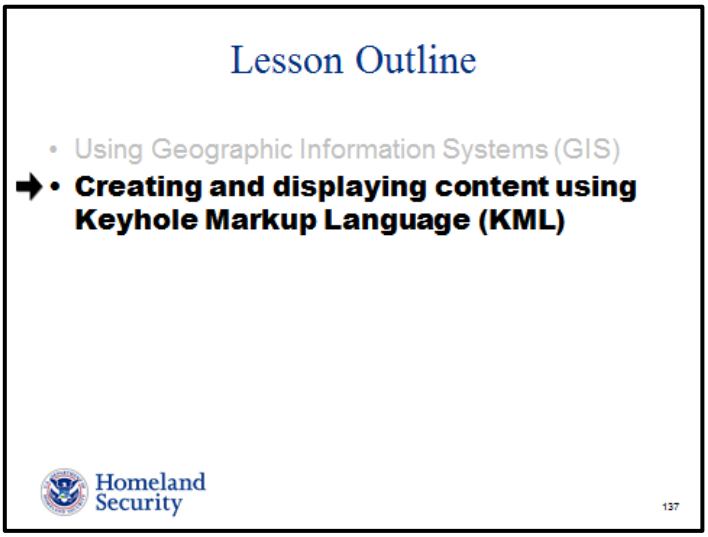
5.5.4 Geospatial Tools

Creepy and Echosec are geolocation OSINT tools, which gather geolocation related information from online sources. Likewise for Geofeedia and Snaptrends, which require high license fees.

5.5.5 Geospatial Tools

Other examples of Geospatial Tools

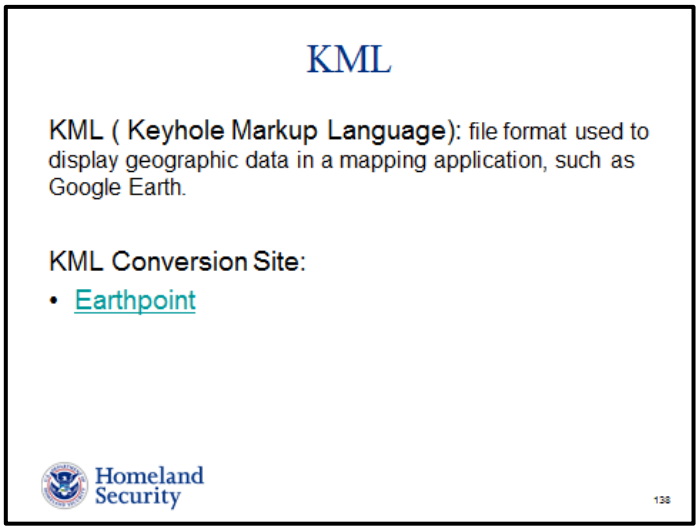
5.6 Creating and displaying content using keyhole markup language (kml)



B170

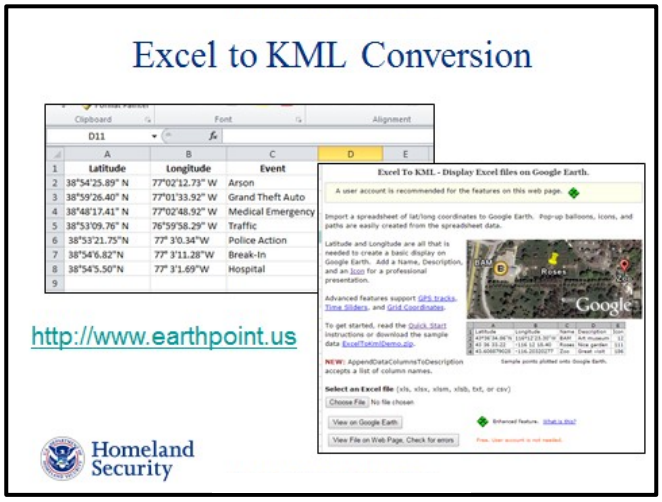
5.6.1 KML files

KML is a file format used to display geographic data in a mapping application, such as Google Maps for mobile.

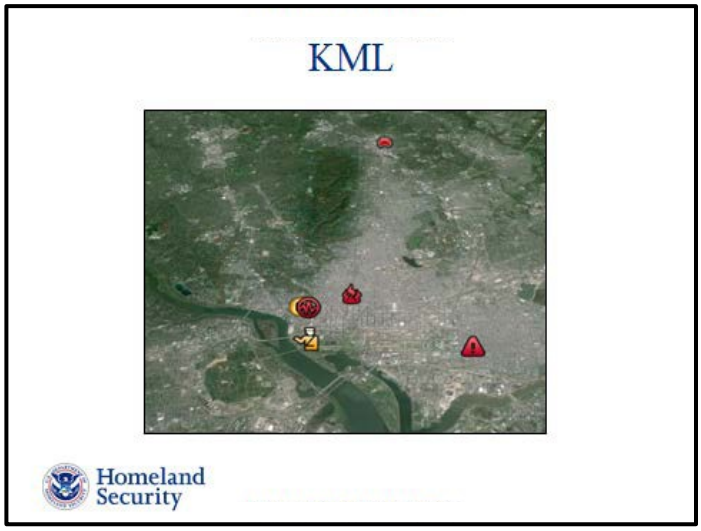


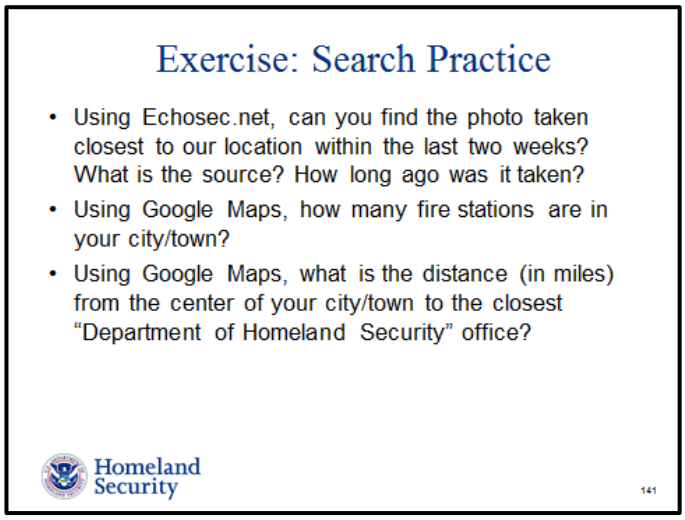
5.6.2 Excel to KML

Web-based tools exist to transfer data from XLS to KML and display on a map.



5.6.3 KML Example



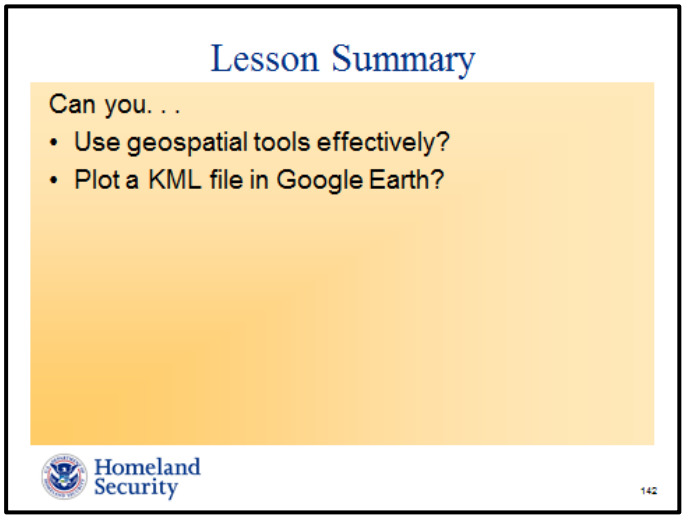


5.7 CONCLUSION

5.7.1 Lesson Review

Review questions:

- Describe geospatial concepts like a GIS and GPS?
- Analyze Web data using geospatial tools like MarineTraffic.com and Crimereports.com?
- Describe KML?
- Can you utilize KML files to visualize points on a map.



B172

Lesson 6 – Managing Your Data Streams

6.1 LESSON OVERVIEW

This lesson focuses on how to manage the data streams that open source researchers will find when employing the search tools and techniques covered in the course. The lesson provides instruction on how to set up Google Alerts; how to capture an RSS feed, filter it, and send it to a feed reader; and how to navigate and retrieve information from OpenSource.gov.

6.2 TOPICS COVERED

- Google Alerts
- RSS Feeds
- OpenSource.gov

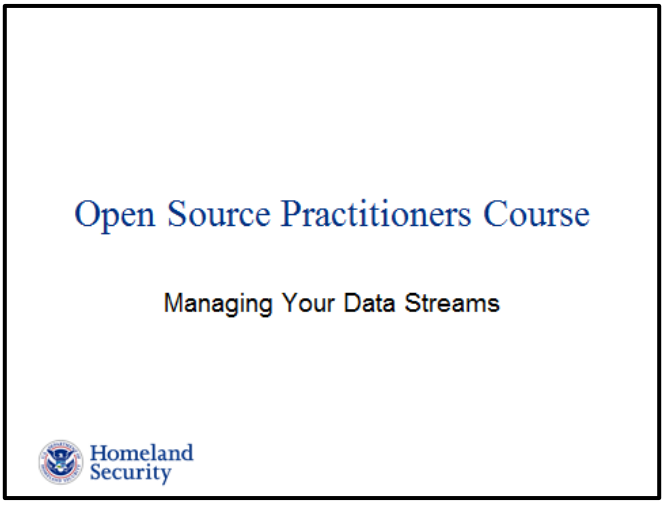
6.3 LEARNING OBJECTIVES

Enabling Objectives:

- Given a classroom environment, set up a Google Alert to a minimum of 75% accuracy.
- Given a classroom environment, describe RSS and its benefits in managing open source data streams to a minimum of 75% accuracy.
- Given a classroom environment, subscribe to and filter an RSS feed to a minimum of 75% accuracy.
- Given a classroom environment, describe and use the resources on Federal Portals to a minimum of 75% accuracy.

B173

6.4 INTRODUCTION

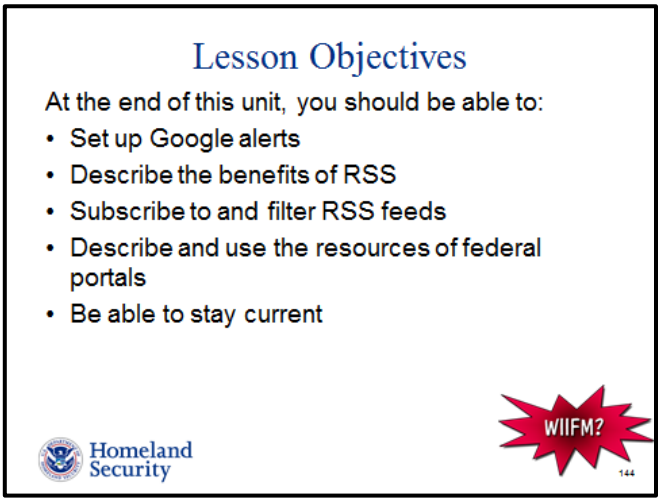


6.4.1 Objectives

Lesson objectives:

- Set up Google alerts.
- Describe the benefits of RSS.
- Subscribe to and filter RSS feeds.
- Describe and use the resources of federal portals.
- Be able to stay current.

WIIFM = What's In It For Me? – RSS Feeds can help you manage a large volume of new information while not missing anything important.



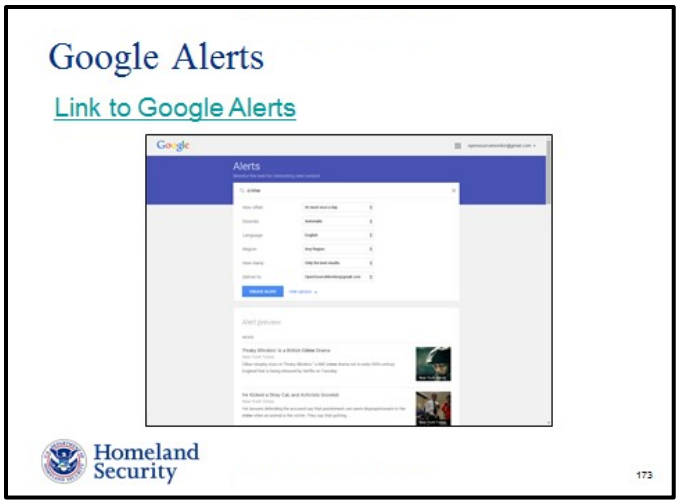
6.5 GOOGLE ALERTS

6.5.1 Google Alerts

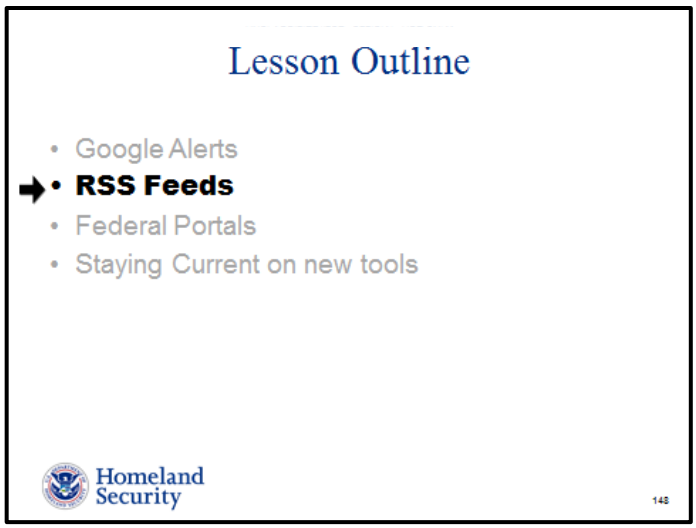
Google Alerts is a service offered by Google that conducts automated searches and notifies users by email, or as a feed, about the keywords they enter.

6.5.2 Google Alerts

Google Alerts also allow its users to determine the frequency in which checks are made for new results.



6.6 RSS FEEDS

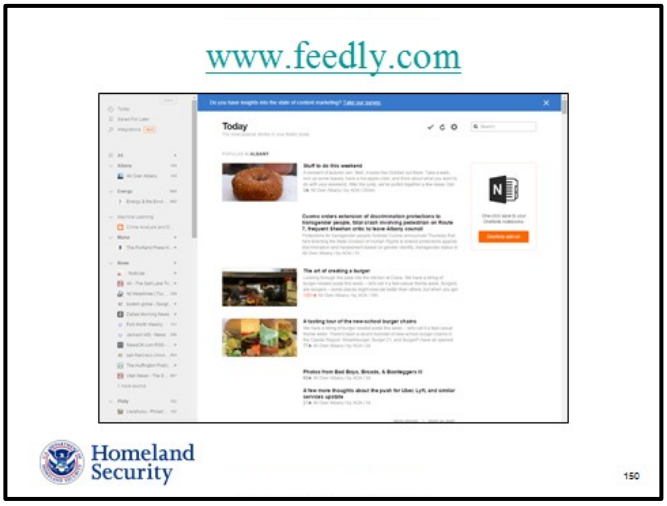


6.6.1 RSS Feeds: What Is An RSS Feed?

RSS is a valuable, time-saving tool for monitoring large volumes of information.

6.6.2 RSS Feeds: Feed Reader

The first step in setting up an RSS feed is to pick an RSS reader. Here is one easy-to-use aggregator that has picked up some business from the discontinued Google Reader.



6.6.3 RSS Feeds: Find An RSS Feed

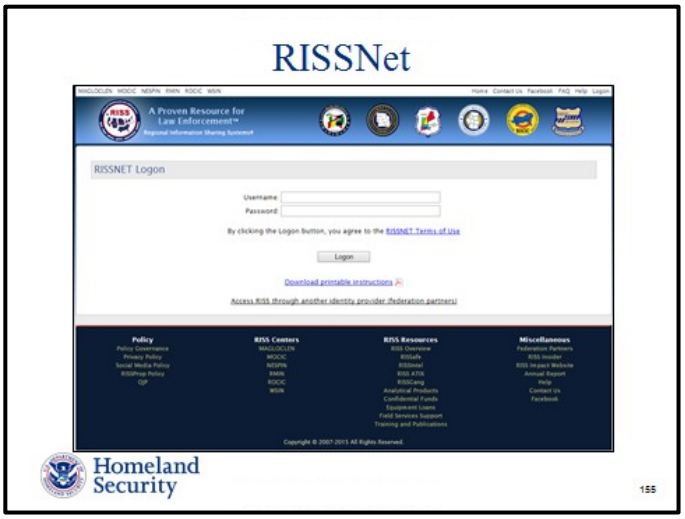
The third step is to find an RSS feed to follow. Check your favorite major news sites like CNN, *The New York Times*, MSNBC, your local newspaper, or specialized news source like your favorite blog.

6.7 FEDERAL PORTALS

6.7.1 OpenSource.gov

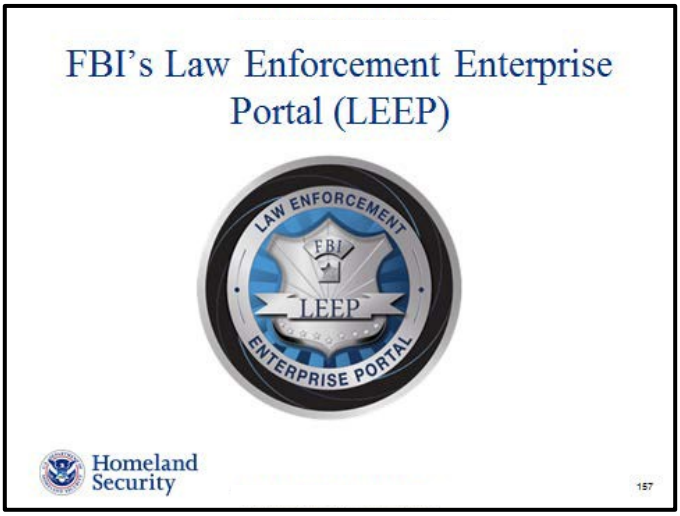
6.7.2 Intelink

6.7.3 RISSNet



6.7.4 Homeland Security Information Network (HSIN)

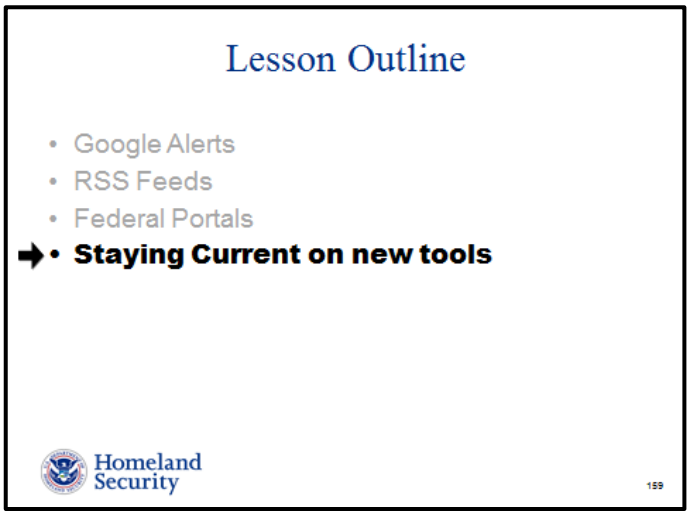
6.7.5 FBI's Law Enforcement Enterprise Portal (LEEP)



B178

6.7.6 DHS TRIPwire

6.7.7



6.7.8 Staying Current on OSINT Tools

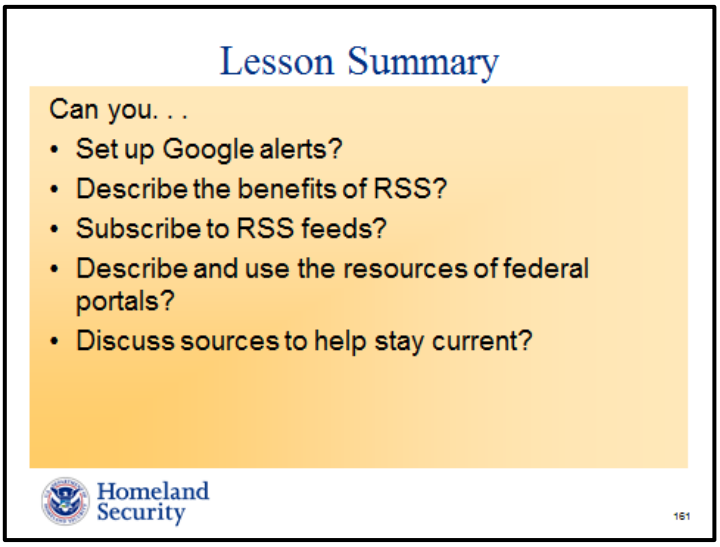
Many websites exist to keep track of all the latest developments on the internet.

6.8 CONCLUSION

6.8.1 Lesson Summary

Review questions:

- How do you set up a Google alert?
- What are the benefits of RSS? What does RSS stand for?
- How do you subscribe to RSS feeds?
- What are some of the federal portals available to you?
- Discuss the sources to help you stay current.



OPEN SOURCE WEBSITES & TOOLS

1. GOVERNMENT OPEN SOURCE PORTALS

DNI Open Source Center	https://www.opensource.gov	National Open Source Enterprise product repository
Regional Information Sharing Systems (RISS)	https://www.riss.net/	Resources and services for LE
Intelink	https://www.intelink.gov/	Intelligence Community internet
Homeland Security Information Network (HSIN)	http://www.dhs.gov/homeland-security-information-network-hsin	HSIN trusted network for homeland security
Law Enforcement Enterprise Portal (LEEP)	https://www.cjis.gov/CJISEAI/EAIController	FBI gateway to beneficial resources
TRIPwire	https://tripwire.dhs.gov	DHS technical resources for incident prevention

INTERNET SEARCH ENGINES

Google	www.google.com	Most popular engine (relevancy-based algorithm)
Yahoo	www.yahoo.com	Common search engine (popularity-based algorithm)
Bing	www.bing.com	Microsoft-developed search and decision engine
Search Both	www.searchboth.com	Multiple search engine side-by-side comparison tool
Exalead	www.exalead.com/search	European-focused search engine (based in France)
Baidu	www.baidu.com/	Asian-focused search engine (based in Beijing, China)
Kartoo	www.kartoo.com	Visualization Search Engine and directory
Pixsy	www.pixsy.com	Search engine for millions of videos and images
Blinkx	www.Blinkx.com	Video Search Engine
2Lingual	www.2lingual.com	Simultaneous search in two different languages
Vimeo	www.vimeo.com	Video sharing site
Flickr	www.flickr.com/	Video and image searching
Wiki.com	www.wiki.com	Searches wiki-related websites

PRIVACY-AWARE SEARCH ENGINES

Duck Duck Go	https://duckduckgo.com/	Removes referral information; disallows cookies
Yippy	http://www.yippy.com/	Does not track activity, store history, record searches
Ask	http://www.ask.com/	Provides optional AskEraser privacy feature

DIRECTORIES AND DEEP WEB PORTALS

Open Directory		
Internet Public Library	http://www.ipl2.org	Maintained by professional research librarian cadre
WWW Virtual Library	http://vlib.org/	First human index of content on the world wide web
Information Bridge	www.osti.gov/bridge	Access to Department of Energy research literature
Science Information	www.science.gov	Search capabilities provided by DOE/Oak Ridge, TN
Deep Web Search	www.deepwebtech.com	Meta-search engine for science, medicine, business
Engineering	www.techxtra.ac.uk/index.html	Focuses on engineering, mathematics, and computing

RSS READERS

FeedBucket	www.feedbucket.com	Free Web-based; quick, easy way to view RSS feeds
JetBrains	www.jetbrains.com/omea/reader	Free downloadable; reader and newsgroup aggregator
FeedGhost	www.feedghost.com	Free download; prioritize, organize by tag, and share
InoReader	http://www.inoreader.com/	Free Web-based RSS reader

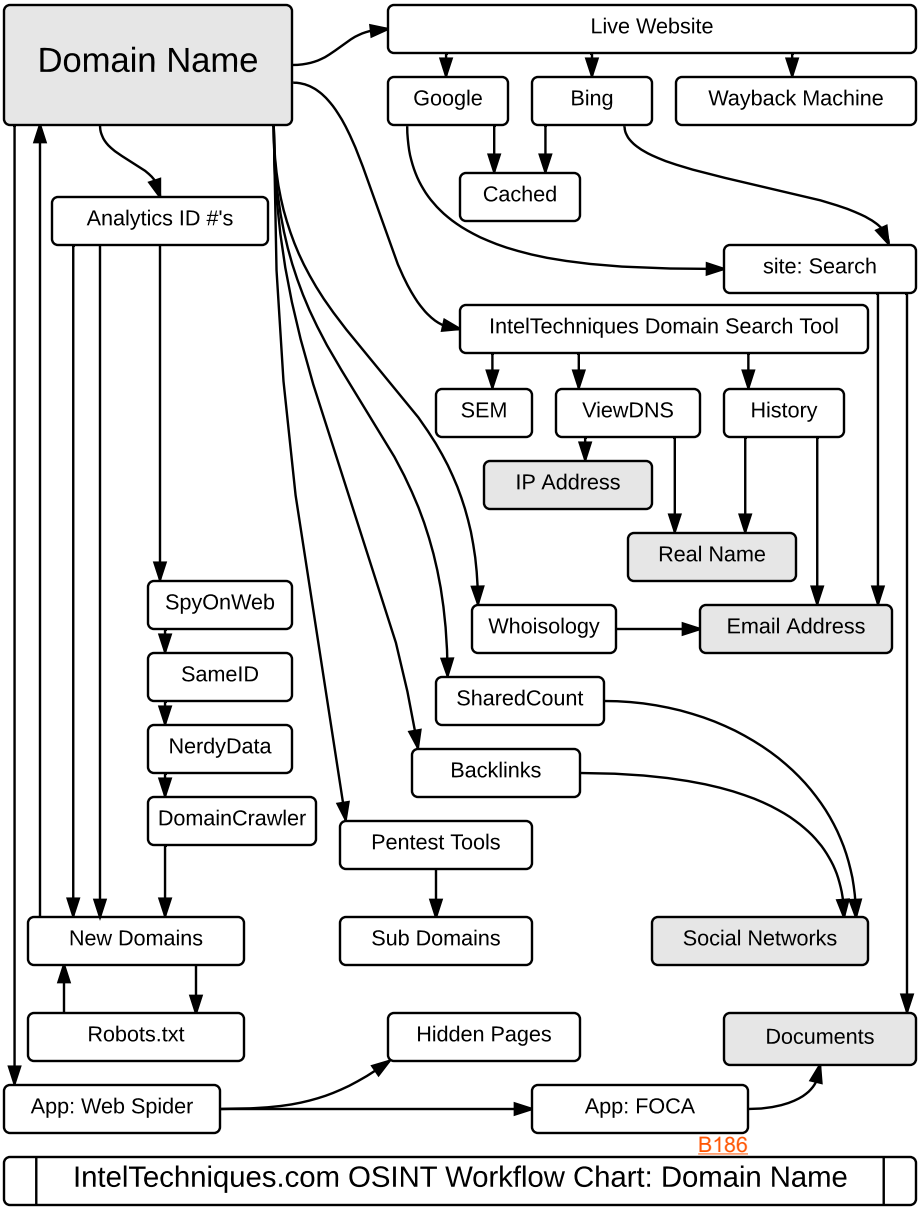
Feedly	www.feedly.com	Free Web-based; customizable, quick, easy way to view RSS feeds
RSS FEED FILTERS		
Feed Rinse	www.feedrinse.com	Advanced RSS spam filter for RSS subscriptions
MACHINE LANGUAGE TRANSLATION TOOLS		
Google Translate	http://translate.google.com	Instantaneous translation of supported languages
Yahoo	http://babelfish.com	Translate to/from English to any language
Bing	http://www.bing.com/translator/	Enter free text or web page URL
GIS, MAPPING & IMAGING TOOLS		
N2YO	www.n2yo.com	Real-Time Satellite Image tracking
Wikimapia	www.wikimapia.org	Interactive mapping tool
SpotCrime	www.spotcrime.com	Crime Maps
CrimeReports	www.crimereports.com	Crime Maps
Ucrime	www.ucrime.com	Crime Maps for colleges and universities
Crimemapping	www.crimemapping.com	Crime Maps
Raidsonline	www.raidsonline.com	Crime Maps
Panoramio	www.panoramio.com	Global geospatial appliance
TinEye	www.tineye.com	Reverse image search tool
Metapicz	http://metapicz.com	Free web based EXIF discovery tool
Jeffrey's EXIF Viewer	http://regex.info/exif.cgi	Free Web based EXIF discovery tool
FotoForensics	http://www.fotoforensics.com/	Free Web based EXIF discovery tool
Echosec	www.Echosec.net	Location-based real-time aggregated multi social media search tool.
Geofeedia	http://geofeedia.com/	Fee-based Location-based real-time aggregated multi social media search tool.
Snaptrends	www.snaptrends.com	Fee-based Location-based real-time aggregated multi social media search tool.
CREEPY	http://www.geocreepy.com	Geolocation information gathering through social networking platforms
Earth Point	http://www.earthpoint.us	Google Earth tool – Excel to KML converter.
Reliefweb	http://reliefweb.int/	Specialized digital map service of the United Nations Office for the Coordination of Humanitarian Affairs (OCHA).
Geocommons	www.geocommons.com	GeoCommons is the public community of GeoIQ users who are building an open repository of data and maps for the world.
Pacific Disaster Center	www.pdc.org	Worldwide disaster monitoring mapping service
Marine Traffic	www.marinetraffic.com	Free real-time information to the public, about ship movements and ports, mainly across the coast-lines of many countries around the world.
ANONYMIZATION TOOLS		
Anonymizer	www.anonymizer.com	Fee-based commercial anonymization tool
The TOR Project	www.torproject.org	Free download anonymization tool
Ixquick	www.ixquick.com	Does not track your IP address or retain search history
Internet Archive	www.archive.org	View archived copies of public websites
PDFmyURL	http://pdfmyurl.com/	Screen captures webpage without going to the live site
Anonymouse	http://anonymouse.org/	Free web-based anonymization tool
Hot Spot Shield	http://www.hotspotshield.com/en	Downloadable free or fee-based anonymization tool
BuyProxies	www.buyproxies.org	Proxies for sale
Private Internet Access	www.privateinternetaccess.com	VPN for sale
yourprivateproxy	www.yourprivateproxy.com	Proxy for sale

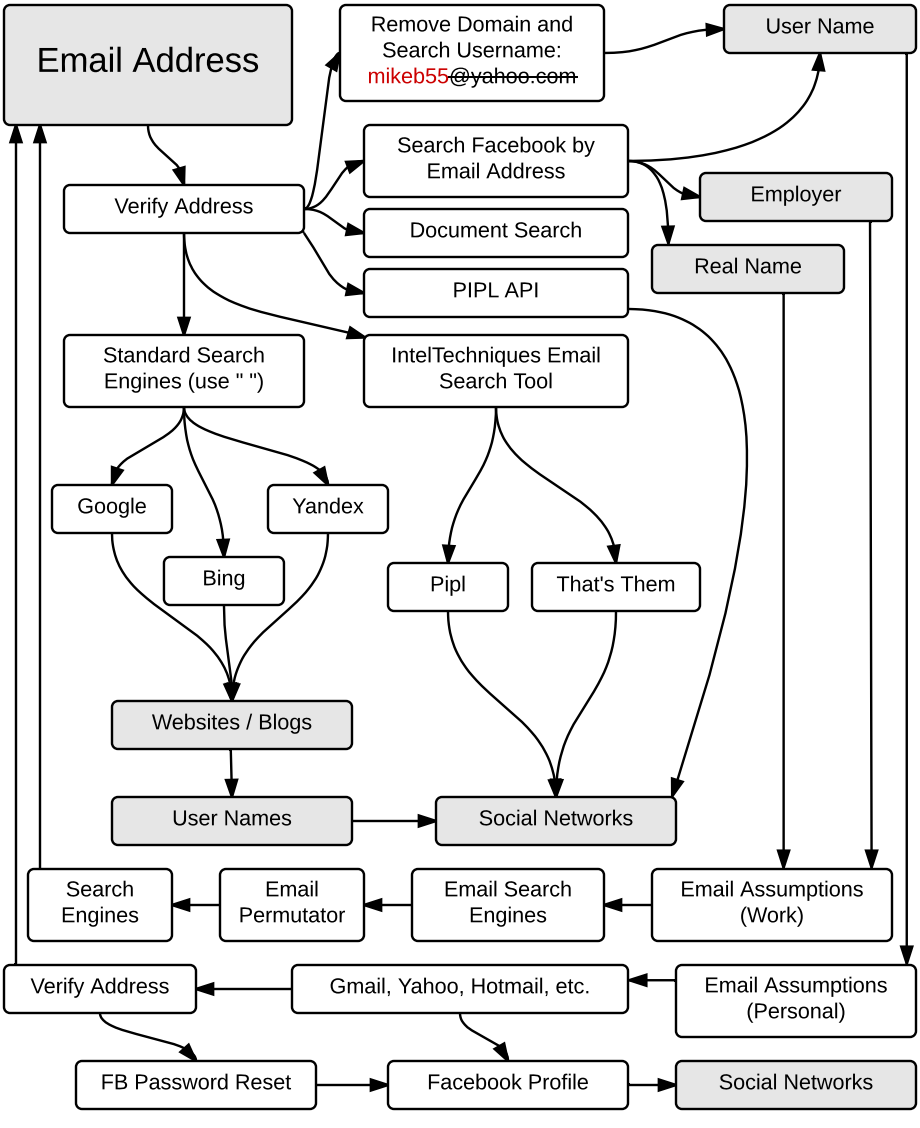
IPVanish	https://www.ipvanish.com/	VPN for sale
ExpressVPN	https://www.expressvpn.com/	VPN for sale
JonDonym	https://anonymous-proxy-servers.net/index.html	Secure anonymous browsing site
Hide My Ass	www.hidemyass.com	Proxy scrambler/reverse locate IP address to overseas
WEBSITE MONITORING TOOLS		
WebSite Watcher	http://www.snapfiles.com/get/webwatcher.html	Tool for monitoring changes to websites
Watch That Page	http://www.watchthatpage.com/	Tool for monitoring changes to websites
Change Detection	www.changedetection.com	Page change tracker
Page Follow	www.followthatpage.com	Page change tracker
OTHER WEB TOOLS		
AM-Deadlink	http://aignes.com/deadlink.htm	Detects dead links and duplicates in bookmarks/text
MyIP Info	http://www.myipinfo.net/	Find your IP and other information
Ip-adress	www.ip-adress.com	Searches IP addresses manually in real time
Ip-tracker	www.ip-tracker.org	Track and trace IP Address using the latest IP tracki ng technique.
CentralOps	www.CentralOps.net	A collection of Internet utilities
Common Craft	http://www.commoncraft.com/	Short video clips that explain latest Internet tools
Debka	www.debka.com	Jerusalem-based open source military intelligence
4chan	http://www.4chan.org/	Image-based bulletin board
Internet Live Stats	www.internetlivestats.com	Internet statistics available in a dynamic and time relevant format
WolframAlpha	www.wolframalpha.com	Mathematical search engine
Wikipedia	www.wikipedia.org	Free information search tool
Wikimedia	www.wikimedia.org	List of 16 different wikis
PEOPLE FINDERS/PERSONAL DATA SEARCH ENGINES		
Zoom Info	www.zoominfo.com	Company and business professional people search
Pipl	www.pipl.com	Comprehensive public information people search tool
Zaba Search	www.zabasearch.com	Comprehensive public information people search tool
Peek You	www.PeekYou.com	Comprehensive people search tool
Peoplefinders	www.peoplefinders.com	Comprehensive people search tool
Spokeo	www.spokeo.com	Search blogs and photos across 40 social networks
Criminal Searches	www.criminalsearches.com	Search criminal records based on public information
Yasni	www.yasni.com	Worldwide name search by category
Name Check	www.namecheck.com	Free on-line name check/reputation management
SOURCE VALIDATION/EVALUATION		
Alexa	www.alexa.com	Traffic metrics, search analytics, and demographics
Who Is	http://whois.icann.org/	Domain-based research services
Who.is	www.who.is	Domain-based research services
Domain Tools	whois.domaintools.com	Domain ownership and registration information
Hypestat	www.hypestat.com	Website analysis and statistics
Quantcast	www.quantcast.com	Web site profile and detailed demographics
Name Droppers	www.namedroppers.com	Domain Search Database
Snopes	www.snopes.com	Validate/debunk rumor, urban legend, folklore, myths
The Internet Corporation for Assigned Names and Numbers (ICANN)	https://www.icann.org/	not-for-profit public-benefit corporation with international participants dedicated to keeping the Internet secure, stable and interoperable
American Registry for Internet Numbers (ARIN)	https://www.arin.net/	Non-profit supporting the operation of the internet

B183

Fact Check	www.factcheck.org	Monitors the factual accuracy of politics
SOCIAL NETWORKING SITES		
Facebook	www.facebook.com	An online social networking service
Twitter	http://twitter.com	Microblogging limited to 140 characters length
LinkedIn	www.linkedin.com	Business-oriented social networking service.
Pinterest	www.pinterest.com	Web and mobile application company that offers a visual discovery, collection, sharing, and storage tool.
Myspace	https://myspace.com/	Social networking service with a strong music emphasis owned by Specific Media LLC and pop music singer and actor Justin Timberlake.
Google+	https://plus.google.com/	Social networking and identity service
Instagram	http://instagram.com	Text/Photo/Video sharing app
Ello.co	https://ello.co	ad-free social network – relatively anonymous
IP TRACES		
Maxmind	www.maxmind.com	IP geolocation and on-line fraud prevention
Hosting	www.whoishostingthis.com	Website hosting search tool
Location	www.ip2location.com	Identify website visitor geographic location
SOCIAL BOOKMARKING TOOLS		
Delicious	www.delicious.com	Social bookmark manager
Stumble Upon	http://www.stumbleupon.com/	Recommends new sites, videos from across the web
Diigo	www.diigo.com	Social bookmarking and collaborative research
Know 'Em	www.knowem.com	Social network, domain name, USPTO trademark data
SOCIAL MEDIA SEARCH ENGINES		
Twitter (local)	www.twitterlocal.net	City-specific/caches tweets by specific location
IceRocket	www.icerocket.com	Searches social media (Blogs, Twitter, FaceBook)
Twingly	www.twingly.com	Data-mining of blogs
Tweetgrid	www.tweetgrid.com	Twitter search dashboard updates in real time
Search Twitter	https://www.twitter.com/search	Searches Twitter
Tweet Deck	www.tweetdeck.com	Twitter proprietary aggregator/dashboard
Twitterfall	www.twitterfall.com	Real-time Twitter monitoring tool
Bee Volve	www.beevolve.com	Social media monitoring and real-time analytics
Topsy	www.topsy.com	Social media search and analytics
Newzpile	www.newzpile.com	Searches blogs and twitter
Social Mention	http://socialmention.com	Real-time social search and analysis
SmashFuse	www.smashfuse.com	Real-time social search and analysis
Social Searcher	www.social-searcher.com	Free Social Media Search Engine.
Samepoint	http://www.samepoint.com	Social media search engine
Tumblr	www.tumblr.com/search	Search text, photos, quotes, links, music, and videos
Boardreader	http://boardreader.com	Search engine for forums and message boards
Perisearch	http://www.perisearch.net/	Search engine for Periscope streams
Gramfeed	www.gramfeed.com	Instagram search tool
Twipho	https://twipho.net	Twitter photo search engine
Instafall	http://instafall.com/	Monitors Instagram feeds in real-time
CircleCount	www.circlecount.com	Google+ search tool
SOCIAL MEDIA AGGREGATORS AND DASHBOARDS		
Addictomatic	www.addictomatic.com	Searches multiple social media applets
Net Vibes	www.netvibes.com	First personalized dashboard publishing platform
Hoot Suite	www.hootsuite.com	Manage and measure multiple social networks
Global Voices	www.globalvoicesonline.org	International community of bloggers
Ushahidi	http://ushahidi.com	Uses concept of "crowd sourcing" for social activism
Silo Breaker	www.silobreaker.com	Aggregates news, blogs, audio, video, digital content
SOCIAL NETWORK RESEARCH TOOLS		
Digsby	www.digsby.com	Aggregates several Web2.0 tools on a single site
Flickr	www.flickr.com	Photo sharing website

Met Blogs	www.metblogs.com	Largest network of city-focused blogs (56 cities)
MentionMapp	http://mentionmapp.com/	Twitter network visualizer (requires registration)
Booshaka	http://www.booshaka.com/	Leading marketing platform for the social web
PUBLIC TRANSIT WEBSITES		
MetroBits	http://mic-ro.com/metro/	Exploration of subways around the world
Amadeus	www.amadeus.net	Worldwide Transportation Information Site
Urban Rail	www.urbanrail.net	Information on subway systems; Worldwide
CRIMINAL-RELATED MESSAGE BOARDS		
Topix	www.topix.com	Exchange information (drug prices, sources, dealers)
Migente	www.migente.com	Most popular Latino-American community site
Asian Avenue	www.asianavenue.com	Most popular Asian site
Hi5	www.hi5.com	Photo-based social networking site with
Bebo	http://www.bebo.com/	Global social networking site
Gangster	www.gangsterbb.net	LE sources/interdiction related to organize crime
MOBILE-ONLY APPS		
Yik Yak	http://www.yikyakapp.com/	Relatively anonymous social media smart-device app
Banjo	http://ban.jo/	Events and photos geolocated – smart-device only
Whisper	https://whisper.sh/	Anonymous messaging, public or private
Snapchat	https://www.snapchat.com/	Text/Photo/Video sharing app - Over 100m active monthly users.
LAW ENFORCEMENT EXPLOITATION		
Vehicles	www.nicb.org	Search VINs/stolen vehicles
Criminal Information	www.familywatchdog.us	National sex offender list
Criminal Information	www.felonspy.com	Address information for felons www.zillow.com
Real Estate Information	www.trulia.com	House values and identify owners
Real Estate Information	www.shoeview.com	Searches real estate cadasters
Shoe Model Information		Compare shoe size, type, footprint, manufacture


Domain Name
Live Website
Google
Bing
Wayback Machine
Cached
Analytics ID #'s
site: Search
IntelTechniques Domain Search Tool
SEM
ViewDNS
History
IP Address
Real Name
SpyOnWeb
Whoisology
Email Address
SameID
SharedCount
NerdyData
Backlinks
DomainCrawler
Pentest Tools
New Domains
Sub Domains
Social Networks
Robots.txt
Hidden Pages
Documents
App: Web Spider
App: FOCA
B186
IntelTechniques.com OSINT Workflow Chart: Domain Name



B187

IntelTechniques.com OSINT Workflow Chart: Email Address

ORDER FORM

This order form is subject to and governed by the terms and conditions of Geofeedia's Online Terms of Service posted at http://www.geofeedia.com/terms-of-service. Please review the Online Terms of Service carefully before signing below, as your signature below constitutes your agreement to be bound by its terms. If for any reason you are unable to view the Geofeedia Online Terms of Service online at the website given above, please contact Geofeedia immediately.

Pursuant to this Order Form, Customer is purchasing subscriptions to the Geofeedia Service identified below, subject to any specified usage parameters (e.g. number or types of users, number of locations, volume of data, etc.) and any professional services described herein. The term of this Order Form shall automatically renew for subsequent one-year terms unless either party provides notice to the other party at least forty-five days prior to the Contract End Date.

Order Information

Account Name:	Bston Regional Intelligence Center	**Contract Start Date:**	8/1/2015
Prepared By:	Trent McMahan	**Contract End Date:**	1/31/2016
		Total Amount:	**[$9,999.00]**

Subscription Term, Billing & Payment Information

Company Name:	Boston Regional Intelligence Center	**Billing Phone:**	617-343-4328
Billing Name:	David Carabin	**Billing Fax:**	
Billing Email:	David.carabin@pd.boston.gov		
Billing Address:	1 City Hall Plaza, Room 201 Boston, MA 02201 United States	**Payment Method:** **PO Number:**	Invoice [IF APPLICABLE]
Billing Terms:	Invoices sent ***Annually*** **Customer Initials** DC Invoices for Overage Fees, if any, sent monthly.		
Payment Terms:	Due Upon Receipt. Interest accrues at the rate of 1.5% per month 90 days after the invoice date. Invoices 30 days or more past due may result in suspension of Services.		

Customer: [CUSTOMER NAME]	**Geofeedia, Inc.**
Signature: _____	Signature: _____
Printed: David Carabin	Printed: _____
Title: Director	Title: _____
Date: June 5, 2015	Date: _____

Application Services Subscription*
The Application Services include the following:

Service Edition	**Total Price**

Standard Service Package
Customer orders the following Standard Service Package:

Geofeedia Team Edition	$ 9,999.00

Total Permitted Users: Thirty (30)

Standard Applications
- Real-Time Search
- Up to five (5) Real-Time Streams
- Administrator functions

Premium Applications
- Geofeed Manager (up to 15)
- Collections
- Alerts
- Influencers

Other Included Features
- Shape File Support
- Language Translations
- Data Export
- Analytics
- Networks currently Included: Instagram, Twitter, Flickr, Picasa, YouTube, Facebook, YikYak

Data Storage**
- Up to 200,000 post per month

Search Radius
- Maximum of 15 kilometers

Additional options	N/A

None

Training and Implementation	No charge

Geofeedia Video Training (included)

Total Annual Cost	**$ 9,999.00**

Order Comments

* Assuming no Overage Fees.
** Data overage will be billed at a cost of $50.00 per 1,000 posts in excess of per-month allowance.
Note: Any other services not included hereunder and must be identified in a separate, executed Statement of Work.

For additional details regarding standard features and functionality of the Application Services, please visit:
http://geofeedia.com/how-it-works

OEM Equipment and Supply Pre-Requisition Form

Requestor Information

Name	David Carabin	**Discipline**	508 Law Enforcement
Phone	617-343-2748	***If other, please indicate***	
Email (below)		**Department/City/Town Name**	211100 Boston Police
david.carabin@pd.boston.gov		***If other, please indicate***	

[

Item Description	AEL # (required)	Quantity	Unit Price	Extended Price
Geofeedia Social Media Situational Awareness Service	N/A	1	$ 9,999.00	$ 9,999.00
		1		$ -
		1		$ -
				$ -
				$ -
				$ -
Total				$ 9,999.00

Specifications

Manufacturer		**Make**		**Model #**	
Part #		**Style**		**Color**	
Size		**Useful life**		**Licensing Required?**	N
Suggested Vendor		Geofeedia			
Other Information					

Ship To

Name	See above	**Department/City/Town Name**	211100 Boston Police
Phone		***If other, please indicate***	
Street	1 Schroeder Plaza	**City/State/Zip**	Roxbury, MA

Jurisdiction Pont of Contact Signature & Date

Signature _____ **Date** _____

City of Boston Use Only

Request: Appr / Rej: _____ **Date:** _____

Header Defaults/PO Comments

GL Unit	BOSTN	Account Code	52907	**Project/Grant**	UASI 13 (HLS14002)
Fund	200	**Dept ID**	211100 Boston P	**Program (discipline)**	508 Law Enforcement
Location	4480	**OEM Planner**	A. Murphy	**Program (equip type)**	F Logistical Support
CFDA #	97.067	**Bud Ref**	0	**Class (category)**	23 Equipment
PJ #	U13-3.3	AEL #	N/A	**Class (project)**	04 Intelligence Capacity

?GoogleGuide making searching even easier

(A printable PDF version is available.)

Basic Examples

This Search	Finds Pages Containing...
biking Italy	the words **biking** and **Italy**
recycle steel OR iron	information on recycling steel or recycling iron
"I have a dream"	the exact phrase **I have a dream**
salsa –dance	the word **salsa** but NOT the word **dance**
Louis "I" France	information about **Louis** the First (**I**), weeding out other kings of **France**
castle ~glossary	**glossaries** about **castles**, as well as **dictionaries**, lists of **terms**, **terminology**, etc.
fortune-telling	all forms of the term, whether spelled as a single word, a phrase, or hyphenated
define:*imbroglio*	definitions of the word **imbroglio** from the Web

Calculator

Operators	Meaning	Type Into Search Box (& Results)
+ – * /	basic arithmetic	**12 + 34 - 56 * 7 / 8**
% of	percentage of	**45% of 39**
^ or ****	raise to a power	**2^5** or **2**5**
old units **in** *new units*	convert units	**300 Euros in USD**, **130 lbs in kg**, or **31 in hex**

Restrict Search

Operators	Meaning	Type Into Search Box (& Results)
city1 *city2*	Book flights.	sfo bos (Book flights from San Francisco (SFO) to Boston (BOS).)
site:	Search only one website or domain.	**Halloween site:www.census.gov** (Search for information on Halloween gathered by the US Census Bureau.)
[#]..[#]	Search within a range of numbers.	**Dave Barry pirate 2002..2006** (Search for Dave Barry articles mentioning pirates written in these years.)
filetype: (or **ext:**)	Find documents of the specified type.	**Form 1098-T IRS filetype:pdf** (Find the US tax form 1098-T in PDF format.)
link:	Find linked pages, i.e., show pages that point to the URL.	**link:warriorlibrarian.com** (Find pages that link to Warrior Librarian's website.)

Specialized Information Queries

Operators	Meaning	Type Into Search Box (& Results)
book (or **books**)	Search full-text of books.	**book Ender's Game** (Show book-related information. *Note:* No colon needed after **book**.)
define, **what is**, **what are**	Show a definition for a word or phrase.	**define monopsony**, **what is podcast** (Show a definition for the words **monopsony** and **podcast**. *Note:* No colon after **define**, **what is**, or **what are**.)
define:	Provide definitions for words, phrases, and acronyms from the Web.	**define:kerning** (Find definitions for **kerning** from the Web.)
movie:	Find reviews and showtimes.	**movie: traffic** (Search for information about this movie, including reviews, showtimes, etc.)
stocks:	Given ticker symbols, show stock information	**stocks: goog** (Find Google's current stock price.)
weather	Given a location (US zip code or city), show the weather	**weather Seattle WA**, **weather 81612** (Show the current weather and forecast. *Note:* No colon after **weather**.)

Alternative Query Types

Operators	Meaning	Type Into Search Box (& Results)
		cache:www.irs.gov

cache:	Display Google's cached version of a web page.	(Show Google's cached version of the US Internal Revenue Service home page.)
info: (or **id:**)	Find info about a page.	**info:www.theonion.com** (Find information about The Onion website.)
related:	List web pages that are similar or related to the URL.	**related:www.healthfinder.gov** (Find websites related to the Healthfinder website.)

Restrict Search to Sites where Query Words Appear

Operators	Meaning	Type Into Search Box (& Results)
allinanchor:	All query words must appear in anchor text of links to the page.	**allinanchor:useful parenting sites** (Search for pages that are called **useful parenting sites** by others.)
inanchor:	Terms must appear in anchor text of links to the page.	**restaurants Portland inanchor:kid-friendly** (Search for pages on Portland restaurants for which links to the page say they are "kid friendly.")
allintext:	All query words must appear in the text of the page.	**allintext:ingredients cilantro chicken lime** (Search for recipes with these three ingredients.)
intext:	The terms must appear in the text of the page.	**Dan Shugar intext:Powerlight** (Find pages mentioning **Dan Shugar** where his company, **Powerlight**, is included in the text of the page, i.e., less likely to be from the corporate website.)
allintitle:	All query words must appear in the title of the page.	**allintitle: Google Advanced Operators** (Search for pages with titles containing "Google," "Advanced,", and "Operators".)
intitle:	The terms must appear in the title of the page.	**movies comedy intitle:top ten** (Search for pages with the words **movie** and **comedy** that include **top ten** in the title of the page.)
allinurl:	All query words must appear in the URL.	**allinurl:pez faq** (Search for pages containing the words **pez** & **faq** in the URL.)
inurl:	The terms must appear in the URL of the page.	**pharmaceutical inurl:investor** (Search for pages in which the URL contains the word **investor**.)

Restrict Search to Google Groups

Operators	Meaning	Type Into Search Box (& Results)
author:	Find Groups messages from the specified author.	**flying author:Hamish author:Reid** (Search for Hamish Reid's articles on flying.)
group:	Find Groups messages from the specified newsgroup.	**ivan doig group:rec.arts.books** (Search for postings about Ivan Doig in the group **rec.arts.books**.)
insubject:	Find Groups messages containing **crazy quilts** in the subject.	**insubject:"crazy quilts"** (Find articles containing **crazy quilts** in the subject line.)

Restrict Search to Google News

Operators	Meaning	Type Into Search Box (& Results)
location:	Find News articles from sources located in the specified location.	**queen location:uk** (Find British news articles on the Queen.)
source:	Find News articles from specified sources.	**peace source:ha_aretz** (Show articles on peace from the Israeli newspaper Ha'aretz.)

About This Cheat Sheet

SOME RIGHTS RESERVED

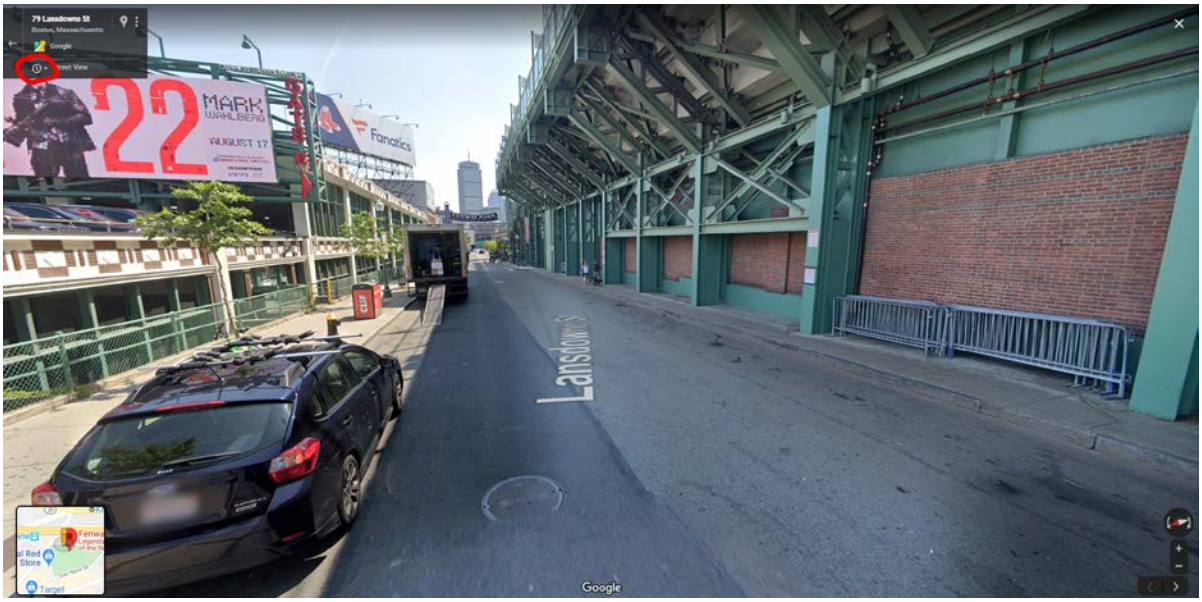
For more tips, tricks, & examples, visit www.GoogleGuide.com.
By Nancy Blachman & Jerry Peek who don't work for Google & Tasha Bergson-Michelson.
Thank you Matt Vance for the idea of creating a Google Guide cheat sheet.

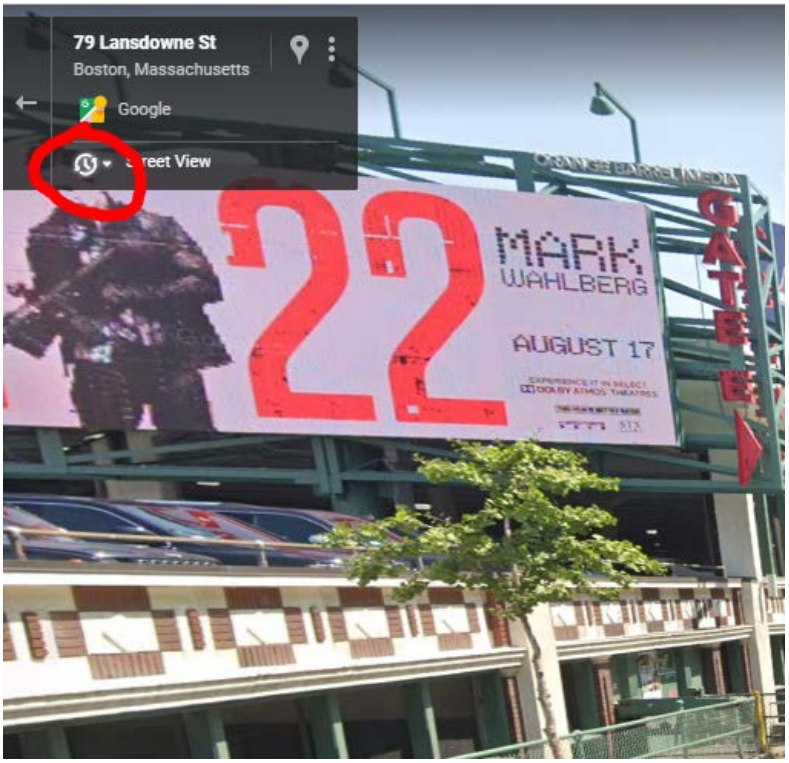
This page was last modified on Sunday February 26, 2012

Google Maps

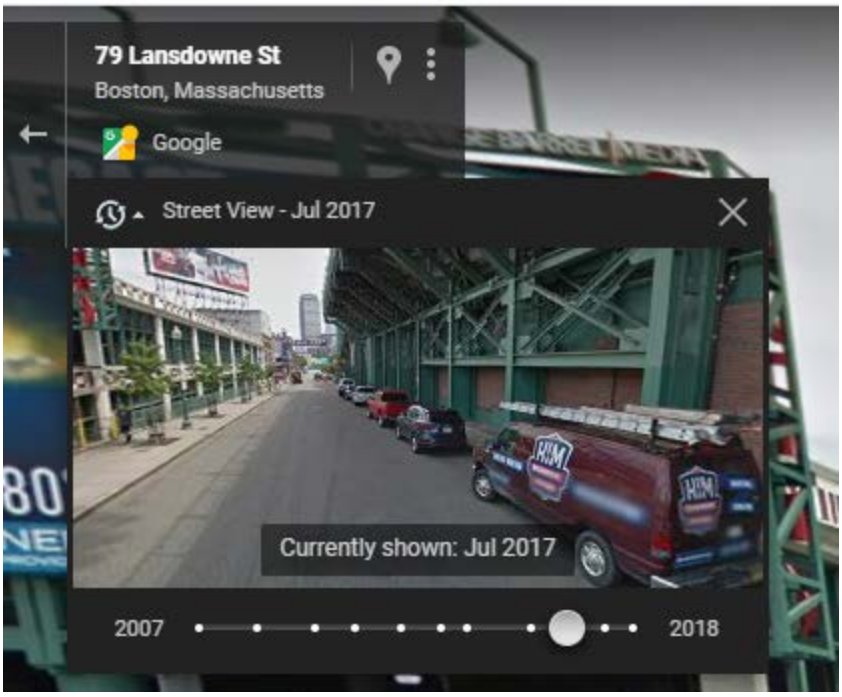
Historical imagery

- Go to street view
- Click on the clock in the top right corner



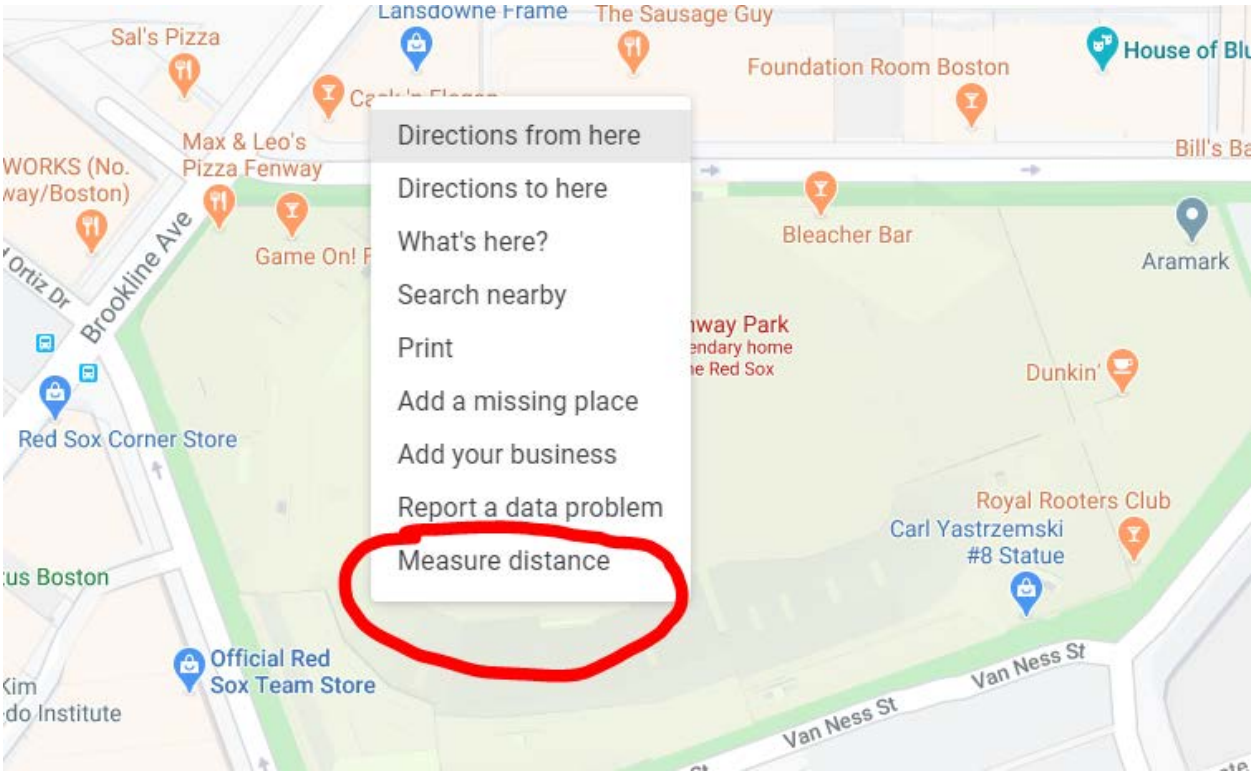


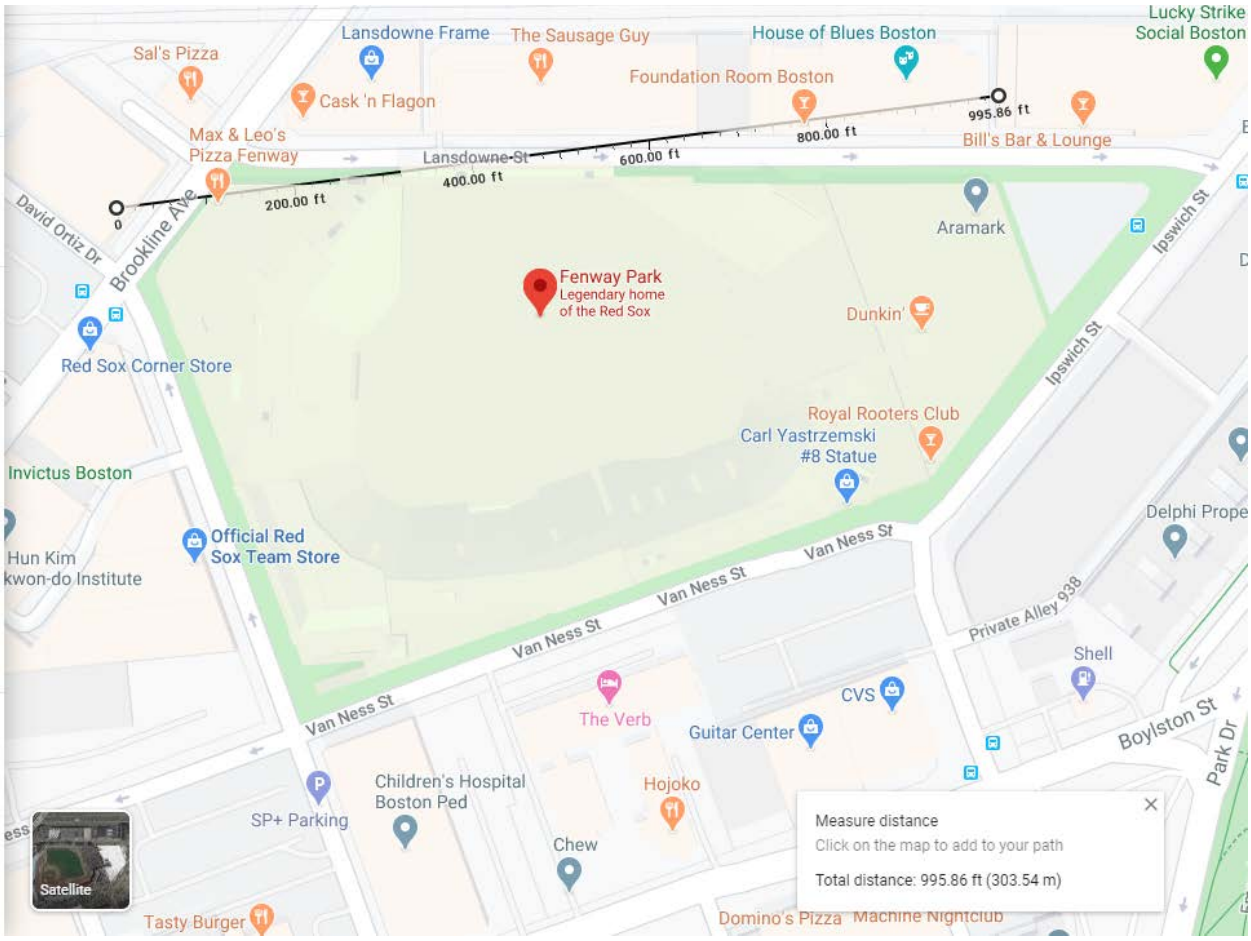
- Change the time when the street view was taken



Measure distance between two points

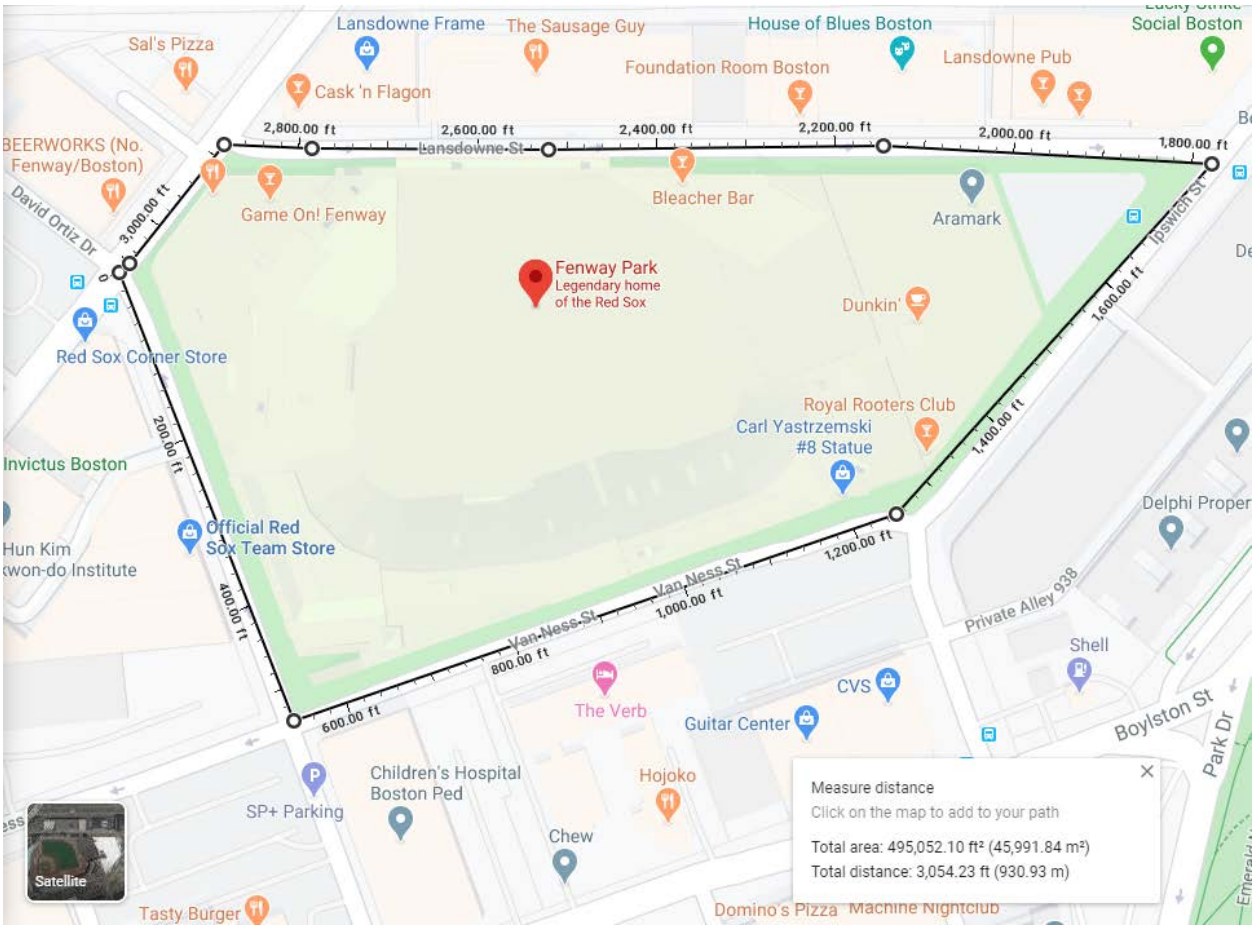
- Right click on the first location
- Click “Measure Distance”





You can add multiple points to measure distance

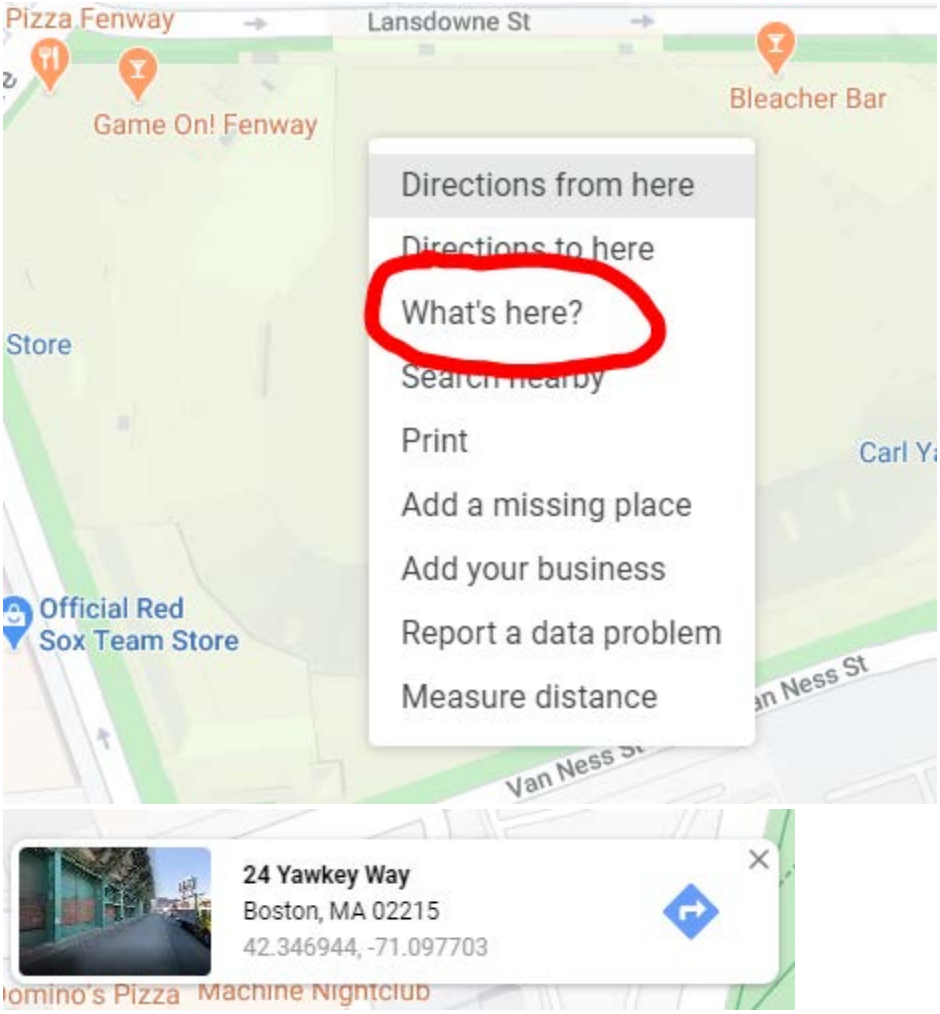
For example, the distance around Fenway Park



How to Find coordinates for location

Right click on a location

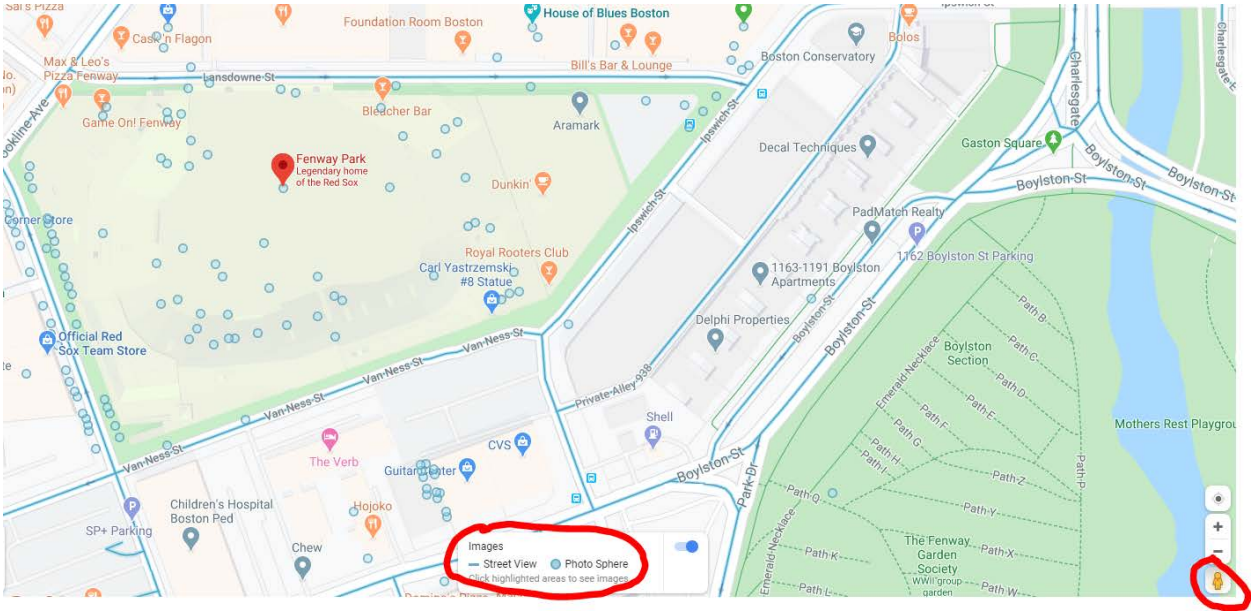
Click “What’s Here”



Street View

Click the yellow peg man in the bottom right corner to see what locations are available for street-level views

- Blue lines represent street views
- Blue dots represent photosphere views - panoramic views uploaded by Google Users



[Source: 10 Minute Tips]

How to Investigate Online Classifieds, Ecommerce, Social Networks, etc IAFCI Cyber Summit April 18, 2017

Hosted by: Allen Atamer
LTAS Technologies
1-877-352-3277
www.harmari.com

Allen Atamer

- MIT graduate 2001 (S.M.)
- 15 years experience in artificial intelligence, text mining and software engineering
- 1 US and 1 Canadian patent in my name
- 8 years in the aerospace industry
- Personal motivation: 3 daughters

© LTAS Technologies Inc. 2016

Illegal Activity

- Auto crime / Auto fraud
- Property Crime
- Injury Rings / Staged Car Accidents
- E-Fencing stolen / counterfeit merchandise
- Unlicensed Contractors / Trades
- Child prostitution
- Weed / Drugs (Silk Road)
- Fraud / 419 scam (King of Nigeria)

© LTAS Technologies Inc. 2016

info@harmari.com

Everything On the Internet is True

Remember the French Model … "Bonjour"?

courtesy State Farm Insurance

© LTAS Technologies Inc. 2016

info@harmari.com

Online Classifieds and E-commerce

Online Classifieds & Ecommerce

- Cheap, effective way to reach many people with your product/service
- Many postings to investigate – sometimes thousands per day
- Anonymous nature of listings, limited validation of personal information
- CL hides behind the law when questioned*

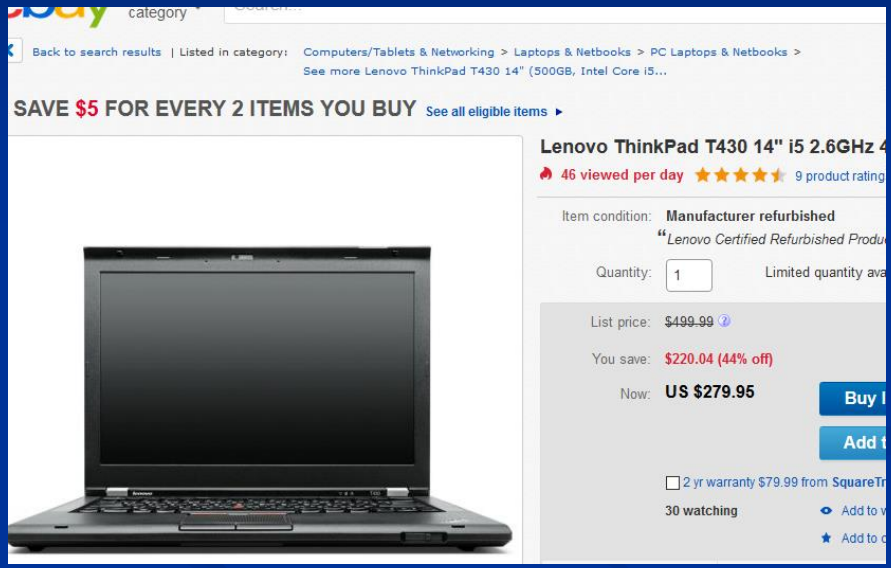
* S230 of the Communications Decency Act 1996

© LTAS Technologies Inc. 2016

info@harmari.com

Desktop Investigation

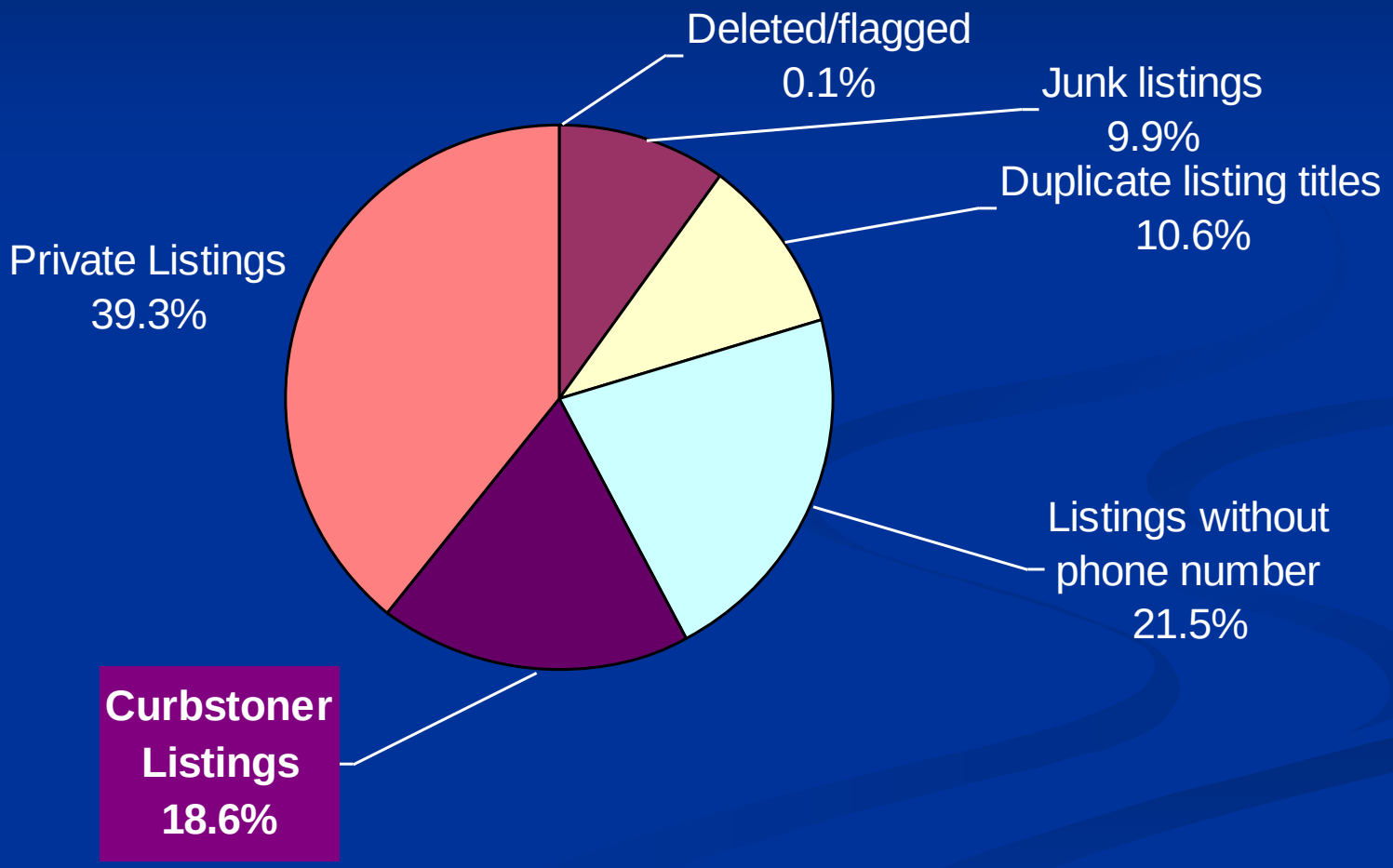
- Use the anonymity of the internet to your advantage
- IT Blocking you? It's a $400 fix
  - used Thinkpad
  - $10/mo data add on



© LTAS Technologies Inc. 2016

info@harmari.com

Typical breakdown of postings



© LTAS Technologies Inc. 2016

info@harmari.com

Create a (virtual) paper trail

- Craigslist ads are volatile (can be altered, deleted, or flagged at any time) 7 days metro / 45 days other
- Either
  - Print out ad (easy)
  - Save ad to PDF (saves trees)
    - Download freeware: doPDF
  - Save ad as HTML complete (saves trees, searchable)
- Email saved ad along with hyperlink

© LTAS Technologies Inc. 2016

info@harmari.com

Screen capture tools

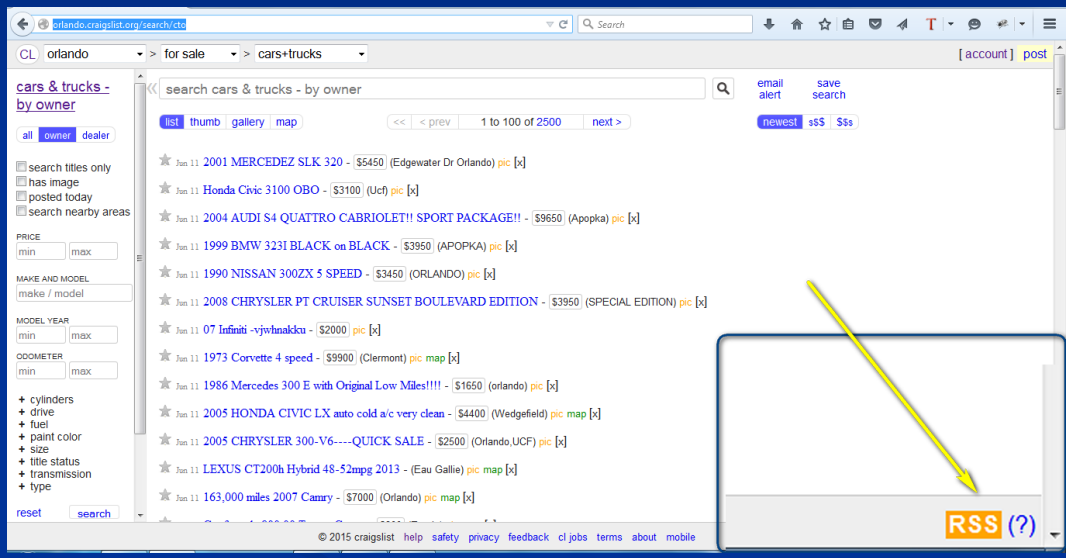
- Free: Prt Sc button & paste, Snipping Tool
- Pay: FastStone Capture ($20)
  - Scrolling capture for multi-screen FB evidence
  - Video capture & narration
  - Professional editing and annotation tools
  - A real time-saver

© LTAS Technologies Inc. 2016

info@harmari.com

CL Free Monitoring Tool -

- Good for alerts on recently stolen items
- Use feedly or other reader
- Change name to yyyymmdd to sort them by date

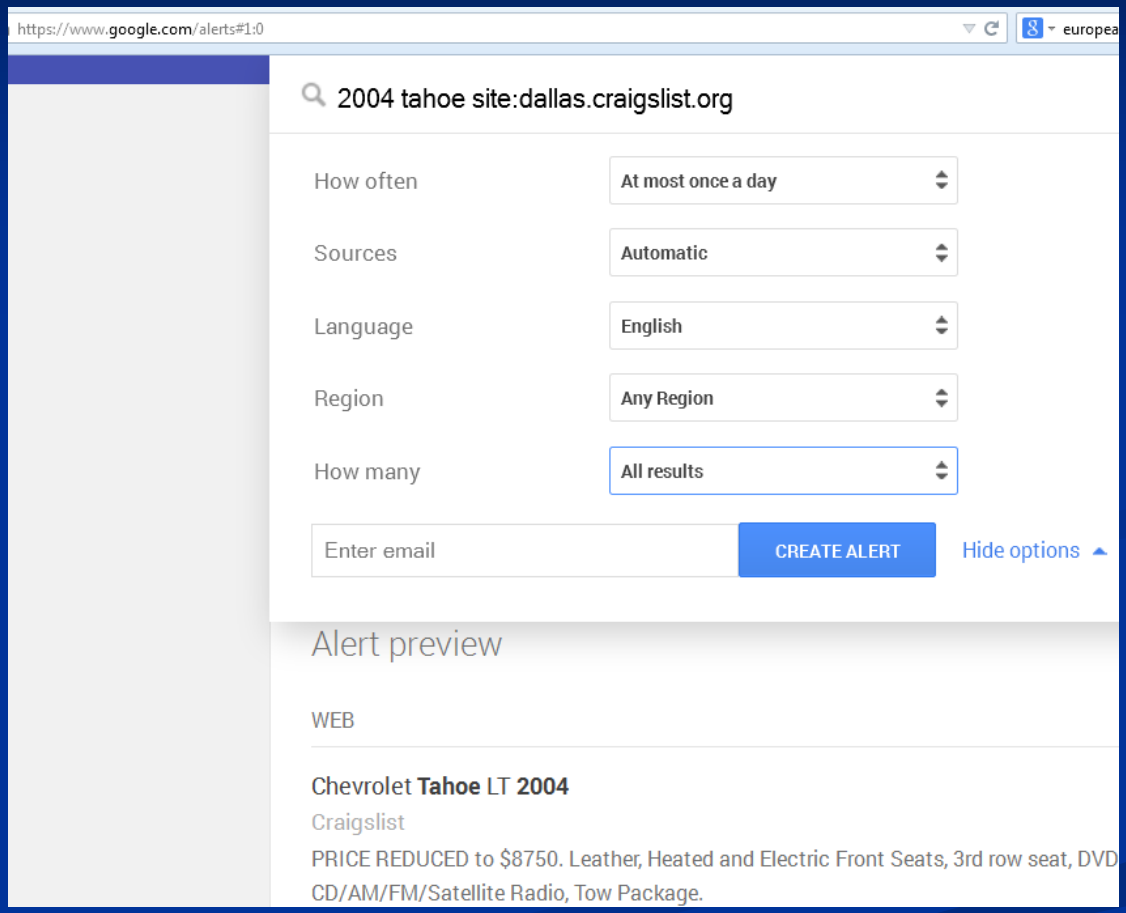


© LTAS Technologies Inc. 2016

B209
info@harmari.com

Google Alerts

- Enter your search
- Select the type of update (feed, email)
- Wait for updates



© LTAS Technologies Inc. 2016

info@harmari.com

Multi-City Search

- http://www.searchtempest.com
- Searches multiple Craigslist cities / states simultaneously
- Pick the keywords, then search geography by
  - Distance (miles) from a city
  - States/cities selectable from a menu
- Results separated by City or Altogether
- http://www.autotempest.com searches other pages too (eBay, cars.com, Auto Trader)

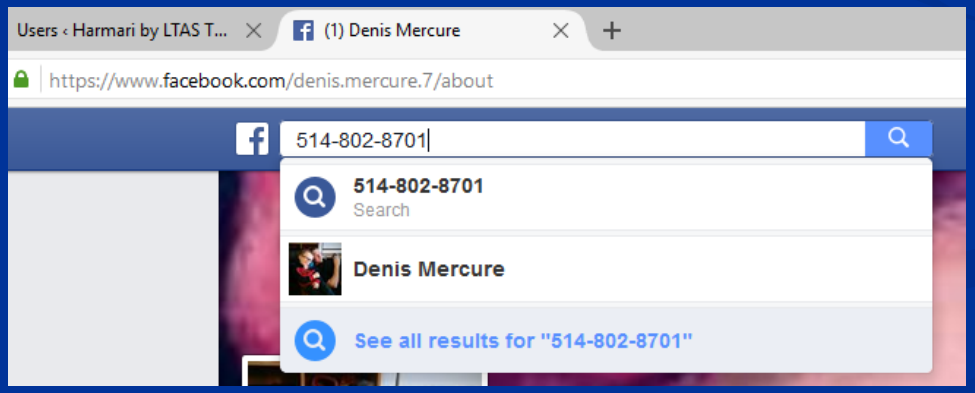
© LTAS Technologies Inc. 2016

info@harmari.com

Phone Number Lookups

- Search 555-1234 → John Doe, 123 Main St.
- TLO, Accurint, CLEAR
- Use utility bills, cellphone providers
- About 50% hit rate

Facebook phone number → 30% name hit rate



© LTAS Technologies Inc. 2016

info@harmari.com

Find the phone number

1959 karman Ghia Vw volkswagen - $1100 (Arlington)

prohibited

spam/overpost

best of craigslist

Date: 2011-03-29, 9:44PM PDT

Reply to: sale-khreu-2294590919@craigslist.org [Errors when replying to ads?]

59 Karman Ghia Volkswagen- Cash or want to trade for pre 68 bug. Will consider 68 and newer. A very complete car in project stage. I have all parts except for bumpers. It has complete 36hp engine that runs well as of September of 2010 before I began dismantling the car. The motor is still in tact and all tin is included. It has been inside my garage and not in the weather. The floor pans are rusted through but only requires back quarters replaced not halfs. I have original hub caps with Wolfsburg crests. Original Wolfsburg crest batwing steering wheel and horn crest. Original Batwing Karmann emblem and glass marker lenses. No title. Chasis and pan numbers match and indicate manufactor date at November of 59. All glass is with it. I am excited for what you got in trade.
Nine one six.509.2165 I am in Arlington Wa. Please e mail for more pictures or info.

- Location: Arlington
- it's NOT ok to contact this poster with services or

Obfuscated numbers foil the Reverse Lookup Search

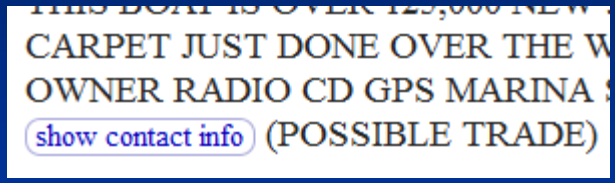
Only Harmari Search can pick up obfuscated numbers (98% accurate)

B213

© LTA

Major recent Craigslist changes

1. Hide phone numbers under “show contact info” (Still Searchable through CL, not thru Google)
2. Private phone number hidden in “Reply” button. (**Not searchable** in Craigslist or in Google)



© LTAS Technologies Inc. 2016

info@harmari.com

Harmari Search

- http://harmari.com
- Covers Craigslist, Backpage, AutoTrader
- Multi-city, Multi-state search
- Pay-per-search based on credits
- LEO discount through RAPID (bwirapid.com)
- Alpha-numeric / encrypted / Contact phone numbers
- Bulk VIN / Phone Number search available
- 900 million Live and historic ads throughout US and Canada (since Dec, 2013)
- For every $1 spent on Harmari, customers save $10-$15

© LTAS Technologies Inc. 2016

info@harmari.com

Harmari Testimonial

"I had immediate success on my first search of the insured's phone [number]. He listed the car on Craigslist 9 days prior to the theft/burn. Your search got us some absolutely critical information on a case. It's what was in the listing... other things he said“

-Liberty Mutual SIU Investigator

© LTAS Technologies Inc. 2016

info@harmari.com

Harmari Demo

© LTAS Technologies Inc. 2016

B217
info@harmari.com

Other Anecdotes

- Burned RV ($45000 exposure)
- 2011 Camaro ($27000 exposure)
- $18,000 boat
- $15,000 ninja
- Dozens of tires/rims (exposure in the $ thousands for each set)

© LTAS Technologies Inc. 2016

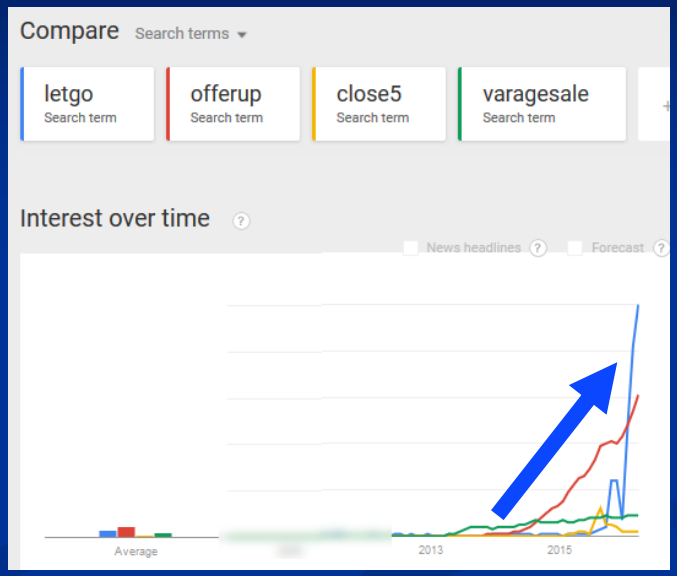
info@harmari.com

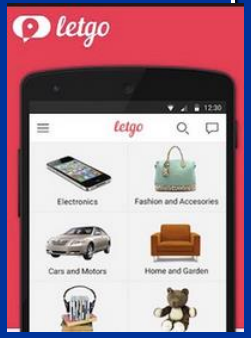
New Classified Overtaking CL

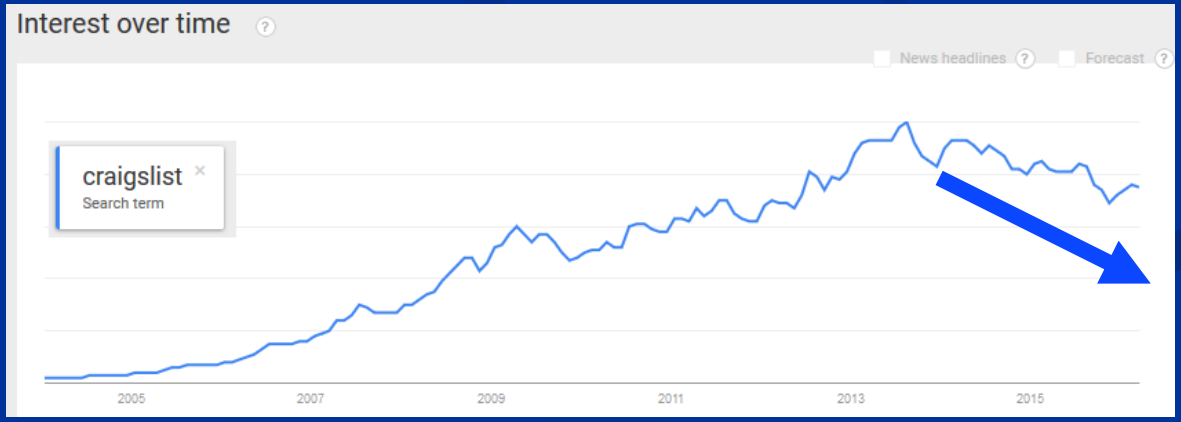
- Facebook Buy/Sell Groups

(Alexa Rank 2)

- OfferUp (1292)
- LetGo (3756)
- PoshMark (1136)
- Close5 (32,529)
- VarageSale (4,475)
- Wallapop (35,060)







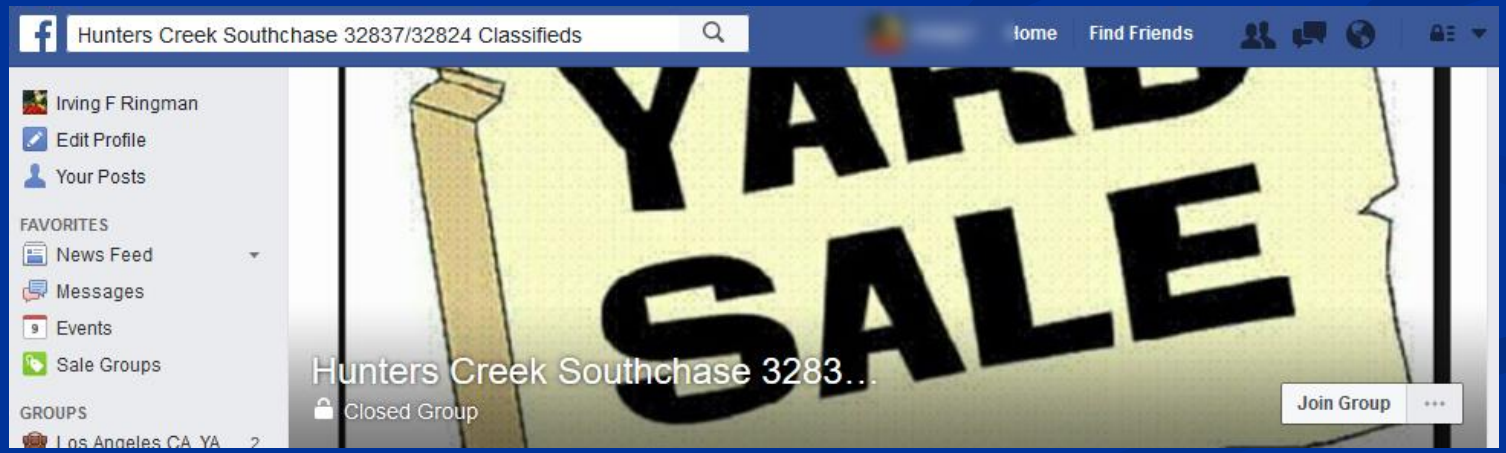
© LTAS Technologies Inc. 2016

info@harmari.com

Facebook Groups

- Open Group – searchable
- Closed Group – need to join and be accepted

(80% closed groups in Orlando area, ranging from 500-8000 members)

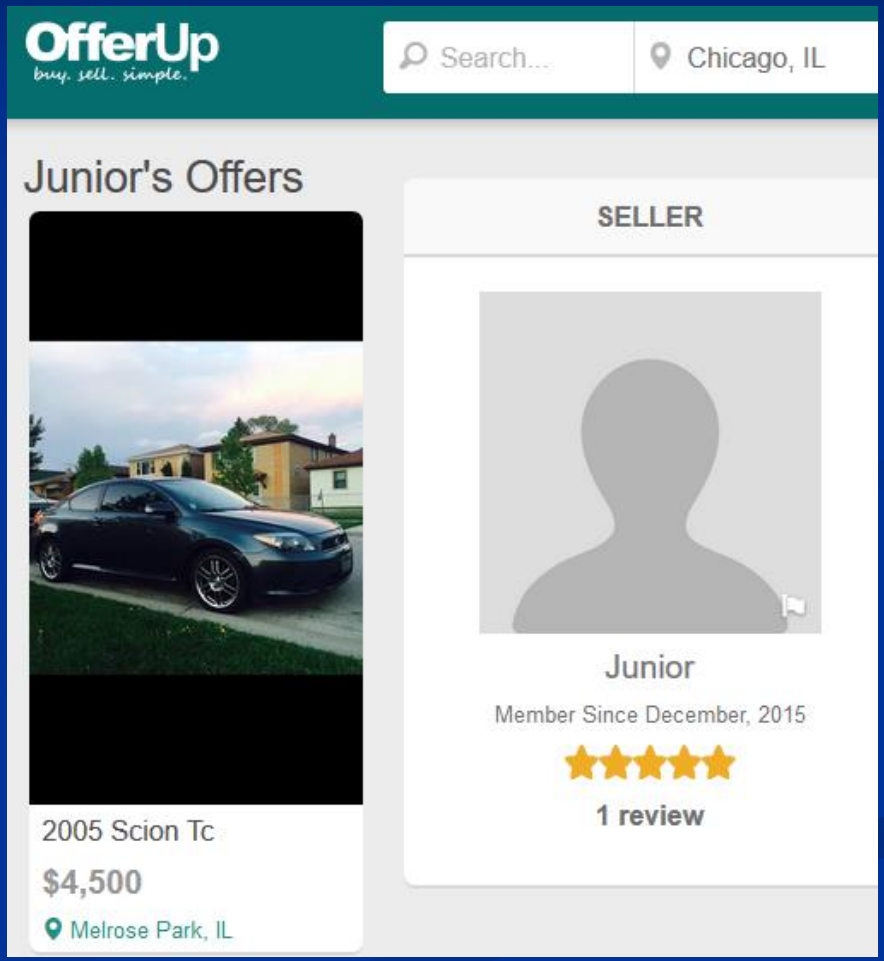


© LTAS Technologies Inc. 2016

info@harmari.com

OfferUp

- No phone number displayed, just avatar or first name
- Harder to associate the insured with vehicle reported in loss
- Need to search vehicle + first name



© LTAS Technologies Inc. 2016

info@harmari.com

Classifieds Quick Guide

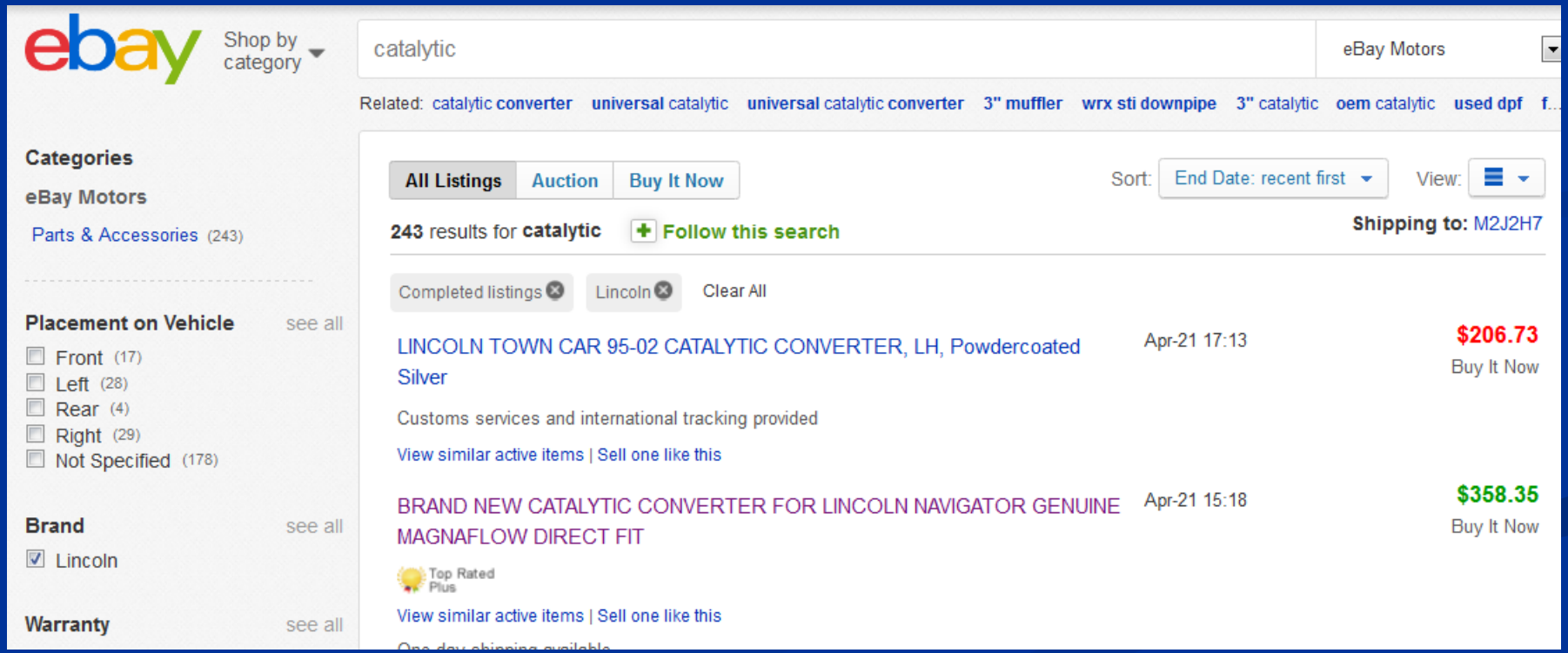
Feature	Craigslist	FB Sale Group	OfferUp
Google searchable	Yes	Public Groups only	Yes
Identifying information	Phone number First name	FB Account	First name Avatar
Ad lifetime	7 days metro / 45 days elsewhere	30 days	Indefinite
Deleteable by author	Yes	Yes	Yes
Item Sold Tracking	No	Yes	Yes
Seller Identity Verification	Phone number (mandatory)	Phone number (mandatory)	Phone number (mandatory) DL/Selfie (voluntary)

© LTAS Technologies Inc. 2016

B222
info@harmari.com

eBay – Completed auctions

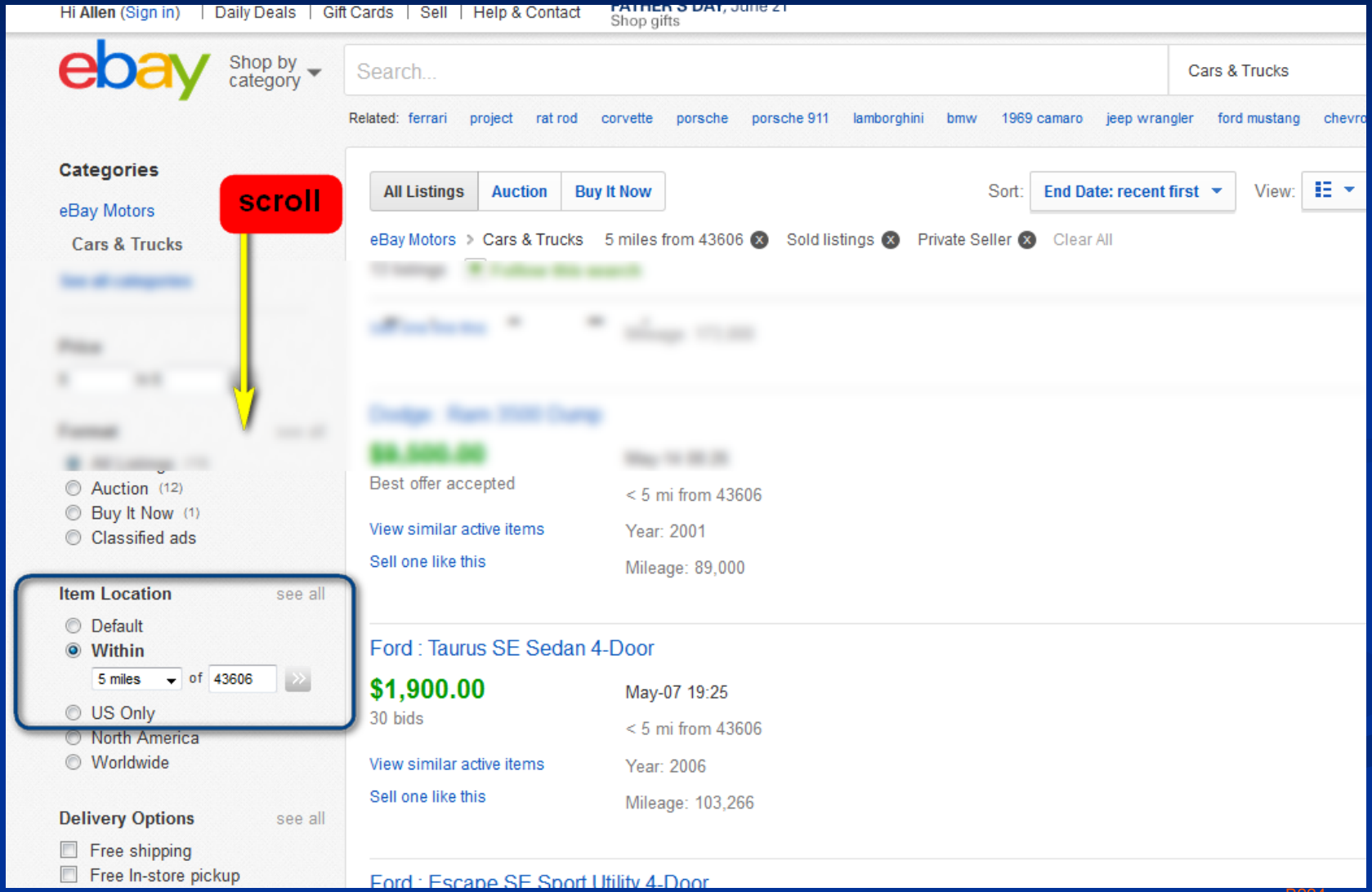
- Can look at completed auction data using advanced feature (up to 90 days back)



© LTAS Technologies Inc. 2016

info@harmari.com

eBay – items near location



© LTAS Technologies Inc. 2016

info@harmari.com

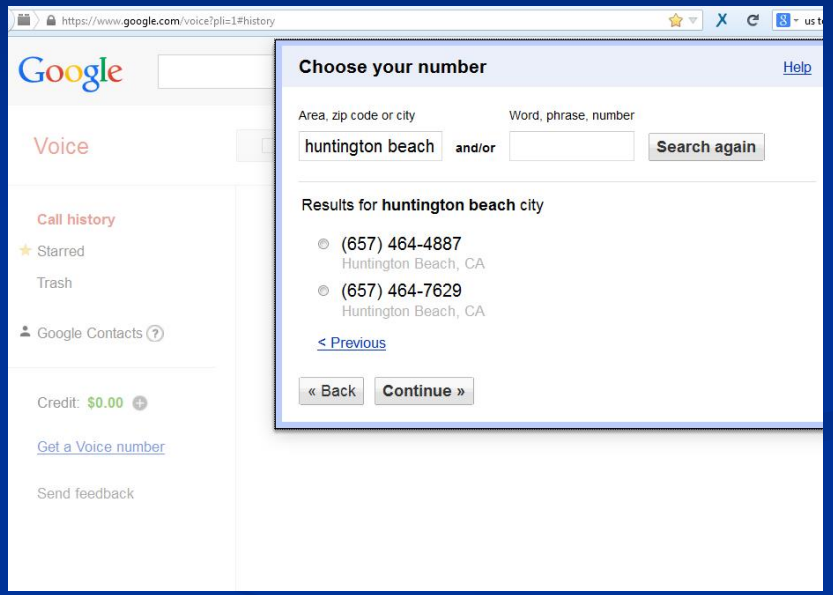
The "Game"

- Career Criminals adapt when they feel the heat
  - Never title the car in their name (rookie mistake)
  - Move their ads to another website
  - Obfuscate phone number in ad
  - Change cell numbers often
  - Block license plate from the picture
  - Photograph car indoors

© LTAS Technologies Inc. 2016

Google Voice

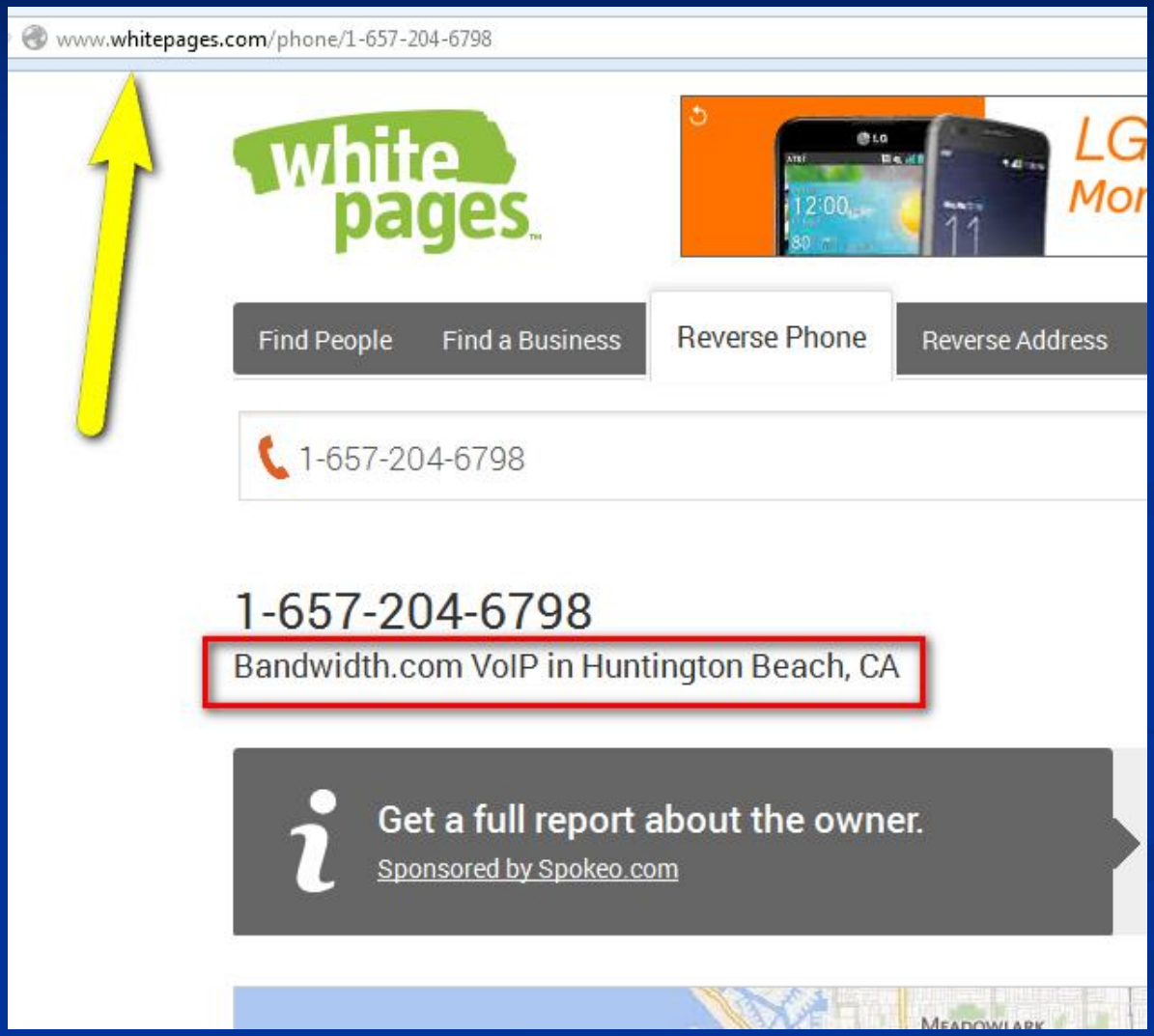
- A free phone number
- Allows you to forward / ring on up to 6 different numbers
- Call screening customized daytime / evening / weekends
- Multiple GV numbers → One Cellphone
- Other "disposable" phone numbers available for low cost, but they are all VoIP based



© LTAS Technologies Inc. 2016

info@harmari.com

Detecting VoIP numbers



© LTAS Technologies Inc. 2016

info@harmari.com

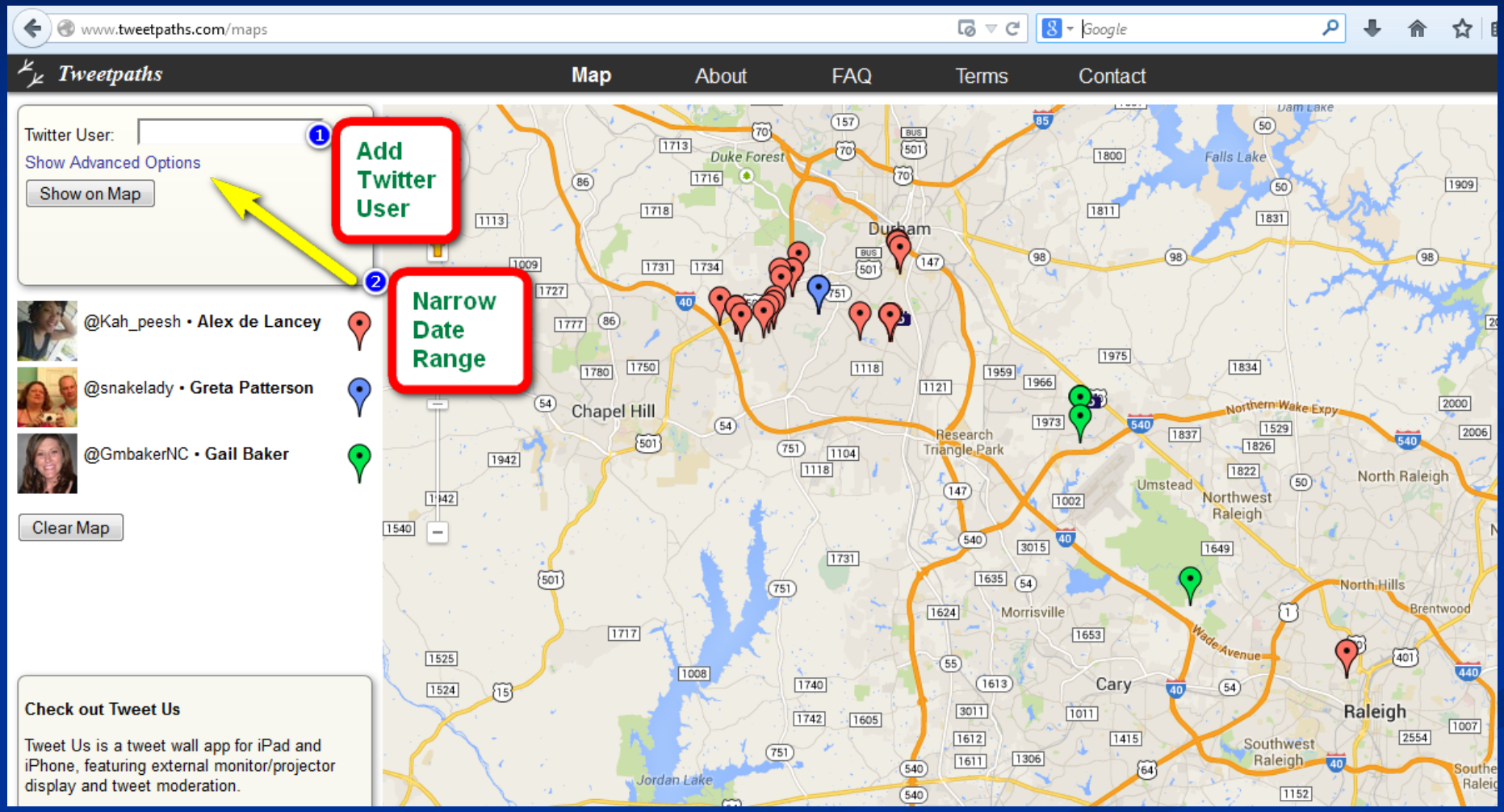
Ridesharing

- 11,000 people on Facebook indicate they are a Driver / Contractor / Chauffeur for a TNC
  - Uberpeople.net – TNC driver forum
- 2,000 people on LinkedIn
- Craigslist has it under
  - Community > rideshare
  - Services > automotive
  - Use keywords “airport”, “driver”, “taxi”

© LTAS Technologies Inc. 2016

info@harmari.com

TweetPaths – Location/Timelines



© LTAS Technologies Inc. 2016

B229
info@harmari.com

Instagram Desktop Tools

- Webstagram
  http://websta.me/tools#blog_parts
  (max 150 recent pics)
- Pinsta.me (http://pinsta.me)
  (no limit, but must hold spacebar)
- http://bearpanther.com/instamap/
  (filter by location, tag)

*browsing does not require an Instagram account

© LTAS Technologies Inc. 2016

info@harmari.com

Check Image Repository

To access all pictures in the album:

- If possible, click on the high-res image to see where it goes
- If not, Right click on Image and
  - "Copy Shortcut" for IE users
  - "Copy Image Location" for FF users
- Click "View All", "View Entire Album", or "View Other Albums", and you might get lucky!
- If it's a "private" album, try searching Google

© LTAS Technologies Inc. 2016

info@harmari.com

Example Image Repository

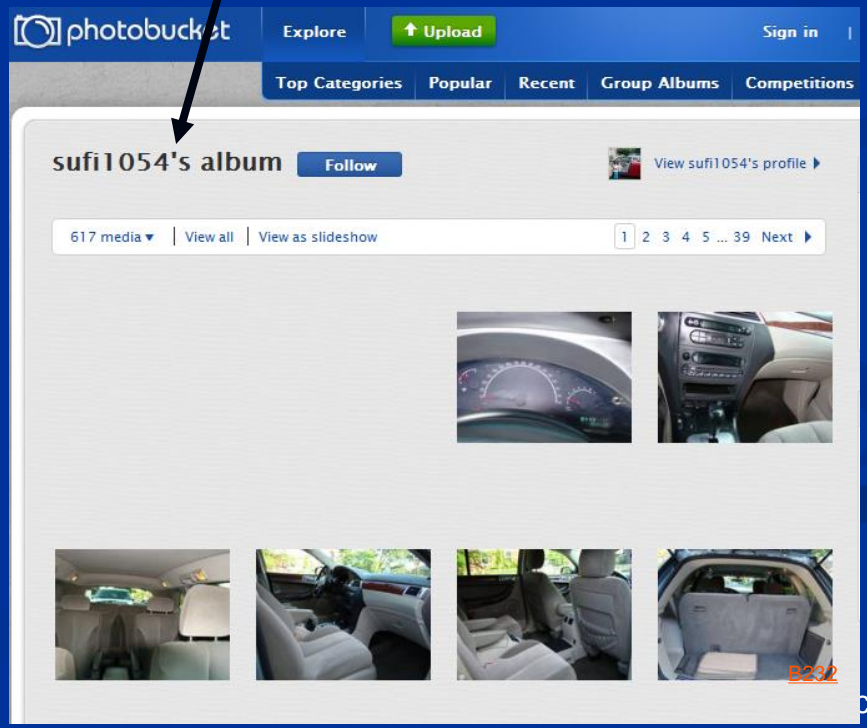
1999 CHRYSLER SEBRING CONVERTIBLE LEATHER - $2795 (QUEENS AREA)

Date: 2012-05-30, 9:40AM EDT
Reply to: q7gwp-3046365605@sale.craigslist.org

1999 CHRYSLER SEBRING CONVERTIBLE
RUNS VERY GOOD
135K MILES
ENGINE VERY GOOD
TRANSMISSION VERY GOOD
CLEAN INSIDE...CLEAN OUTSIDE
POWER WINDOW ..POWER LOCKS..
TOP WORK VERY GOOD
CD PLAYER...AMPLIFIER ..
NEW TIRES..NO LEAK NO NOISE
(5:::1:::6::9::4::5::9:::3::8::4

Image Link:
i709.photobucket.com/albums/ww97/sufi1054/f6ca628e.jpg

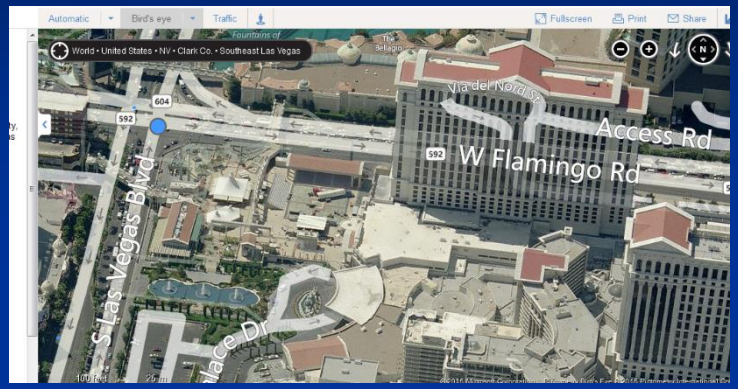
Repository:
i709.photobucket.com/albums/ww97/sufi1054



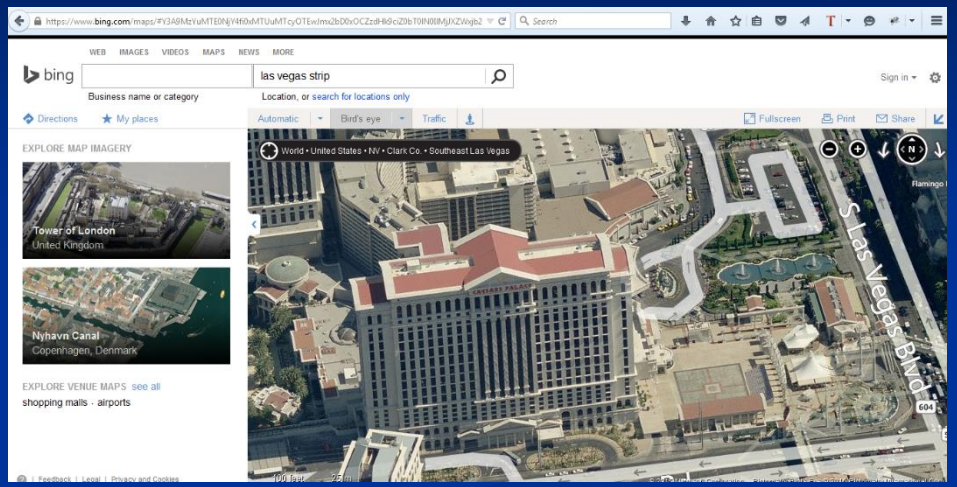
If the album is "open" you can browse other pictures to find other cars/items for sale.
This one has 39 pages of pictures

© LTAS Technologies Inc. 2016

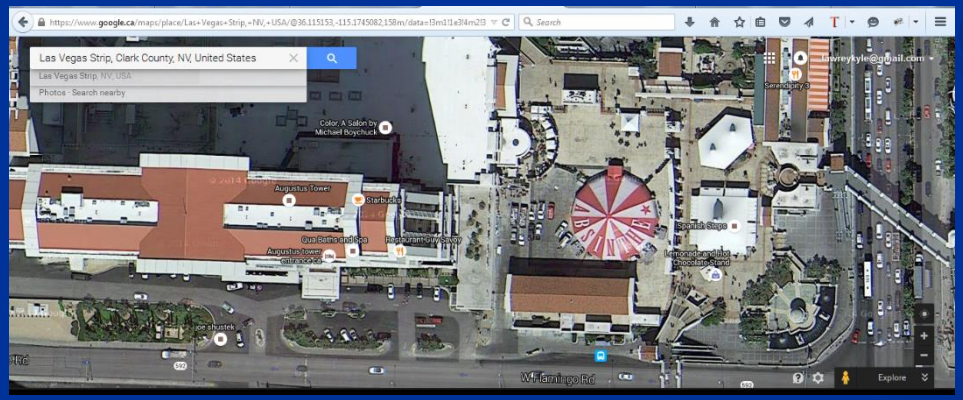
Bing Maps Birdseye View



Birdseye from South



Birdseye from North



Google Maps

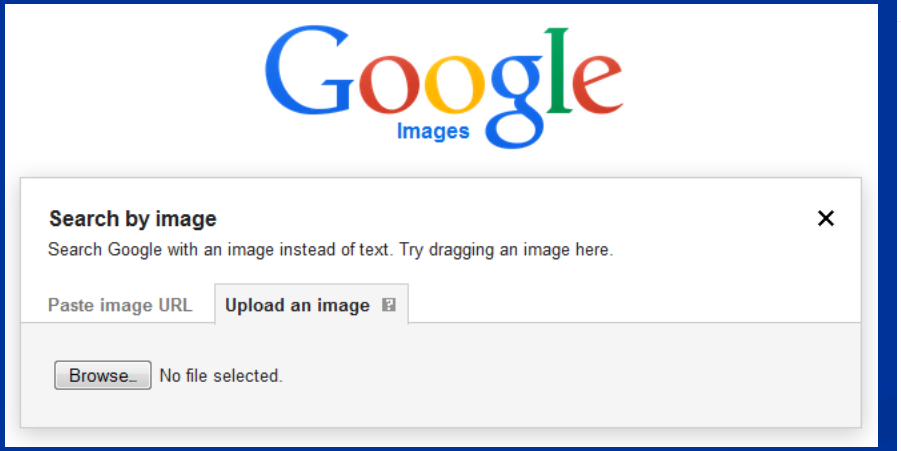
- 40 Degree angle photos taken by aircraft
- Great for getting detail of house at different angles
- Based on Pictometry technology

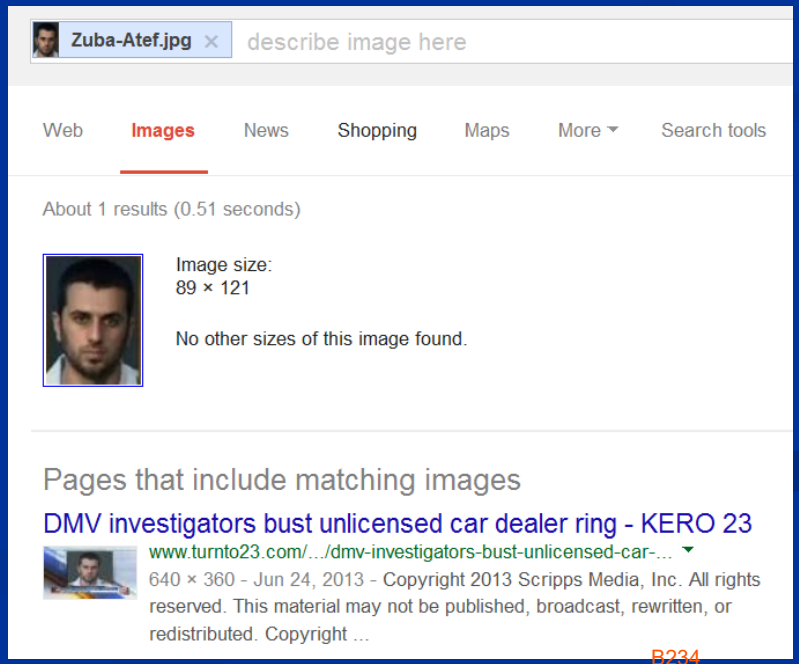
© LTAS Technologies Inc. 2016

info@harmari.com

Google Mugshot search

- Google.com, click Images, click the Camera
- Google returns the 'similar images'
- Pretty good on press release content





© LTAS Technologies Inc. 2016

info@harmari.com

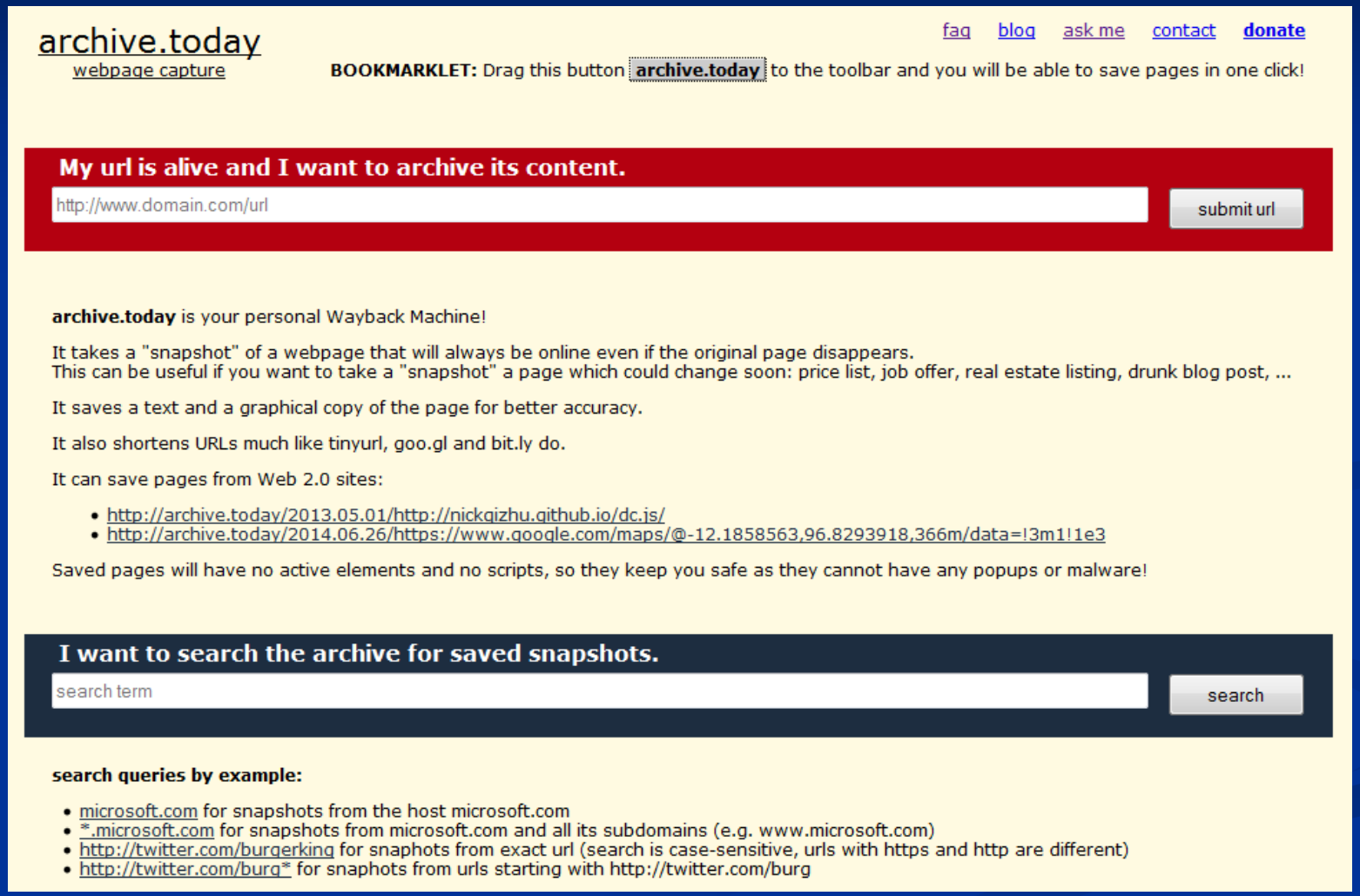
Internet Archive

- www.archive.org
- Archive of snapshots of over 416 billion pages
- Even if the page is deleted today, you can still get at it
- Some limitations
  - Does not archive 'dynamic' content i.e. search results
  - Some limitation on depth

© LTAS Technologies Inc. 2016

info@harmari.com

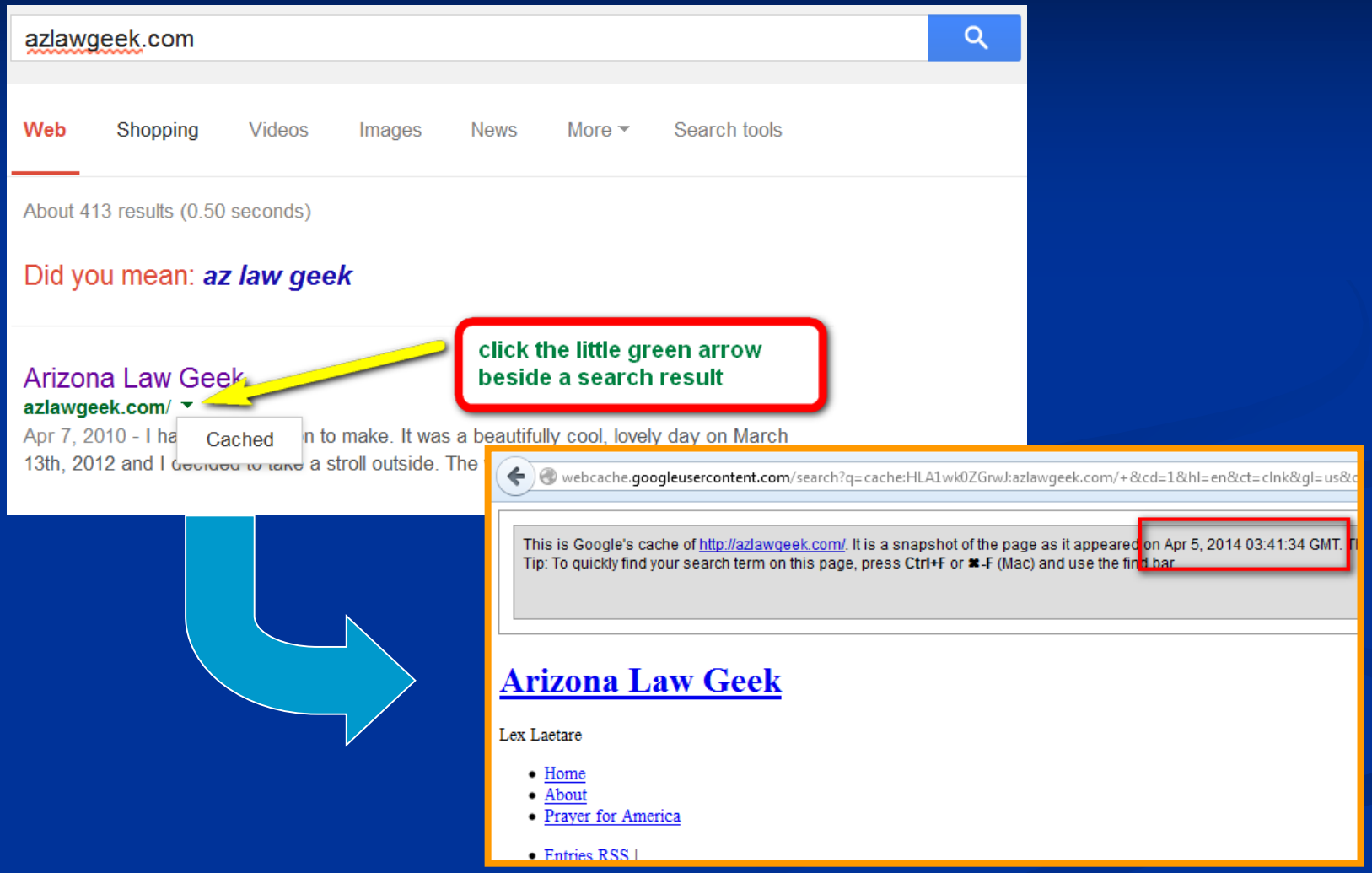
More Internet Archives



© LTAS Technologies Inc. 2016

info@harmari.com

Google Cache



© LTAS Technologies Inc. 2016

info@harmari.com

Google Advanced Search

What do these searches do?

- Auto theft site:.gov
- 2007 Tahoe site:losangeles.craigslist.org
- Meth site:.onion

© LTAS Technologies Inc. 2016

info@harmari.com

Google Advanced Search

Operation	Example	Useful for
Phrase search	"hotwire electric"	Exact company name or exact person's name
Neg. keyword	electrician -jobs	Eliminate popular matches in favour of alternative
Wildcard	* Buffet	Matches any word with the word following it
Pos. keyword	electrician +john +smith	Forces keyword to appear in results
filetype	John smith filetype:pdf	Finding official documents (permits, city/municipal records, government docs)
Try http://www.google.ca/advanced_search		

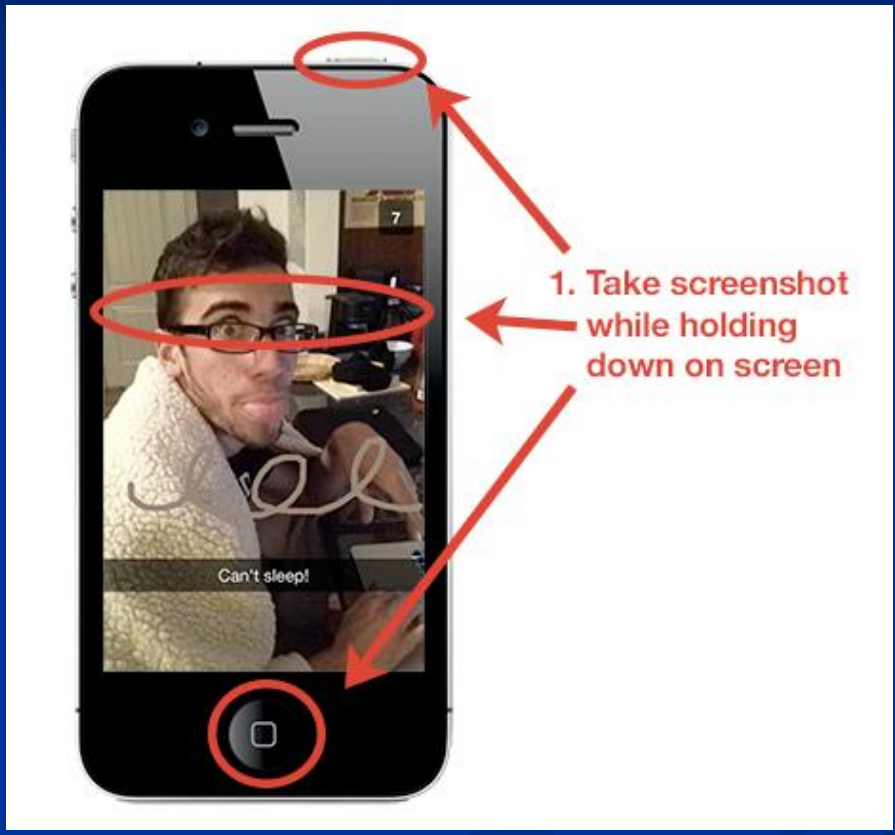
© LTAS Technologies Inc. 2016

info@harmari.com

Social Media

Capturing Snapchats

Multi Webcam Video Recorder Free



Manual Screengrab

© LTAS Technologies Inc. 2016

info@harmari.com

Capturing Snapchat

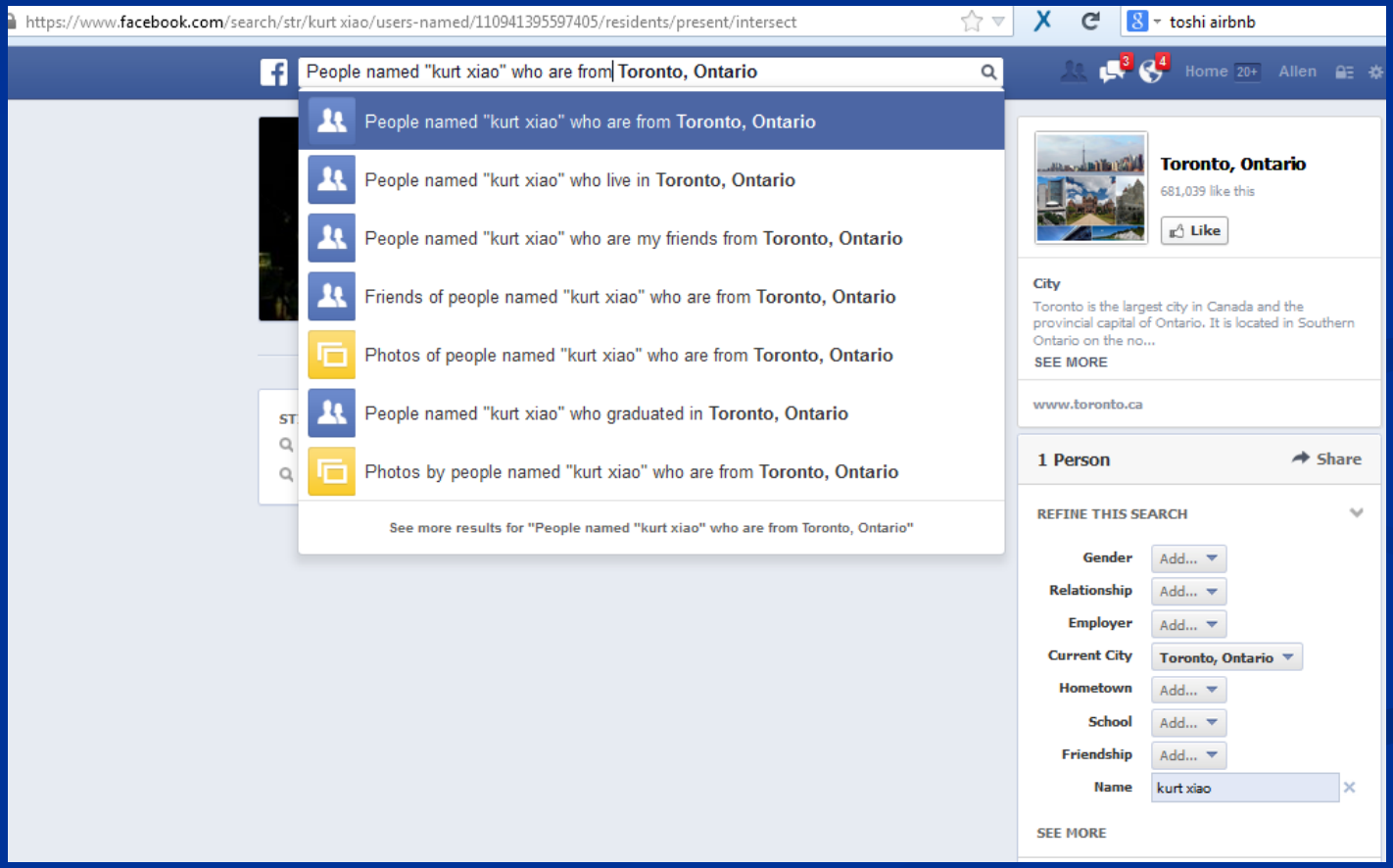
- AirServer ($20)
  - Connects to Airplay, GoogleCast, and Miracast
  - Extends mobile display to large screen
- Faststone $20
  - Records audio + video off your computer

© LTAS Technologies Inc. 2016

info@harmari.com

Facebook Graph Search

- A stalker's dream?! (screenshot circa 2016)



© LTAS Technologies Inc. 2016

info@harmari.com

Graph Search

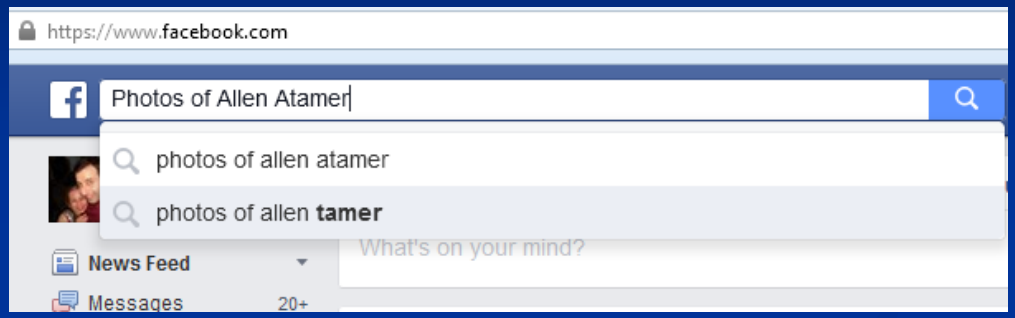
- Suppose your target is John Pefferdoe from Jonestown
- On the surface, not much … no timeline, private friends list, one or two photos
- "Photos of John Pefferdoe"
- "Photos Taken By John Pefferdoe"
- "Places John Pefferdoe visited"
- "People who live / work / from Jonestown…"
- "People who work at …"
- "Events John Pefferdoe attended"

© LTAS Technologies Inc. 2016

info@harmari.com

Recent FB search changes

- Acts more like Google than Facebook
- But Facebook Graph search is still under the hood

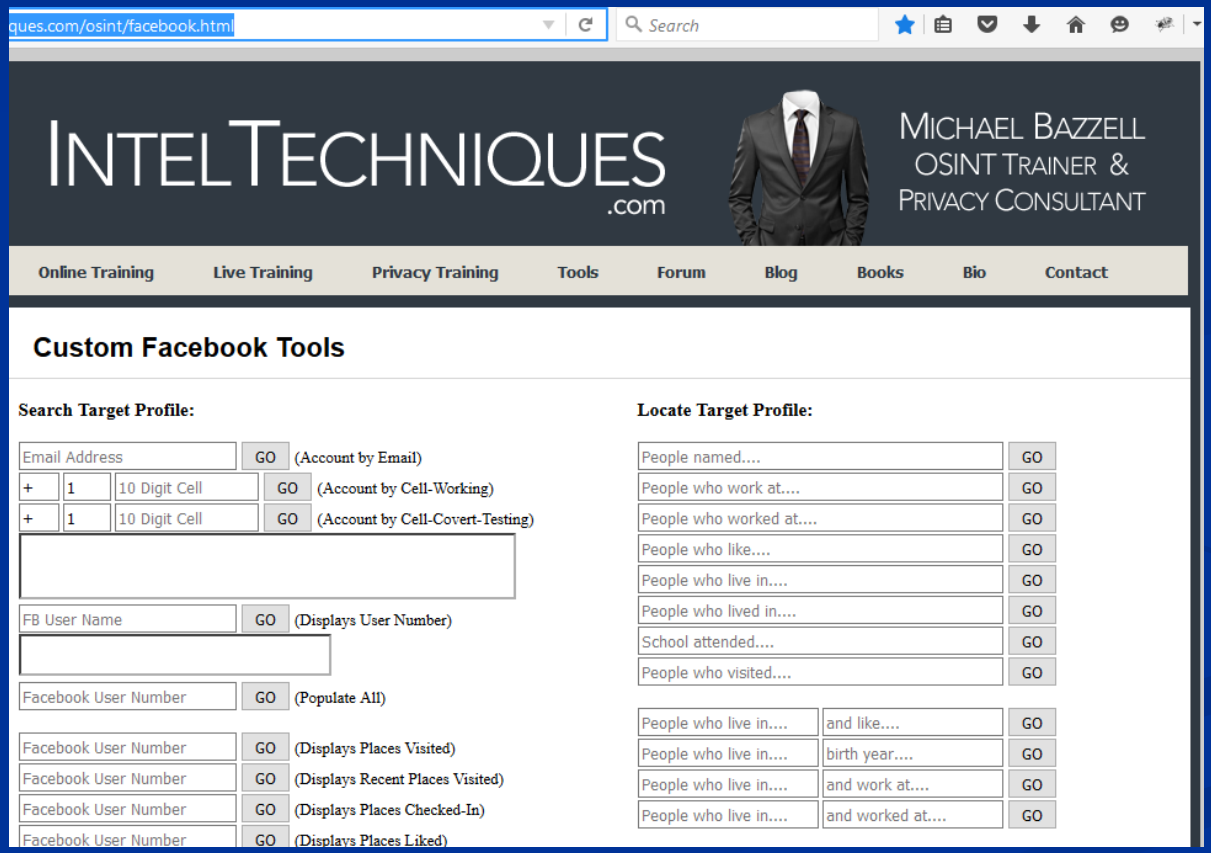


© LTAS Technologies Inc. 2016

info@harmari.com

FB Graph Reference

http://inteltechniques.com/osint/facebook.html

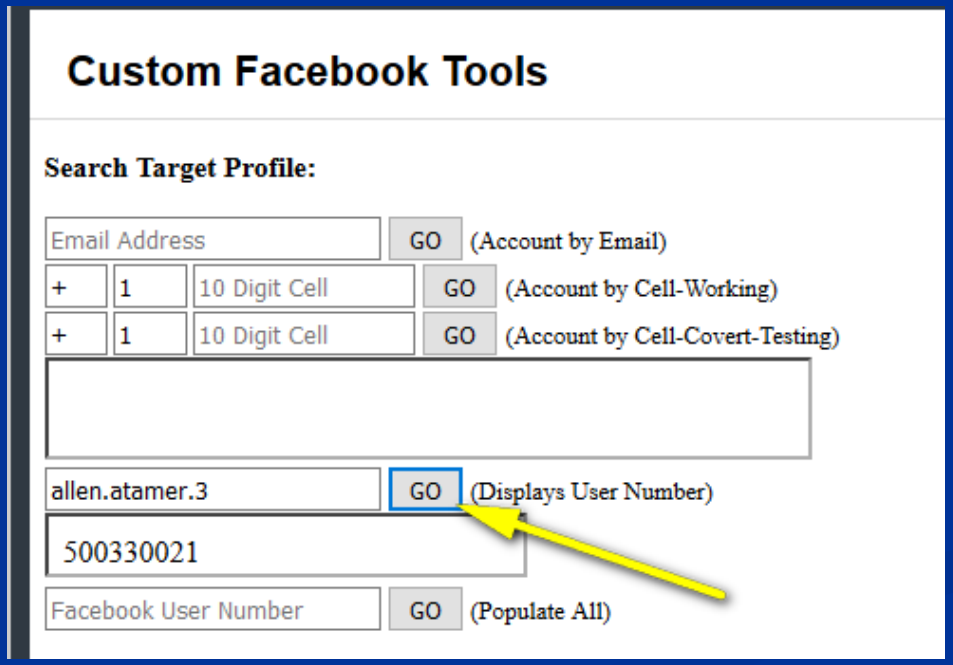


© LTAS Technologies Inc. 2016

info@harmari.com

FB Graph – Step 1

Copy the target's FB website address (e.g http://www.facebook.com/johndoe123) and paste it into this box below and click GO

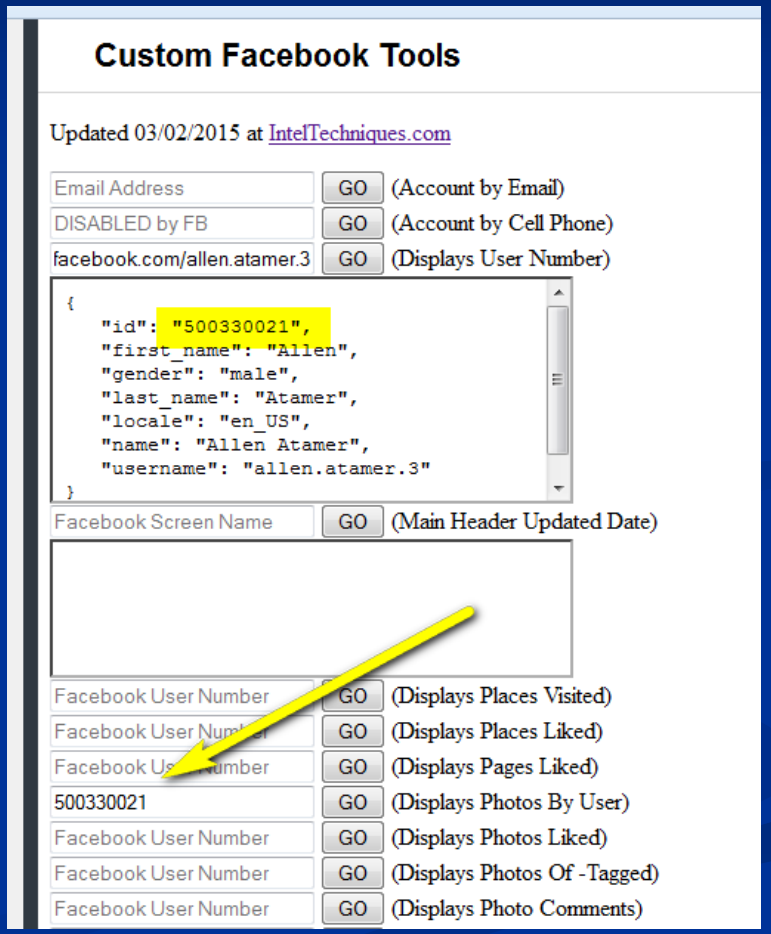


© LTAS Technologies Inc. 2016

info@harmari.com

FB Graph – Step 2

- Copy the ID number from that box, and paste it into the "Display Photos By User" box and click GO



© LTAS Technologies Inc. 2016

info@harmari.com

FB Graph – Step 3

- Your browser should pop open a new tab which contains all the pictures taken by the target

© LTAS Technologies Inc. 2016

info@harmari.com

Can FB Target see you?

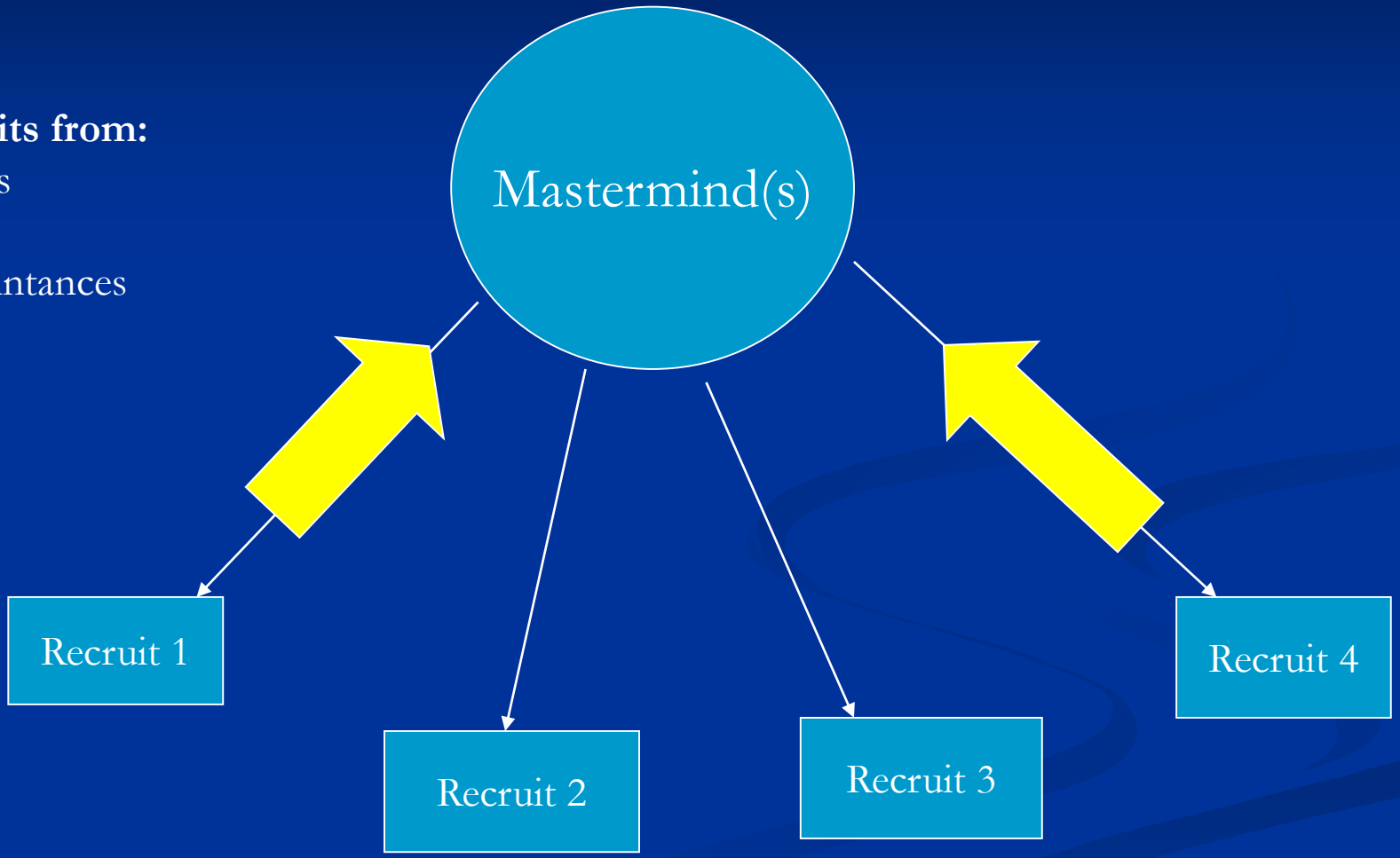
- Will you appear on your target's PYMK list? NO (see blog from Sep. 2013)
- Possible causes:
  - Mutual Friends
  - Phone number connection thru FB App on both phones
  - Hometown/High School
- Stats: out of 100 recommendations **only 16** didn't have mutual friends in common

© LTAS Technologies Inc. 2016

info@harmari.com

Staged Accidents

Recruits from:
Friends
Family
Acquaintances



© LTAS Technologies Inc. 2016

info@harmari.com

Warning:

Individuals named are only examples

WIST – Find Links

WIST - Web Identity Search Tool

Login screen | WIST Search | WIST: Allen Atamer - Tara Weinstein ×

Allen Atamer
Toronto, Ontario
Massachusetts Institute of Technology (MIT)

Ani Christina
Toronto, Ontario
Married
Born on November 22

Jess Bennett
Toronto, Ontario
SapientNitro
Knows Canadian English, Canadian French, Italian, Spanish

Tara Weinstein
New York, New York

Is Direct Friend: No

Shortest Indirect Link Length: 2

Number of Indirect Links: 20

Total users scanned: 68336

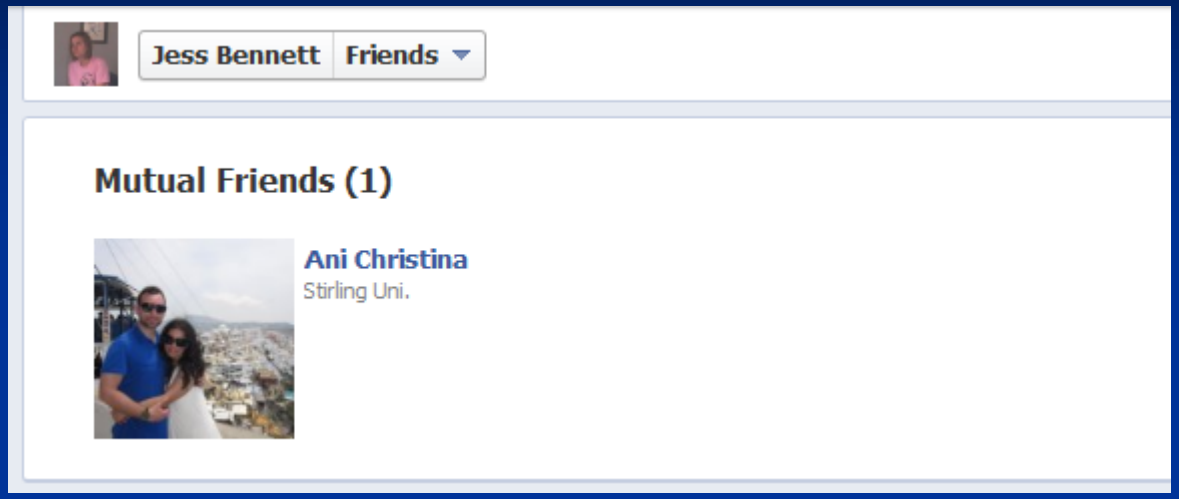
Total time taken for search: 238 seconds

Eitan Weinberg <------> Sanjeev Luthra
Jamie Wells <------> Michael Richters
Jamie Wells <------> Jack Bennett
Jamie Wells <------> Jordan Shapiro
Jamie Wells <------> Lee Chang
Graham Wright <------> Chong-Zi Chen
John Gatsis <------> Daniel Levner
Ani Christina <------> Jess Bennett

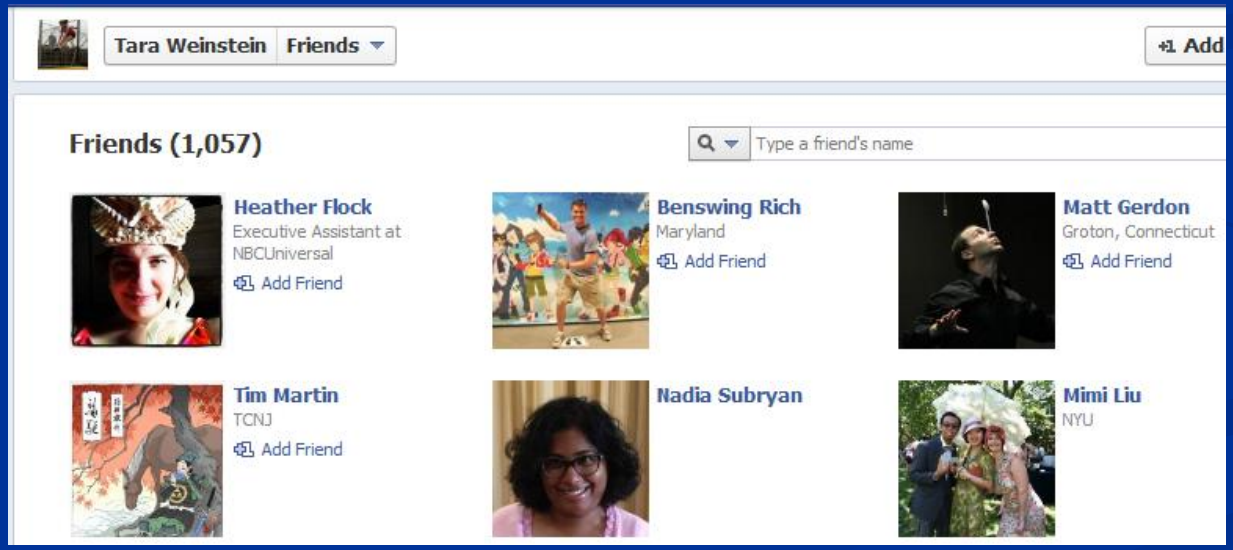
B253

© L

…Despite Private Friends list!



Visibility when Friends are private

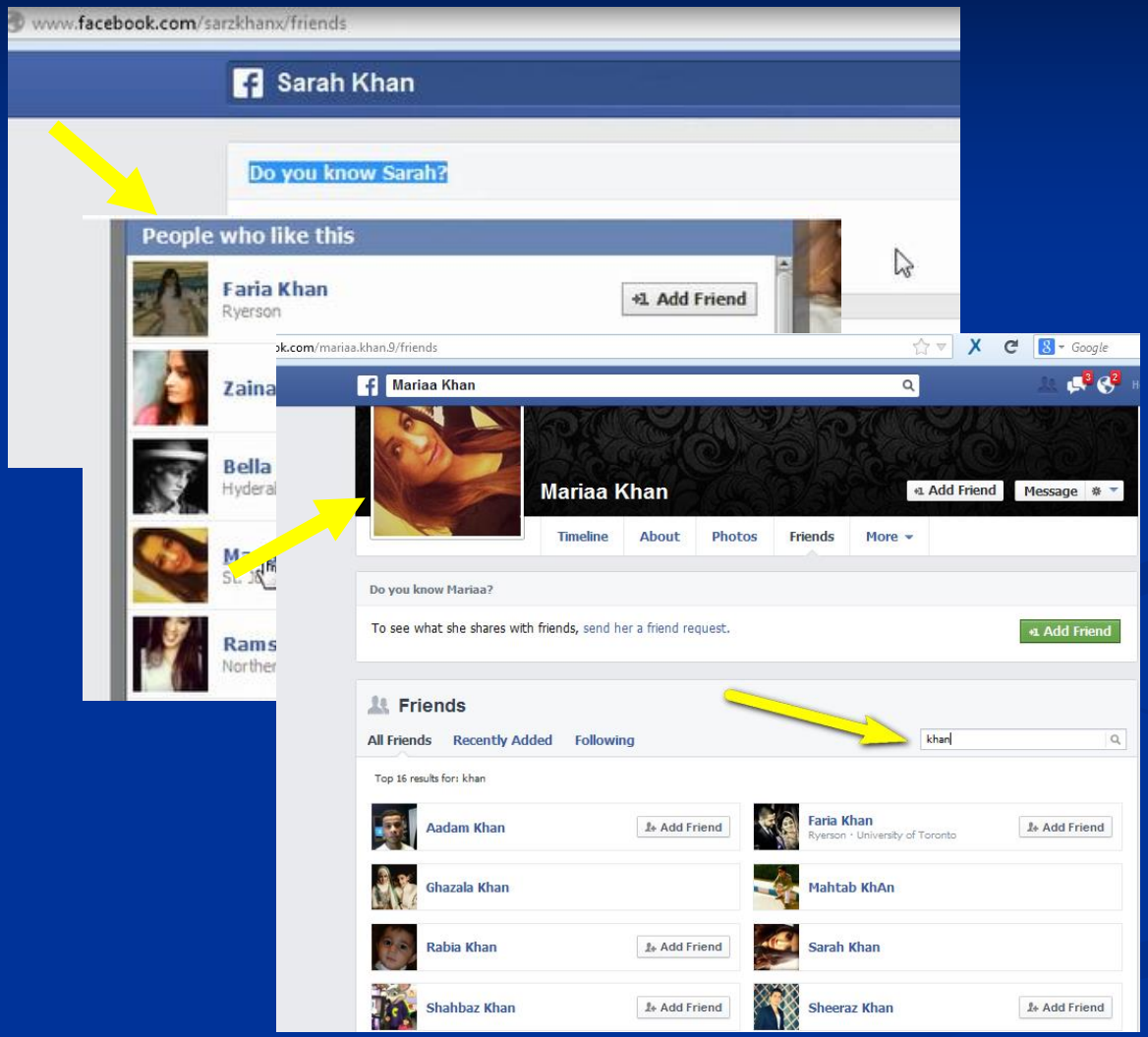


Visibility when Friends are public

© LTAS Technologies Inc. 2016

info@harmari.com

Scenario 1: Unlock Private Friends List



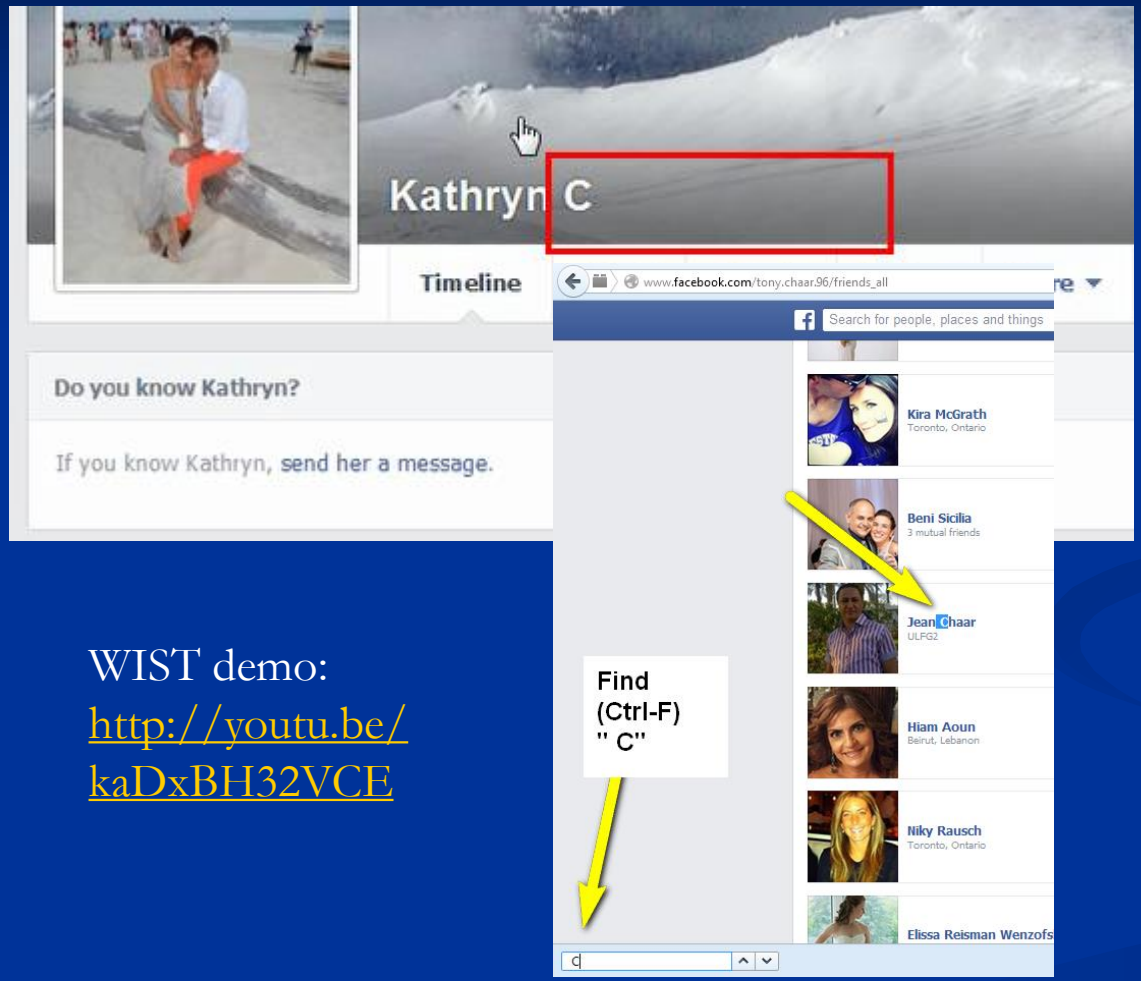
1. Scroll down the target's wall and check the likes box
2. Pick a friend with a Public Friends List
3. Start working backwards towards your target
4. FB searches both first and last names as you type in the Friends List

WIST demo: http://youtu.be/jif8CCOjJ5s

© LTAS Technologies Inc. 2016

info@harmari.com

Scenario 2: Find last name



1. Scroll down the target's wall and check the likes box
2. Pick a friend with a Public Friends List
3. Start working backwards towards your target
4. First letter C using FB search **(page limited to 14 results)**
5. **(BETTER)** press and hold the space bar down to fetch the whole list
6. Now use CTRL-F to search last names " C"

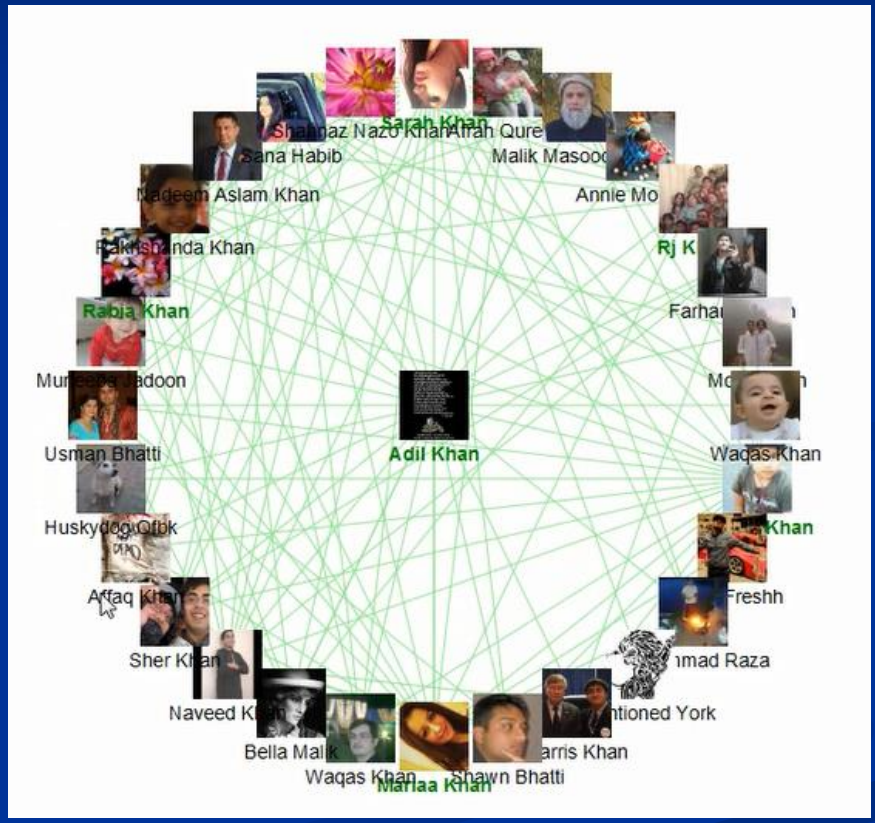
WIST demo: http://youtu.be/kaDxBH32VCE

© LTAS Technologies Inc. 2016

info@harmari.com

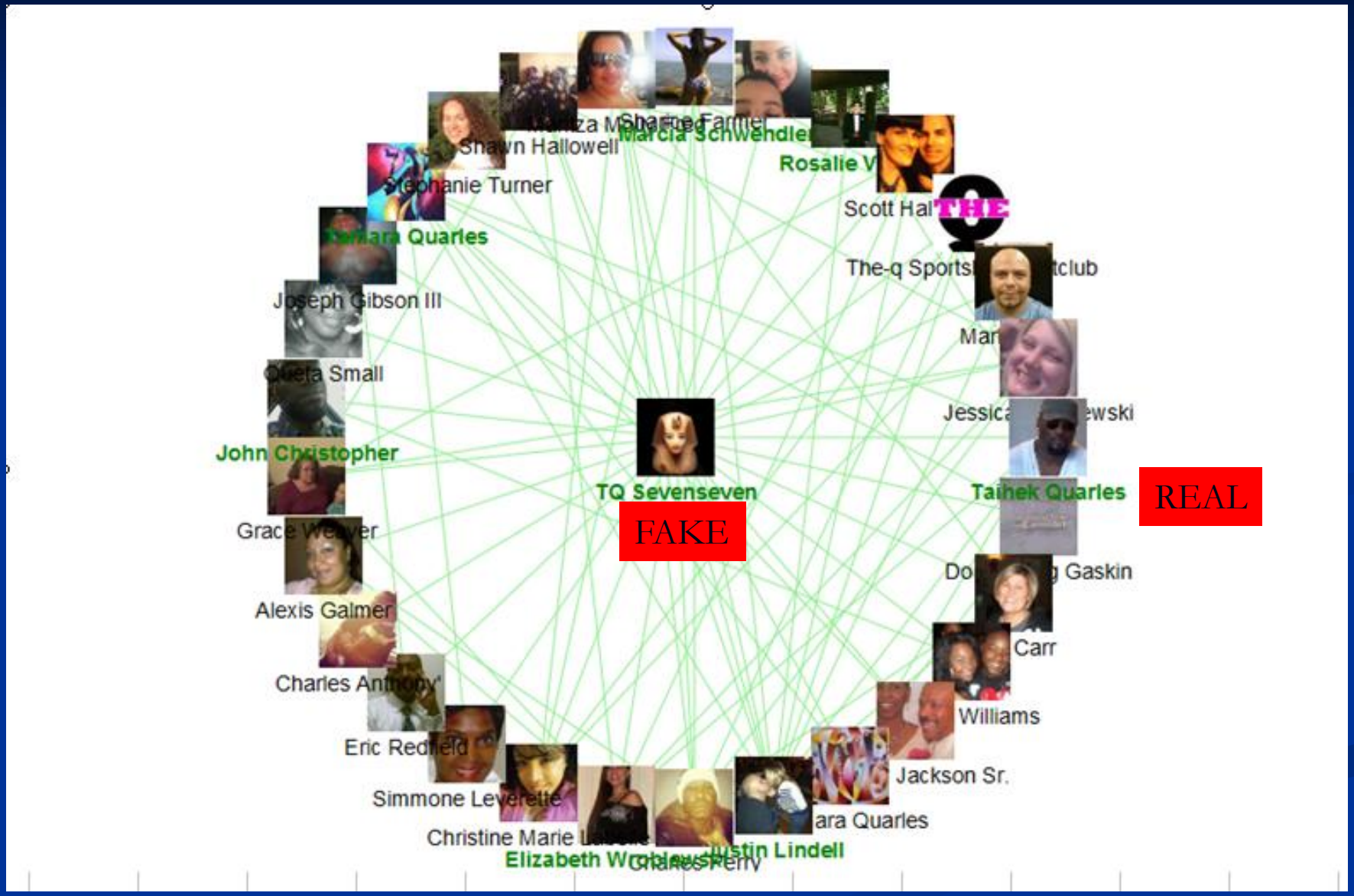
Scenario 3: Find Kingpin

- Too tedious to do manually!
- http://youtu.be/tB0JB87UEjM



© LTAS Technologies Inc. 2016
info@harmari.com

Scenario 4: Find Real Profile from the Fake Profile



© LTAS Technologies Inc. 2016

info@harmari.com

Social Network Analysis

- Average of 3.57 degrees of separation for all of Facebook

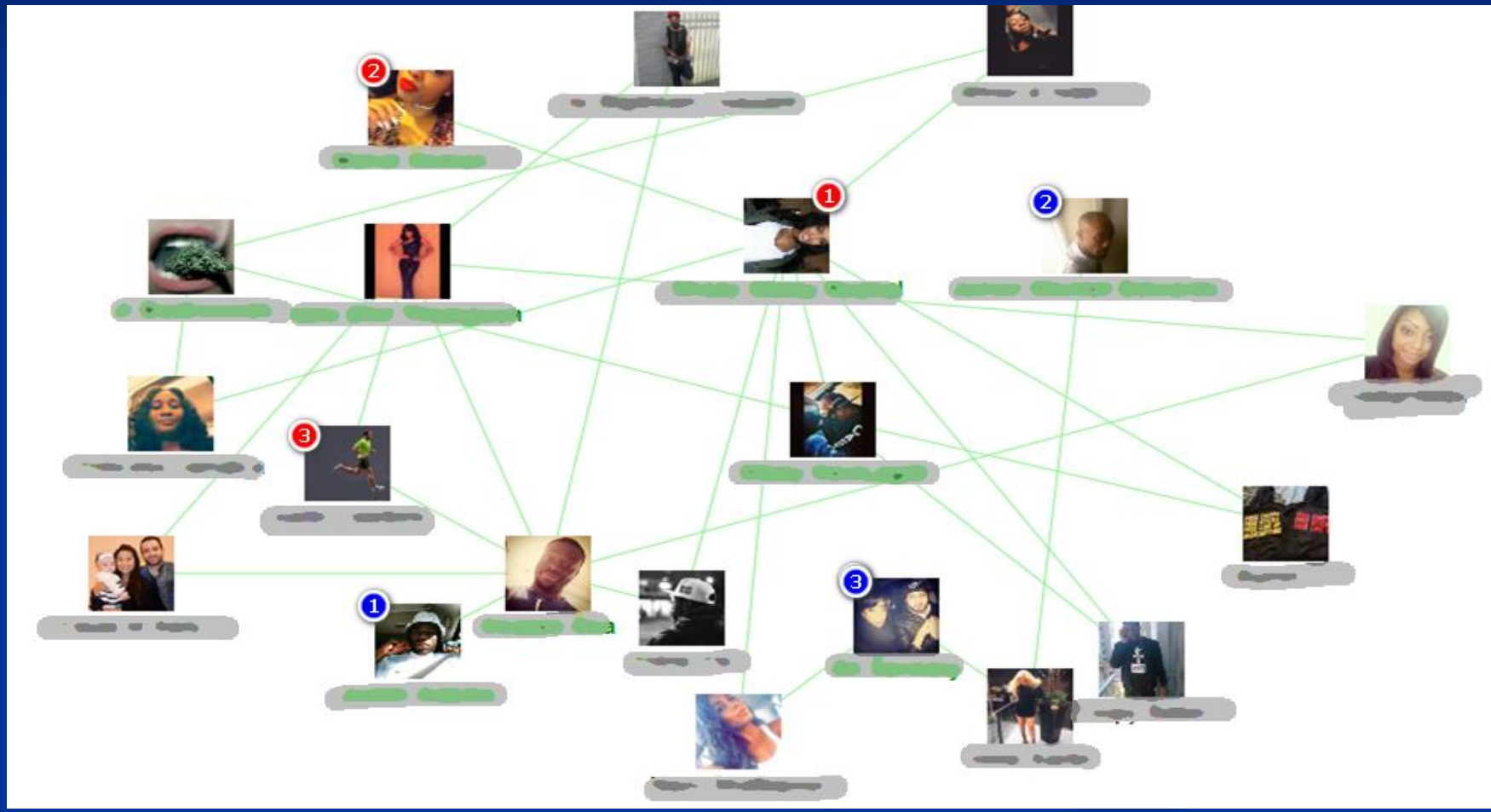
Source: https://research.facebook.com/blog/three-and-a-half-degrees-of-separation/

- Even higher for third party looking in due to private friends lists
- Anything in the 2-3 degree range is beyond statistical chance

© LTAS Technologies Inc. 2016

info@harmari.com

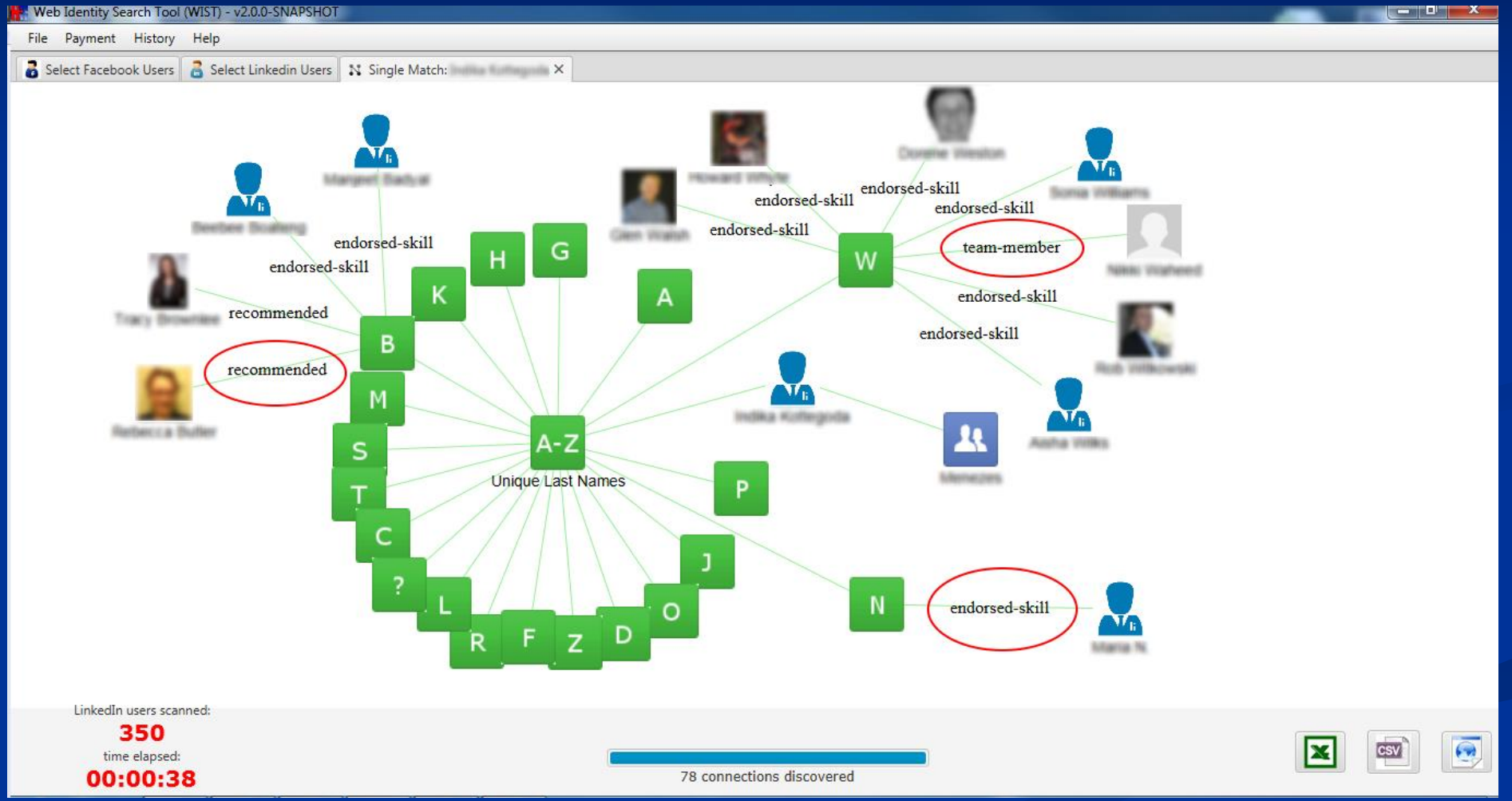
Facebook Link Analysis



© LTAS Technologies Inc. 2016

info@harmari.com

Scenario 4a: LinkedIn



© LTAS Technologies Inc. 2016

info@harmari.com

WIST

- http://harmari.com, Products > WIST
- Must install on standalone PC
- Pay-per-match based on credits
- Enterprise accounts available (user management, reporting)
- Phone and email support
- Software updates incl. FB API changes

© LTAS Technologies Inc. 2016

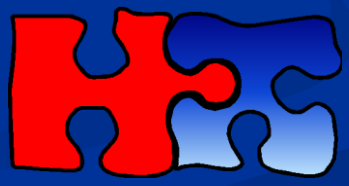
info@harmari.com

Thank you

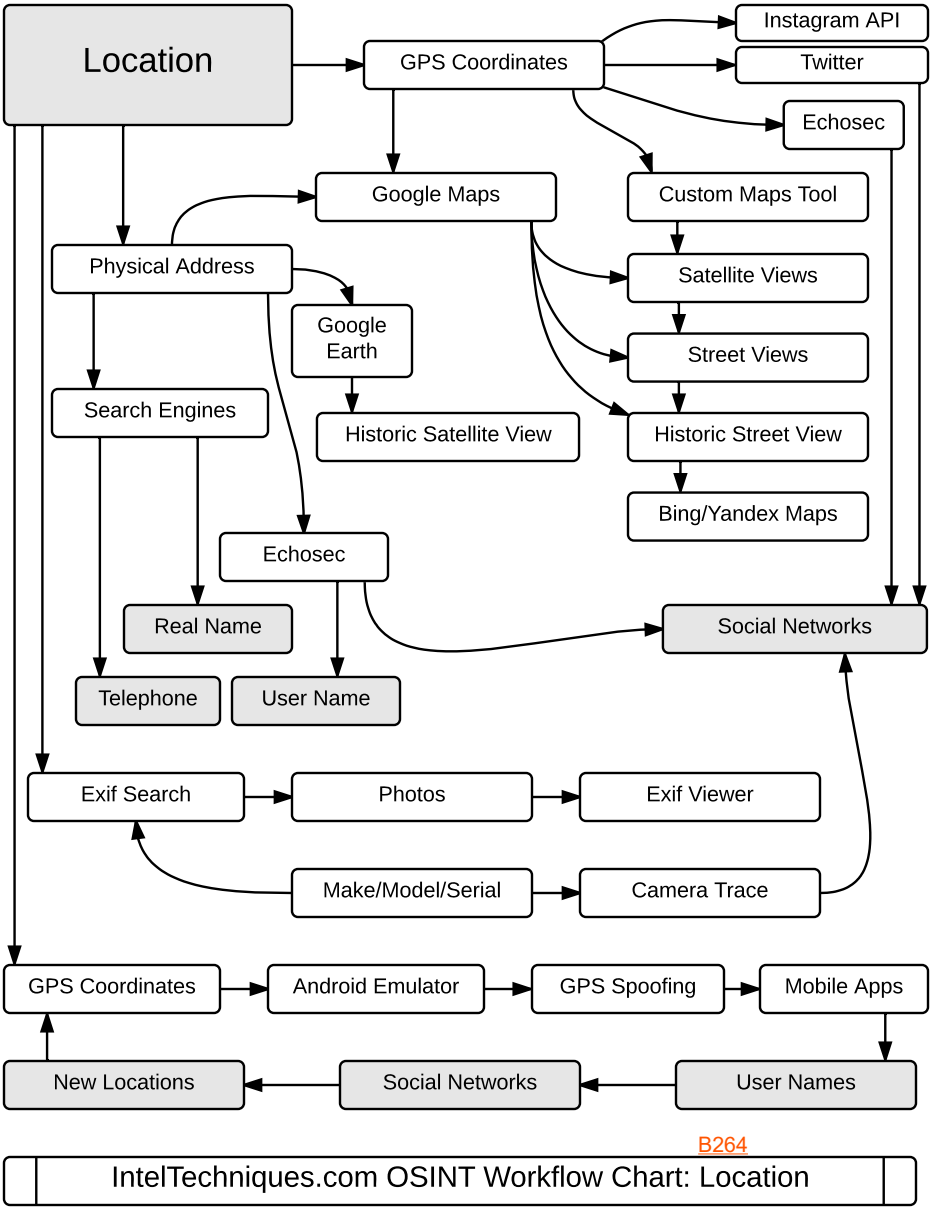
Our customers include:

- 80 police, state, and federal government agencies
- 20 insurance companies
- Lawyers, PIs, Retail LPs, Cybercrime

LTAS Technologies
www.harmari.com
1-877-352-3277
Email: info@harmari.com



© LTAS Technologies Inc. 2016


Location
GPS Coordinates
Instagram API
Twitter
Echosec
Google Maps
Custom Maps Tool
Physical Address
Satellite Views
Google Earth
Street Views
Search Engines
Historic Satellite View
Historic Street View
Bing/Yandex Maps
Echosec
Real Name
Social Networks
Telephone
User Name
Exif Search
Photos
Exif Viewer
Make/Model/Serial
Camera Trace
GPS Coordinates
Android Emulator
GPS Spoofing
Mobile Apps
New Locations
Social Networks
User Names
B264
IntelTechniques.com OSINT Workflow Chart: Location

HetheringtonGroup

Expert Investigations and Intelligence Services

OPT OUT ONLINE

The recognition and removal of personal identity information found through the Internet

Cynthia Hetherington, MLS, MSM, CFE, CII

November 11, 2017

Version 9.1

www.hetheringtongroup.com
T. 973.706.7525 E. cs@hetheringtongroup.com
400 Ringwood Ave. Wanaque, NJ 07465

About Us

The Hetherington Group is a professional security, intelligence, and investigative group. We assist those in the high-profile market with their day-to-day exposure online and in the media by protecting their privacy. With our years of knowledge and experience, we identify the resources from where personal identifying information is created, stored and disseminated, and we remove or alter their personal information, such as addresses, family members, and associates.

As a specialist firm that also conducts training and publishing, we also endeavor to teach those who can do for themselves—particularly in the first responder and military communities. This report is meant to help facilitate your personal privacy in a very open online world. There is no one solution, no one vendor, who has all the answers. The best security practices start at home. Using this report as a guide, you can begin to remove, obstruct, or obscure the open source information that leaves you and your family vulnerable online.

OPT OUT ONLINE

The recognition and removal of personal identity information found through the Internet. *Cynthia Hetherington, MLS, MSM, CFE, CII*

~ You are not forgotten ~

THE ANTI-ESTABLISHMENT IS HUNTING YOU ONLINE

In this combative world of ours, militants will take any advantage to undermine their enemy; they'll gather home addresses of soldiers serving overseas in order to threaten military families at home, and they'll possibly protest on the front lawns of first responders. Militants are walking our streets, angry for the injustices they feel have befallen them, American citizens who wish they were not part of this country but sovereign in their own nation-state, the Islamic State of Iraq and the Levant (ISIL) with its grasp on our youth from an ocean away. The Anonymous joining the ranks of the Crips, the Bloods, and the Hells Angels; characters made romantic by the film industry in such movies as *GoodFellas* and *Scarface,* rendered classics by their admirers. In truth, these entities are anti-establishment, and their followers would sooner see you and your family suffer than be subjected to another day of Western idealism, American justice, and democracy. A protester, anti-government, non-conforming anarchist is welcome in America, however once the line of civil disobedience is crossed over into crime, then we Americans must fortify ourselves to do our jobs and protect our families.

This report will help you understand the dark side of information. Data, at its most annoying, is a commodity with social media sites selling your *Likes* to data providers. Data, at its most dangerous, allows ISIL, from overseas, to farm from open sources the personal addresses of our military and threaten their families. Unfortunately, much of this information is shared willingly by us, ourselves.

A good deal of the information found in online databases is generated by us and our eagerness to keep our lives simple. For instance, does your keychain look like holiday garland with commercial value cards dangling from it? Gliding through the airport, do you advertise who you are with easily visible bag tags displaying your status and address? Are you, or your family members, regularly checking from either a smartphone or a laptop the Facebook and Instagram updates of friends? Is your wallet bulging with credit and/or debit cards and not dollars? Do your home phones and cell phones receive unsolicited offer/scam calls? Is your postal mail box full of unsolicited offerings? If any of these scenarios apply to you, you are oversharing your information.

Want to get a sense of how much information you generate and spread during an average day? Try the following offline example: Over the course of a week, keep a journal of all the times you share your name, address, phone number, or credit card number, online or not; how often you drive a car through a tollbooth with an automated payment system (such as E-Z Pass or Fast

Pass); how often you *Like* your friend's social media page; how often you use a grocery store coupon card; how often you pay your bills online; and how often you answer unsolicited email. After this exercise, you may think completely removing yourself from the online world would be insurmountable. Paying for goods and services with a credit card, and driving through toll stations without having to physically stop to pay the toll, and having a telephone in your home are some of the practical modern conveniences that you rely on almost daily. Give them up? Not likely.

Oddly enough, such personal information has always been readily available—although it required investigative experience and/or a serious commitment to locate these types of details through county courthouses, administrative offices, and other public record venues. Since the advent of the easily accessible and always available World Wide Web, public record companies have become available for anyone to access—over 100 such companies in the U.S. alone. These companies will locate individuals and share personal details about where they live, who lives with them, their ages, and so on, for anyone who searches on them.

FROM WHERE DO COMPANIES GET MY NAME?

Organizations use information from a variety of sources for a variety of reasons. You are familiar with some of them—businesses wanting to send you an offer, companies wanting to better understand their marketplace or to develop new products and improve customer service. In other cases, companies use information to protect you and themselves from risks related to identity fraud.

Most companies rent or buy lists of individuals who they believe are likely to be interested in their products or services. They will use these lists to market to you either offline or online. These lists come from a variety of sources, including public records, telephone directories, and from companies who exchange or rent their customer file for marketing purposes to other organizations who have a legitimate need for the information. The rental or exchange of customer files has been a common practice for decades and does not pose a security risk to you. The exchange usually involves only the basic contact information and very general information about your purchases. These lists are used to send postal mail or email to you, or phone you, or text you about special promotions or offers. Contacting you in this manner enables a company to more effectively reach out to individuals who are not yet customers, but who might have an interest in or need for their product or service.

It is also common practice for a business or organization to create a marketing file of names, addresses, and other information related to their customers' purchases. Marketing file information may include household characteristics obtained from surveys you fill out or from general communication with you.

Marketing, however, is only one use for information about you. Early detection and prevention of fraud by verifying your identity is a second use that offers significant benefits to both you and businesses. Being able to correctly recognize a customer—especially when transacting

business over the phone, on the Internet, or via a mobile device—can help reduce the chances of that customer becoming a victim of identity fraud.

There are still other uses of personal information you may not have considered, such as courts tracing parents who fail to meet child support obligations, or investigators conducting background checks for the purposes of compliance and anti-fraud initiatives, or law enforcement agencies apprehending criminals, or attorneys searching for missing heirs, or family members looking for lost relatives, to name just a few. These suggested uses provide significant benefits to society and are permitted—even, in some cases, required by various laws, such as background screening for child care center employees and school bus drivers.

WHAT KIND OF INFORMATION IS AVAILABLE?

A variety of information is available to businesses and organizations. While most of the information is non-sensitive, some of it can be sensitive. Some examples follow:

Public Records
Collected primarily from state and federal government sources, this information about you may come from public records, including property deeds, marriage and professional licenses, and birth and death records.

Information is also available from other public records such as court proceedings, voter registration files, driver's license records, and motor vehicle registrations. Note that various federal and state laws place restrictions on the use of some of these sources.

Publicly Available Information
Some information is considered in the public domain, meaning anyone has access to it. This type of information includes telephone directory listings, professional registries, classified ads, information posted online in chat rooms, on blogs, and in public sections (or areas designated as public) on online social network sites.

Publicly available information is not always regulated by law, but responsible providers self-regulate its use through industry codes of conduct.

Customer Information
Customer information is the sort of information collected when you provide details about yourself to an organization when you inquire about a product, donate, make a purchase, register a product warranty, or receive a service. The detailed information you provide can include how to contact you, and a record of your interactions with the company or organization. In some cases, this information is regulated by law, and in other cases by industry practice. It's worth noting responsible organizations develop their own policies to assure appropriate use of the information.

Self-reported Information
Information you voluntarily provide on a survey or questionnaire is considered self-reported. When this type of information is collected, you should be informed of the intended uses and your options for said use. Both law and industry practices limit the use of this information.

Passively Collected Information
The Internet and other technologies, such as mobile devices with location tracking features and interactive televisions, may collect information about you or your device without you having to take any action. In fact, in many cases you may not be aware any collection is taking place. Some of the collection is necessary to provide you a service, such as recording the number of times you go through the express lane of a tollbooth, so you can be charged for the toll, or when you have had a car accident and emergency assistance needs to locate your car to send help. The collection of information can also be used to provide you relevant advertising, such as offering a discount on a specialty coffee from a coffee shop you are near, or to provide online advertising tailored to interests that have been identified based on other Web sites you have recently visited or keywords you have recently used in a search. Both law and industry practices limit the use of these types of information.

Personal Identifying Information (Sensitive)
Some information, if used inappropriately, can have more serious consequences. This type of information includes your Social Security number, driver's license number, medical records, wage and salary information, tax reports, credit reports, and any information that personally identifies your children.

Sensitive information should be kept confidential and is usually not provided to other organizations unless you give specific permission or unless it is permitted, or required, under state or federal law.

To develop credit reports, credit reporting agencies gather information from banks and other financial institutions with which you have a relationship. The Federal Trade Commission closely regulates the use of this kind of information as directed by the Fair Credit Reporting Act (FCRA) and the Fair and Accurate Credit Transactions Act (FACTA).

To assure you will be a responsible employee, or tenant, or insured individual, employers, landlords, and insurance companies may ask your permission to perform a background check on you. This activity involves verifying the information you provided on your application with the source of the data.

Background checks can also involve obtaining a credit report if your financial situation is pertinent to the employer or landlord. The Federal Trade Commission closely regulates these uses of this information as directed by the Fair Credit Reporting Act (FCRA).

HOW CAN I PROTECT MY PRIVACY?

Despite the overabundance of information shared and sold on the Web today, several measures for protecting your information are available to you. Learn about these important protections and how to exercise the options offered to you. The following highlighted segments will give you a start on protecting your personal privacy.

Read the Privacy Policy
Reputable companies (such as financial institutions and credit card issuers) will often have a Privacy Policy which tells you what information the company collects and maintains, how it is used, and when it is being shared with other parties. You can view the Privacy Policy of most companies on their Web site or by contacting the company and asking for a copy. *Companies who do not post or provide a Privacy Policy should be given extra scrutiny.*

Act on Choices
Most companies will give you some choices regarding the use and dissemination of your personal information. Some of these choices are buried in the small print of Web sites or mailers, so you will have to look for them. If the company provides information about you to third parties for their marketing uses, you should be given a chance to opt out of that activity—you can request the company not provide information about you to third parties for marketing purposes. *Look for the annual statement from your credit card company that discusses the opt out options and act on them.*

Monitor the Accuracy
Organizations should maintain appropriate procedures that ensure the information they use about you for important or substantive decisions is accurate. You should be able to access such information if you feel it may not be accurate and have the opportunity to have erroneous information corrected, updated, or removed. Retrieving your credit report on a regular basis and verifying the details is a good method for monitoring your private information.

Obtain Copies of and Review Credit Reports from the Three Major Credit Reporting Agencies
Use the Web site www.annualcreditreport.com to order a free annual credit report from one or all the three national consumer reporting companies, Equifax, Experian, and TransUnion. You may also call the AnnualCreditReport.com service toll-free at 877-322-8228. You may also download an Annual Credit Report Request Form from either the Federal Trade Commission Web site (www.consumer.ftc.gov/articles/0155-free-credit-reports) or the Consumer Financial Protection Bureau Web site (www.consumerfinance.gov/askcfpb/311/how-do-i-get-a-copy-of-my-credit-report.html).

The direct link to the downloadable Annual Credit Report Request Form is: www.consumer.ftc.gov/articles/pdf-0093-annual-report-request-form.pdf.

Mail the completed form to:

Annual Credit Report Request Service
P.O. Box 105281
Atlanta, GA 30348-5281

Please note that AnnualCreditReport.com is a government recommended credit reporting service, and the only credit report source authorized by Federal law. The site will ask you for personal identifiers which might seem intrusive but is necessary for you to apply for your credit report.

Opt Out of Data Vendors for Public Records

The following vendors are the market share leaders in the public records business. Visit these Web sites and, depending on each individual company's policy, opt out of their service.

Accurint

Web Site	http://www.accurint.com
Privacy Policy	http://www.accurint.com/privacy.html
Opt Out	Partial
Action	https://www.lexisnexis.com/en-us/privacy/for-consumers/opt-out-of-lexisnexis.page
Affiliation	LexisNexis

Acxiom

Web Site	http://www.acxiom.com
Privacy Policy	https://www.acxiom.com/about-us/privacy/
Opt Out	Partial
Action	Acxiom offers a multiple list of products for which it buys and sells identifying information. Be sure to opt out of all of them to remove yourself from standard consumer dataservices. Read through their privacy pages. https://isapps.acxiom.com/optout/optout.aspx & http://www.aboutthedata.com
Affiliation	Google, Yahoo, Whowhere, and Lycos

BeenVerified

Web Site	https://www.beenverified.com
Privacy Policy	https://www.beenverified.com/faq/privacy/
Opt Out	Yes
Action	https://www.beenverified.com/faq/opt-out/ Search for your information. When you find your record, click "That's Me". Provide your email address and click "Send Verification Email". Been Verified will sent you an email with a confirmation link. Open the confirmation link. Your record will be removed in 24 hours.
Affiliation	Google, Yahoo, Whowhere, and Lycos

CLEAR

Web Site	http://clear.thomsonreuters.com
Opt Out	Partial
Action	http://static.legalsolutions.thomsonreuters.com/static/pdf/opt_out_form.pdf Or email questions about who can request removal of their personal information or what kind of documentation is required. May be directed to westlaw.privacypolicy@thomsonreuters.com.
Affiliation	Thomson Reuters, WestLaw

Google

Web Site	http://www.google.com
Privacy Policy	http://www.google.com/intl/en/policies/privacy Removal Policies: https://support.google.com/websearch/answer/2744324
Opt Out	Partial
Action	https://support.google.com/websearch/troubleshooter/3111061?hl=en&rd=1

InstantCheckmate

Web Site	http://www.instantcheckmate.com
Privacy Policy	http://www.instantcheckmate.com/privacy_policy
Opt Out	Yes
Action	http://www.instantcheckmate.com/optout Follow the directions on the page for online or mail-in removal. Note all information is required to remove. Your record will be removed within 48 hours. You will receive an email from optouts@instantcheckmate.com when your record has been removed.

Intelius

Web Site	http://www.intelius.com
Privacy Policy	http://www.peopleconnect.us/privacy
Opt Out	Yes
Action	https://www.intelius.com/optout Intelius will require proof of identity, which can be a state issued identification card or driver's license. Obscure the photo and the driver's license number. Only the name, address, and date of birth are necessary to validate the individual opting out. Fax or postal requests are also accepted. See the link for address details.
Affiliation	Criminalrecords.com, Spock.com, Peopleconnect.us, Peoplelookup.com, Publicrecords.com, Phonesbook.com, Lookupanyone.com, USsearch.com, Zabasearch.com

LexisNexis

Web Site	http://www.lexisnexis.com
Privacy Policy	http://www.lexisnexis.com/privacy
Opt Out	Partial
Action	https://www.lexisnexis.com/en-us/privacy/default.page#optout
Affiliation	Accuity.com, Accurint.com, BridgerInsight.com, WorldCompliance.com

MyLife

Web Site	http://www.mylife.com
Privacy Policy	http://www.mylife.com/privacy-policy
Opt Out	Yes
Action	If you create an account, you can request to opt out via email at privacy@mylife.com. Note that if response is received that mylife.com cannot remove your records, forward them the privacy policy, which clearly states they are able to remove your records.
Affiliation	addressbook.com, myaddressbook.com, reunion.com, highschoolalumni.com, goodcontacts.com

Nuwber

Web Site	https://nuwber.com
Privacy Policy	https://nuwber.com/policy
Opt Out	Yes
Action	https://nuwber.com/removal/link

Peekyou

Web Site	http://www.peekyou.com
Privacy Policy	https://www.peekyou.com/privacy
Opt Out	Yes
Action	http://www.peekyou.com/about/contact/optout Fill out the form. Note that your "Unique ID matches". You can click "What is this?" for an example. You will receive an email within 48 hours that your record has been removed.

Pipl

Web Site	http://www.pipl.com
Privacy Policy	http://www.pipl.com/privacy
Opt Out	No… but read on
Action	Pipl is a search engine, not a producer or reseller of the data. You will need to remove the information from the site that Pipl leads you to. https://pipl.com/help/remove

Spokeo

Web Site	http://www.spokeo.com
Privacy Policy	https://www.spokeo.com/privacy
Opt Out	Yes
Action	Find your listing on http://www.spokeo.com/ and copy the URL. Go to the opt out page:http://www.spokeo.com/opt_out/new Enter the URL of your listing and email address. Select "Remove This Listing" You will receive a confirmation email. To complete your removal process, click the link in the email. Allow 2-3 days for your information to be removed.

ThatsThem

Web Site	http://www.thatsthem.com
Privacy Policy	https://thatsthem.com/privacy-policy
Opt Out	Yes
Action	http://thatsthem.com/optout. Removals are promised within five days.

Zoom Info

Web Site	http://www.zoominfo.com
Privacy Policy	https://www.zoominfo.com/business/about-zoominfo/privacy-center
Opt Out	Yes
Action	Claim your account and then remove or redact the details. Use http://www.zoominfo.com/lookupEmail to find your account by email. Use http://www.zoominfo.com/s/search to fnd your account by name.

PREVENT THE INFORMATION FROM GOING ONLINE

How can you prevent your information from getting out into the Internet space—from going online—in the first place? Here are some tips to follow:

- Have all your postal mail sent to a United States Post Office Box or your office address.
- Un-list and unpublish your landline phone numbers; check with your mobile service company to find out if they sell their subscribers information and how to opt out of that list.
- Never put your name, phone number, or personal information of any sort on any form or application without learning what the company's policy is. If you are not legally bound to enter authentic personal information, then don't.
- Mail a written request to all your credit card companies and personal banking institutions requesting your personal information be removed. Be on alert for any privacy notices mailed from your credit card vendors and insurers, and read those notices—be aware of their policies and updates to those policies.
- Do not fill out and return any warranty cards; instead, save them with the original sales receipts. Provided you have both items in-hand when filing a warranty claim, the store must honor your warranty. Otherwise, you would see "due by" dates on warranty cards, which you often don't.
- Do not use your own name for any magazine subscriptions.
- Do not participate in DNA collection services (i.e. 23andme.com, myheritage.com, ancestrydna.com)
- Obtain your credit report annually, and subscribe to a monthly credit agency reporting service (such as Experian, Transunion, or Equifax).
- Stop sharing information and *Liking* posts online in unnecessary scenarios such as social networks.

PROTECTING AND REMOVING INFORMATION FOUND ONLINE

When you come across personal information such as a postal address, family member's name, personal account information, or social media posts naming you and your family out on the Internet, available to even the most casual of online searchers—and you are bound to—it's time to start opting out of these company resources.

Below are some tips to follow and Web site resources to use to help you control, even in a small way, the personal information that can often be readily available to the public on the Internet.

- Conduct an online security assessment to understand the breadth and depth of damage. On a regular basis, run your name through Google, Pipl, and other search engines to monitor where your name is being mentioned online.

- Contact your credit card companies and request to be removed from third-party marketing lists. The FCRA requires credit card companies send such an opt out option every year, however, buried under legal jargon and interest rate updates in these mailings, the opt out option can be easily missed by you the consumer.

- Register all your phone numbers with the National Do Not Call Registry (www.donotcall.gov) to remove yourself from popular telemarketing lists.

- Opt out of Public Records Data Vendors. Refer to the chart of information elsewhere in this article to follow the detailed removal procedures for each vendor. Some of the vendor sites will ask for verification of your contact information which may be uncomfortable but is necessary to have your information removed.

- Stop oversharing information online in social networks and blogs—this also applies to your children; educate them on this matter.

- Secure your online space, as well as that of your family's; make sure everyone's account is set to private. When you allow anyone in, you are essentially giving anyone—including potential terrorists—open access to your data.

- If someone is posting inappropriate comments about you or your family on a social network service, report the abusive behavior to the social network's account security (for example, the "Report" link in Facebook and LinkedIn).

- When you do come across an upsetting personal online posting, resist the temptation to retort. Do not reply. Antagonizing a bully will only give the bully what he or she wants: attention. If you ignore the bully, try to contact the appropriate authorities. If *you* are the appropriate authority, or have contacted the appropriate authorities to no avail, contact a professional service firm to assist you with the matter.

Old Fashioned Identity Theft: An Online Twist

Losing your identity to online theft is a serious—and all too common—concern. With malware and viruses so covertly blended into today's everyday modern communications tools, even a software engineer might get duped into identify theft from the most benign looking email. The prevalence of online identity theft is indeed significant, but do not overlook the traditional venues—the places where you regularly use your credit card. It is sadly almost predictable how often private, financial information will likely be compromised (hacked) from point-of-sale equipment in the commercial establishments you recently patronized.

WHERE SHOULD WE BE WATCHING?

It's ironic that we fear losing our identity to theft in the online financial services we use—our credit card and bank accounts—and yet give no thought to the personal information lying open in our social network profiles. In truth, the established online financial and commerce systems are some of the most trusted sites available, using multi-layered encryption software to protect our financial transactions. Of course, no one system is impenetrable, but why should a cyber-thief battle multi-layered encryption software to steal your credit card information when the open Internet itself offers up so much more easily attainable information?

Today, an identity thief need only turn to the personal profiles posted in social network sites, like Facebook, Instagram, and LinkedIn, to capture key information about a targeted individual. A full name (even maiden name), date of birth, and current home location gleaned from an open social network account are sufficient data points for a thief to start creating a fraudulent profile. In fact, LinkedIn, the working professional's social network workhorse, holds a veritable goldmine of personal information for identity thieves. Consider this: LinkedIn requires its users to post schools attended and jobs held with corresponding dates. Now, layer on the personal details gleaned from LinkedIn-linked colleagues and friends in the network and you can rather easily crib together a good list of controlled answers for most challenge questions—those security questions used to prompt for a forgotten password.

It's not impossible to lose access to your personal Web-based email account simply because an identity thief was able to hijack the account by answering the security challenge question. After gleaning the information from open source search engines, or from unprotected social network profiles, the security challenge question can be mere child's play for a savvy identity thief.

ONLINE PREVENTION AND CAUTION

So, how does one go about securing one's online information from identity theft? Below are some tips to follow and Web site resources to use to help shield you from online identity theft.

- Monitor your name online. Set up Google Alerts (www.google.com/alerts) and Biznar Alerts (www.biznar.com - sign in and go to alerts) on your own name. If anything is said about you—either in a social network or elsewhere online—these services will send you a notification via email.

- Tweak your memorable word (in a memorable way, of course) that answers your challenge question. For example, if your first dog's name was Java, use the word coffee as a challenge answer and memorize that tweaked word. Or pick one obtuse word, such as rollerblade, to answer every challenge question and, again, memorize that obtuse word.

- If someone you haven't communicated with in decades tries to contact you in a social network, ask them your own challenge question: "Hey, do you remember Jorge Beale getting stuck at the top of ropes in gym class?" The question can be honest, or you can make one up. Pay more attention to the answer—does it seem authentic?

- Be discreet online. Do not publish your life story on social networks. Your full name and the general vicinity of your residence are sufficient identifying information. Further combining information from LinkedIn with information gathered from online directory databases, such as Intelius (www.intelius.com), will allow an identity thief to quickly locate your home address—if not other identifying information—for ill gain.

- Request your personal information be removed from online directories. Contact the Public Records Data Vendors, listed in detail earlier in this report—and of which Intelius is one—to have your personal information removed from their databases.

- Most importantly, work with your family to learn to minimize the points of exposure of where you are found on the Internet. No mentions of Mom's deployment, Dad's late-night shift, the family vacation, soccer practice, or any other time or location sensitive information that will easily pinpoint when and where you will—or will not—be.

If you have been victimized by online bullying, or information exposure, contact an online risk assessment company to help you discover how extensive the damage is.

In the case of a local cyber-bullying attack, most victims usually have a sense of who the culprit is. However, finding out you are the target of ISIS, Anonymous, or any other anti-establishment group can be life altering for you the victim. In such cases, contact a law enforcement agency equipped to handle such concerns, and a professional service firm with a solid reputation for online assessments and removals to assist you in removing any sensitive information.

THWART OR PREVENT ONLINE CYBERATTACKS YOURSELF

Let's take a moment for a bit of history: The Internet began as research commissioned by the United States government in the 1960s to build a communications network that would survive a nuclear attack. By the 1980s, the precursor interconnected regional academic networks gave way to the modern Internet. Across the early 1990s, the Internet saw continued exponential growth as business, personal, and mobile computers of the general public logged on to it. Nearly everyone became an active, engaged Internet user.

Nowadays everyone is online. Just as there are good and not-so-good people in the physical world, there are also good and not-so-good people in the online world. With ubiquity and facility come threats and need for caution. Should you find yourself discovering the Internet's dark side of personal identity theft, don't pack up, shut down, and remove yourself wholesale from the online world. Instead, alter or completely delete your pertinent information (i.e., date of birth, hometown name, identifying photos, etc.) from your social network profile. Edit the profile before deleting it so the Internet crawlers will capture misinformation, not accurate information, for the caching servers, including Google and others.

If you use a social network infrequently—for example, as a place to view your extended family's vacation photos—then offer up only nonessential information when creating an account on the service. If you do so, plus use the service's provided security tools and precautions, there should be no harm to be concerned about. Store nothing online that would cause you concern, nothing for anyone to bully you about, or steal from you.

Respect social media applications. There is an appropriate time and place for using social media. Consider this: If you would not feel comfortable having your online activity broadcast through your local grocery store's public-address system, while simultaneously having a giant, neon arrow pointing directly at you, then there's a good chance your online activity has no business being online.

Social Media: The Enemy in Your Home?

Reconnecting with old friends, networking with colleagues and clients, even finding long-lost loves, are now all real possibilities with information from social networks—networks accessed on desktop and laptop computers or cell and smart phones on a global scale. No extraordinary effort and, more importantly, no extraordinary talent or intelligence are necessary. With plug-and-play social network applications you simply fill in the blanks to answer a few questions, and you are now participating in, and part of, a global network.

In the past, when Web sites were developed and maintained by a select few, those unique participants were the only authors of what happened online. Today, anyone and their grandmother can start sharing their thoughts and photos online through easily-accessible social networks. And they do.

But with ease-of-use often comes lack of control. While people are reuniting, connecting, and sharing in online social networks, the dark side is also online—fomenting a space in which pedophiles are viewing the Instagram images of children, gangs are tweeting amongst one another, ISIL is recruiting, and criminals are trolling for target homes to rob as owners announce in their social networks, "We're on vacation this week!"

That which was once a medium for the few is now an open market for all users—good, bad, indifferent, and sometimes downright ugly.

Everyday Joes and Janes—millions of them—once content to surf the Web and email their friends as their primary Internet activities, are now using social tools like Instagram and Twitter to keep everyone apprised of their day-to-day lives, often in the most minute detail.

Online technology has also reached the young and innocent among us who are easily and readily adapting to the technology. For the young, there is no division between their real lives and their online lives. Their physical-world lives are also their online lives—with no filter. Young users will say, and do pretty much anything online, and often do. On the other hand, adults and seniors are also participating in online social networks, but, unlike the younger set, these more mature folk, who grew up in an era of discretion and modesty, are not as open in their online social network postings. In general, younger people will join social networks openly; adults will exercise some modicum of caution before sharing their lives online, despite the occasional errant CEO sending out a random damaging Tweet, or unpopular image via Vine.

ONLINE CONFESSIONS

People joined (or friended or linked) on social networks have the opportunity for quite a bit of contact with one another—and those people care about what is said. These shifts can initially be unsettling for the first-time user. In the physical world, good or bad news would be shared over the telephone or spoken in person to a few close friends. You wouldn't walk into your local

grocery store and announce to the world that you just finished a load of laundry or that you were staying home with a sick child that day. Doing so would seem awkward and inappropriate. And, yet, in online social networks such as Facebook, it often seems like the social norm to mention these details—in fact, it seems to be almost a social obligation to do so.

In an environment of such relatively uninhibited, open communication, it isn't long before overzealous opinions, little bits of rage, drunken rants, and other embarrassing entries get posted. The user could be upset, deranged, or overjoyed, and his or her natural reaction is to share the emotion—and often that sharing takes place on their social network. Friends don't let friends drive drunk, right? Consider taking not only the keys away from that person, but also the keyboards.

Sharing your thoughts and activities online in and of itself is not necessarily a problem. The problem comes when users forget that everyone in their social network is reading their online post. So, when you post something in frustration about your boss, co-worker, spouse, or friend, remember that the boss, co-worker, spouse, or friend—and all their networked friends (and all *their* networked friends)—may also be reading your posts.

Want examples? Go to the Web site Social Mention (www.socialmention.com), which monitors over 80 social media networks, including Twitter and Facebook, and search on the following phrases (use the quote marks): "hate my boss," "cheated on my husband," or any other such confessional phrase to search public social media postings. View the results. Are you now having second thoughts about using social media with abandon?

WHAT NOT TO DO IN SOCIAL MEDIA

It is possible to take part in social media and still maintain a semblance of privacy. To accomplish that, keep some of the following things in mind when posting to Facebook.

Do not write in a fury

If you are angry, inebriated, or simply have a big secret that you are itching to share, that is the time to step away from the keyboard. What you think is hysterical or outlandish now might only serve to embarrass you, the poster, later.

Do not ignore the privacy controls

Every application and online service offers customization for your profile. Use it. For example, on Facebook, limit your account access by setting who can view your posts to Friends, Friends of Friends, or Only Me. Do not enter contact information, such as your phone number and residential address. Restrict access to your photos, birth date, religious views, and family information, among other things. Give only certain people, or groups of people, access to these items, or block specific people from seeing them.

Do not post your child's name in a photo caption
Do not use your child's name in photo tags or captions. If someone else does, delete the name's tag by clicking on the Remove Tag option. If your child isn't on social media and someone includes his or her name in a caption, ask that person to remove the name. Do not share online the details of your child's life. Your child's sports practice, such as soccer, is likely on a regular schedule, which can be easily tracked by a predator reading Facebook profiles.

Do not mention when you'll be away from home
When you tell your Friends through social media that you are not going to be home, you are inviting criminals who are trolling Facebook profiles—especially unsecured profiles—to your then-unoccupied house. Keep in mind it takes only a few minutes to rob your home, or harm your family. Even a mention of a quick run to the store is unwise.

Do not use a weak password
Avoid using simple names or words that can be found in a dictionary as a password. Even with numerals tacked on the end of the word, these are not secure passwords. Instead, use a knuckle-breaker password, one that requires upper and lower-case letters, in combination with numerals and symbols. A secure password should have a minimum of eight characters.

Do not put your birthday in your profile
Your birth date is an ideal target for identity thieves, who could then use the date to obtain more information about you, potentially gaining access to your bank or credit card accounts. Do not put any personal identity information about yourself in your social media profile accounts.

Do not let search engines find you
To help prevent strangers from accessing your Facebook page, go to the Search section of Facebook's privacy controls and select "Only Friends" for Facebook search results. Be sure the box for public search results is not checked.

Don't ignore privacy settings updates
The Terms of Service for apps and social media services changes constantly. Keep up with any notices that changes have been made to the security and third-party access permissions.

Control your child's social media activity
Most young people are now using social media other than Facebook (such as—as of this writing— Instagram, Twitter, Snapchat and Facebook). Get in the habit of having your child part with his or her smart phone each night so the phone can spend the evening recharging its battery—an excellent opportunity for the parents to then peruse the contents of their child's social media profiles.

Do not Friend your employer

Sure, it seems like a great idea to Friend your boss—that is, until you decide to rant about how much you hate working overtime, or you post photos of your day at the beach (um, the same day you called into work sick).

With all the above-listed cautions in place, it would seem ideal to delete all our social media accounts, unplug all the appliances, and move to a desolate part of the world where you can live off the electronic grid. However, being completely offline is much more suspicious than being online and oversharing every blessed detail of one's life.

The recommendation is to create a minimal online social media presence with no real valuable information attached to it. For instance, "I'm an executive in the New York metro area, with a dull life and unremarkable kids" reads perfectly as a rather benign profile that shows you have some sort of online activity. As soon as we at Hetherington Group research an individual and do not find any personal online information about them, their kids, family, or anyone else connected to them, we start to assume they work in the government (precisely what, if it's true, you don't want people to assume) or they are possibly dead. We wouldn't consider them gang members or drug dealers because experience tells us those sorts of individuals love social media, and are easily tracked when their accounts are found.

So, when it comes to your social media presence, create a minimalist site with a fresh email address and no valuable content. The profile image should be vague—a skyline, a piece of artwork, a picture of a favorite food, a dog, or a superhero. Do not project images with identifying marks, badges, designations, and absolutely no photos of your children. With such a profile, you might be perceived as dull online, but offline you will enjoy a larger sense of security with the ability to control your online world and the antics those who wish to harm or disrepute you would do.

For further information or assistance in an online investigation, removal or sensitive matter, please contact our office at 973-706-7525.

DHS OPEN SOURCE INTELLIGENCE ANALYSIS COURSE (OSINT)

OSINT WEBSITES & TOOLS

B286

GOVERNMENT OPEN SOURCE PORTALS		
DNI Open Source Center	https://www.opensource.gov	National Open Source Enterprise product repository
Regional Information Sharing Systems (RISS)	https://www.riss.net/	Resources and services for LE
Intelink	https://www.intelink.gov	Intelligence Community internet
Homeland Security Information Network (HSIN)	http://www.dhs.gov/homeland-security-information-network-hsin	HSIN trusted network for homeland security
Law Enforcement Enterprise Portal (LEEP)	https://www.cjis.gov/CJISEAI/EAIController	FBI gateway to beneficial resources
TRIPwire	https://tripwire.dhs.gov	DHS technical resources for incident prevention
INTERNET SEARCH ENGINES		
Google	www.google.com	Most popular engine (relevancy-based algorithm)
Yahoo	www.yahoo.com	Common search engine (popularity-based algorithm)
Bing	www.bing.com	Microsoft-developed search and decision engine
Search Both	www.searchboth.com	Multiple search engine side-by-side comparison tool
Exalead	www.exalead.com/search	European-focused search engine (based in France)
Baidu	www.baidu.com	Asian-focused search engine (based in Beijing, China)
Kartoo	www.kartoo.com	Visualization Search Engine and directory
Pixsy	www.pixsy.com	Search engine for videos and images
360daily	www.360daily.com	Video Search Engine
2Lingual	www.2lingual.com	Simultaneous search in two different languages
Vimeo	www.vimeo.com	Video sharing site
Flickr	www.flickr.com	Video and image searching
Wiki.com	www.wiki.com	Searches wiki-related websites
OSINT Toolkit	https://osinttoolkit.github.io/index1.html	Internet search tools including social media, documents, website, people, etc.
ALTERNATE SEARCH TOOLS		
AIO Search	www.aiosearch.com	Meta-search engine for torrent files
blogsearchengine	www.blogsearchengine.org	Searches blogs
Biznar	http://biznar.com/biznar/desktop/en/search.html	Federated search tool
Infospace	http://infospace.com	General search engine
Yandex	https://www.yandex.com	Largest search engine in Russia
PRIVACY-AWARE SEARCH ENGINES		
Duck Duck Go	duckduckgo.com	Removes referral information; disallows cookies
Yippy	www.yippy.com	Does not track activity, store history, record searches
Ask	www.ask.com	Provides optional AskEraser privacy feature
DIRECTORIES AND DEEP WEB PORTALS		

Internet Public Library	http://www.ipl2.org	No longer supported but still accessible and lots of information
WWW Virtual Library	http://vlib.org/	First human index of content on the world wide web
Information Bridge	www.osti.gov/bridge	Access to Department of Energy research
Science Information	www.science.gov	Search capabilities provided by DOE/Oak Ridge, TN
Deep Web Search	www.deepwebtech.com	Meta-search engine for science, medicine, business
Engineering	www.techxtra.ac.uk/index.html	Focuses on engineering, mathematics, and computing
RSS READERS		
FeedBucket	www.feedbucket.com	Free Web-based; quick, easy way to view RSS feeds
JetBrains/OMEA Reader	www.jetbrains.com/omea/reader	Free downloadable; reader and newsgroup aggregator
InoReader	www.inoreader.com	Free Web-based RSS reader
Feed Reader	www.feedreader.com	Alternative to Google Reader
Feedly	www.feedly.com	Free Web-based; customizable, quick, easy way to view RSS feeds
RSS FEED FILTERS		
Feed Rinse	www.feedrinse.com	Advanced RSS spam filter for RSS subscriptions (soon to be relaunched)
LANGUAGE TRANSLATION TOOLS		
Google Translate	translate.google.com	Instantaneous translation of supported languages
Yahoo	http://babelfish.com	Translate to/from English to any language
Bing	www.bing.com/translator	Enter free text or web page URL
Netlingo	www.netlingo.com	List of text and chat acronyms
GIS, MAPPING & IMAGING TOOLS		
N2YO	www.n2yo.com	Real-Time Satellite Image tracking
Wikimapia	www.wikimapia.org	Interactive mapping tool
SpotCrime	www.spotcrime.com	Crime Maps
CrimeReports	www.crimereports.com	Crime Maps
Ucrime	www.ucrime.com	Crime Maps for colleges and universities
Crimemapping	www.crimemapping.com	Crime Maps
Lexis Nexis Community Crime Map	http://communitycrimemap.com	Crime Maps
TinEye	www.tineye.com	Reverse image search tool
Image Raider	www.imageraider.com	Reverse image search tool – Searches Google, Bing, and Yandex simultaneously
Metapicz	http://metapicz.com	Free web based EXIF discovery tool
Jeffrey's EXIF Viewer	http://exif.regex.info/exif.cgi	Free Web based EXIF discovery tool
FotoForensics	www.fotoforensics.com	Free Web based EXIF discovery tool
Echosec	www.Echosec.net	Location-based real-time aggregated multi social media search tool. (Fee Based)
Pic2Map	https://www.pic2map.com	Online EXIF data viewer with GPS support - locate and view photos on Google Maps
Verexif	www.verexif.com/en	View or remove EXIF info from photos
Geofeedia	http://geofeedia.com	Fee-based Location-based real-time aggregated multi social media search tool. (Fee Based)

Snaptrends	www.snaptrends.com	Fee-based Location-based real-time aggregated multi social media search tool. (Fee Based)
CREEPY	www.geocreepy.com	Geolocation information gathering through social networking platforms
Earth Point	www.earthpoint.us	Google Earth tool – Excel to KML converter
Scribble Maps	www.scribblemaps.com	Create your own map and share
Reliefweb	http://reliefweb.int	Specialized digital map service of the United Nations Office for the Coordination of Humanitarian Affairs (OCHA).
GeoCommons	geocommons.com	GeoCommons is the public community of GeoIQ users who are building an open repository of data and maps for the world.
Pacific Disaster Center	www.pdc.org	Worldwide disaster monitoring mapping
Marine Traffic	www.marinetraffic.com	Free real-time information to the public, about ship movements and ports, mainly across the coastlines of many countries around the world.
Google Map	www.google.com/maps/d	Create a New Google Map
Crowdmap	https://crowdmap.com/welcome	Build a collaborative map
Mapbox	www.mapbox.com/blog/id-for-crisis-mapping	A mapping platform for developers
CrowdSociety	http://crowdsociety.org/index.php/Crisis_mapping	Displays and analyses data during crises, usually environmental disasters, social and political crises, in real-time
GPSVisualizer	www.gpsvisualizer.com	Create a map, convert a file to a map, geocode addresses, calculators, elevation lookups, etc.
Gpsfly.org	http://gpsfly.org	Upload own track and/or share map.
GPSies	www.gpsies.com/	View and download tracks from GPS device. Free.
Triptrack.org	http://triptrack.org	Record a "trip" – maps automatically.
Google.org Crisis Map	www.google.org/crisismap	A collection of national and regional-scale layers related to weather, hazards, and emergency preparedness and response, mostly for the U.S.
YouTube Videos by Location	youtube.github.io/geo-search-tool/search.html	Search for YouTube videos by location
Triple Map View	data.mashedworld.com/dualmaps/map.htm	See three Google maps on one screen
ANONYMIZATION TOOLS		
Anonymizer	www.anonymizer.com	Fee-based commercial anonymization tool
The TOR Project	www.torproject.org	Free download anonymization tool
Startpage	www.startpage.com	Does not track your IP address or retain search history – Built in proxy
Internet Archive	www.archive.org	View archived copies of public websites
CachedView	https://cachedview.nl	Google Cache, Wayback Machine, Live site, request screenshot all in one site.
PDFmyURL	http://pdfmyurl.com	Screen captures webpage without going to the live site
Anonymouse	anonymouse.org	Free web-based anonymization tool
Hot Spot Shield	www.hotspotshield.com/en	Downloadable free or fee-based anonymization tool
BuyProxies	https://buyproxies.org	Proxies for sale

Private Internet Access	www.privateinternetaccess.com	VPN for sale
yourprivateproxy	www.yourprivateproxy.com	Proxy for sale
IPVanish	www.ipvanish.com	VPN for sale
ExpressVPN	www.expressvpn.com	VPN for sale
JonDonym	https://anonymous-proxy-servers.net/index.html	Secure anonymous browsing site
VirtualBox	www.virtualbox.org	General-purpose full virtualizer for x86 hardware, targeted at server, desktop and embedded use
Anonymox	www.anonymox.net/en	Allows user to choose country of origin and change IP address
Hide My Ass	www.hidemyass.com	Proxy scrambler/reverse locate IP address to overseas
AccountKiller	www.accountkiller.com/en/#	Provides instructions to remove your account or public profile on most popular websites
BackgroundChecks.org	http://backgroundchecks.org/justdeleteme	A directory of direct links to delete your account from web services
Electronic Privacy Information Center	https://epic.org/privacy/tools.html	EPIC Online Guide to Practical Privacy Tools
Prism Break	https://prism-break.org/en/all	A comprehensive site that lists private alternatives to popular web services
Privnote	https://privnote.com	Free, web-based service to send notes that will self-destruct after being read
Howtogeek	www.howtogeek.com/192173/how-and-why-to-change-your-mac-address-on-windows-linux-and-mac/	Step-by-step MAC address spoofing on multiple operating systems.
Wikihow	www.wikihow.com/Spoof-a-MAC-Address	Step-by-step MAC address spoofing on multiple operating systems.
Tails OS	https://tails.boum.org/	Tails is a live operating system that you can start on almost any computer from a USB stick or a DVD.
tisiphone.net	https://tisiphone.net/	Blog post for removing yourself from the internet (as best as possible)
WebBreacher	https://webbreacher.com/	Blog post for removing yourself from the internet (as best as possible)
NON-ATTRIBUTABLE PHONE AND EMAIL SITES		
Sudo	https://sudoapp.com	Apple App for up to 9 extra phone numbers, talk, text, email for free – Apple iOS only
2ndLine	www.2ndline.co	2nd phone number plus talk and text - free
Sideline app	www.sideline.com	2nd free phone line for text, calls, and voicemails (fee based)
Burner app	www.burnerapp.com	Provides additional phone numbers for voice, SMS, and MMS communications
Tempophone	https://tempophone.com	Free temporary phone number
Hushed	https://hushed.com	Mobile app – 2nd phone number
SMS Receive Free	https://smsreceivefree.com	Temporary and disposable phone numbers
CoverMe	www.coverme.ws/en/index.html	Military-grade encryption protection for your calls, messaging and all your personal and private information
mailcatch	www.mailcatch.com/en/disposable-email	Disposable temporary email address
10MinuteMail	https://10minutemail.com	Disposable temporary email address
Guerilla Mail	www.guerrillamail.com	Disposable temporary email address

EasyTrashMail	www.easytrashmail.com	Disposable temporary email address
Mailinator	www.mailinator.com	Free, public, email system where you can use any inbox you want
Yopmail	www.yopmail.com/en	Disposable temporary email address
MintEmail	www.mintemail.com	Disposable temporary email address
AirMail	en.getairmail.com	Disposable temporary email address
Mailnesia	http://mailnesia.com	Disposable temporary email address
FilzMail	http://filzmail.com	Disposable temporary email address
Fake Person Generator	www.fakepersongenerator.com	Generates random background info to create research identity - customizable
Fake Name Generator	www.fakenamegenerator.com	Generates random background info to create research identity - customizable
TOR TOOLS		
not Evil	hss3uro2hsxfogfq.onion.to www.tor2web.org	A conduit connecting Internet users to content hosted inside the Tor network – DOES NOT PROVIDE ANONYMITY!
Torch	xmh57jrzrnw6insl.onion.to	A conduit connecting Internet users to content hosted inside the Tor network – DOES NOT PROVIDE ANONYMITY!
TOR2WEB	www.onion.to	Gateway to TOR hidden services - DOES NOT PROVIDE ANONYMITY!
Deep Web Links	www.deepweblinks.org	List of Deep Web Links – Need TOR to browse
Ahmia	https://ahmia.fi	Ahmia searches hidden services on the Tor network – Need TOR to access results.
facebookcorewwwi.onion	www.facebookcorewwwi.onion	A site that allows access to Facebook through TOR
WEBSITE MONITORING TOOLS		
WebSite Watcher	www.snapfiles.com/get/webwatcher.html	Tool for monitoring changes to websites
Watch That Page	www.watchthatpage.com	Tool for monitoring changes to websites
Visual Ping	https://visualping.io	Page change tracker
Page Follow	www.followthatpage.com	Page change tracker
OTHER WEB TOOLS		
AM-Deadlink	http://aignes.com/deadlink.htm	Detects dead links and duplicates in bookmarks/text
MyIP Info	www.myipinfo.net	Find your IP and other information
Ip-adress	www.ip-adress.com	Searches IP addresses in real time
Ip-tracker	www.ip-tracker.org	Track and trace IP Address using the latest IP tracking technique.
CentralOps	www.CentralOps.net	A collection of Internet utilities
Common Craft	www.commoncraft.com	Short video clips that explain latest Internet tools
Debka	www.debka.com	Jerusalem-based open source military intelligence
4chan	www.4chan.org	Image-based bulletin board
Internet Live Stats	www.internetlivestats.com	Internet statistics available in a dynamic and time relevant format
WolframAlpha	www.wolframalpha.com	Mathematical search engine
Wikipedia	www.wikipedia.org	Free information search tool
Wikimedia	www.wikimedia.org	List of 16 different wikis
PEOPLE FINDERS/PERSONAL DATA SEARCH ENGINES		
Zoom Info	www.zoominfo.com	Company and business professional people search

Pipl	www.pipl.com	Comprehensive public information people search tool
Zaba Search	www.zabasearch.com	Comprehensive public information people search tool
Peek You	www.PeekYou.com	Comprehensive people search tool
Peoplefinders	www.peoplefinders.com	Comprehensive people search tool
Spokeo	www.spokeo.com	Search blogs and photos across 40 social networks
Criminal Searches	www.criminalsearches.com	Search criminal records based on public information
Yasni	www.yasni.com	Worldwide name search by category
That'sThem	https://thatsthem.com	People search tool
skipease	www.skipease.com	Multiple people search engines in one location
Knowem	http://knowem.com	Search tool for usernames
Checkusernames	http://checkusernames.com	Search tool for usernames
Name Chk	https://namechk.com	Search tool for usernames – can download results to CSV file
AnyWho	www.anywho.com/whitepages	People search tool
Name Checkr	www.namecheckr.com	Search domain and social username availability
NameVine	https://namevine.com	Search for a domain name and matching social media profiles
WebMii	http://webmii.com	People search mash up centralizing public information from other websites
Usersearch	https://usersearch.org	Scans against 45 popular websites
SOURCE VALIDATION/EVALUATION		
Alexa	www.alexa.com	Traffic metrics, search analytics, and demographics
Who.is	www.who.is	Domain-based research services
Domain Tools	whois.domaintools.com	Domain ownership and registration information
ViewDNS	www.viewdns.info	Website and IP address info lookups
Hypestat	www.hypestat.com	Website analysis and statistics
Name Droppers	www.namedroppers.com	Domain Search Database
Snopes	www.snopes.com	Validate/debunk rumor, urban legend, folklore, myths
The Internet Corporation for Assigned Names and Numbers (ICANN)	www.icann.org	not-for-profit public-benefit corporation with international participants dedicated to keeping the Internet secure, stable and interoperable
American Registry for Internet Numbers (ARIN)	www.arin.net	Non-profit supporting the operation of the internet
Fact Check	www.factcheck.org	Monitors the factual accuracy of politics
SOCIAL NETWORKING SITES		
Facebook	www.facebook.com	An online social networking service
Twitter	http://twitter.com	Microblogging limited to 140 characters
LinkedIn	www.linkedin.com	Business-oriented social networking service
Pinterest	www.pinterest.com	Web and mobile app company that offers a visual discovery, collection, sharing, and storage tool.

Myspace	https://myspace.com	Social networking service with a strong music emphasis owned by Specific Media LLC, pop singer and actor Justin Timberlake.
Google+	https://plus.google.com	Social networking and identity service
Instagram	http://instagram.com	Text/Photo/Video sharing app
Ello.co	https://ello.co	Ad-free social network – relatively anonymous
IP TRACES		
Maxmind	www.maxmind.com	IP geolocation and on-line fraud prevention
Hosting	www.whoishostingthis.com	Website hosting search tool
Location	www.ip2location.com	Identify website visitor geographic location
SOCIAL BOOKMARKING TOOLS		
Delicious	https://del.icio.us	Social bookmark manager
Mix	https://mix.com	Recommends new sites, videos from across the web
Diigo	www.diigo.com	Social bookmarking and collaborative research
SOCIAL MEDIA SEARCH ENGINES		
Meltwater	www.meltwater.com	Searches social media (Blogs, Twitter, FB)
Twingly	www.twingly.com	Data-mining of blogs
Tweetgrid	www.tweetgrid.com	Twitter search dashboard updates in real time (Site down for now)
Search Twitter	www.twitter.com/search	Searches Twitter
Tweet Deck	www.tweetdeck.com	Twitter proprietary aggregator/dashboard
Twitterfall	www.twitterfall.com	Real-time Twitter monitoring tool
Bee Volve	www.beevolve.com	Social media monitoring and real-time analytics
Newzpile	www.newzpile.com	Searches blogs and twitter
Social Mention	http://socialmention.com	Real-time social search and analysis
Social Searcher	www.social-searcher.com	Free Social Media Search Engine.
Tumblr	www.tumblr.com/search	Search text, photos, quotes, links, music, and videos
Boardreader	http://boardreader.com	Search engine for forums and message boards
Perisearch	www.perisearch.net	Search engine for Periscope streams
Picodash	www.picodash.com	Instagram search tool (Fee based)
Twipho	https://twipho.net	Twitter photo search engine
TreeVerse	Extension on Chrome	Shows Twitter conversations in “tree” form sorted by user and time
SOCIAL MEDIA AGGREGATORS AND DASHBOARDS		
Net Vibes	www.netvibes.com	First personalized dashboard publishing platform
Hoot Suite	www.hootsuite.com	Manage and measure multiple social networks
Global Voices	www.globalvoicesonline.org	International community of bloggers
Ushahidi	http://ushahidi.com	Uses concept of "crowd sourcing" for social activism
Silo Breaker	www.silobreaker.com	Aggregates news, blogs, audio, video, digital content
SOCIAL NETWORK RESEARCH TOOLS		
Foller.Me	foller.me	Insights into public Twitter profiles
Followerwonk	https://moz.com/followerwonk	Insights and comparison of Twitter profiles

SocialBearing	socialbearing.com	Insights and analytics for tweets and timelines
TweetStats	www.tweetstats.com	Graph any Twitter user's stats
Postchup	www.postchup.com	Social media analytics tool
Met Blogs	www.metblogs.com	Largest network of city-focused blogs
MentionMapp	http://mentionmapp.com	Twitter network visualizer (requires registration)
Sprinklr	www.sprinklr.com	Leading marketing platform for the social web
Warble Alerts	https://warble.co	Email alerts for Twitter
PUBLIC TRANSIT WEBSITES		
MetroBits	http://mic-ro.com/metro	Exploration of subways around the world
Amadeus	www.amadeus.net	Worldwide Transportation Information
Urban Rail	www.urbanrail.net	Information on global subway systems
CRIMINAL-RELATED MESSAGE BOARDS		
Topix	www.topix.com	Exchange information (drug prices, sources, dealers)
Migente	www.migente.com	Most popular Latino-American community site
Asian Avenue	www.asianave.com	Most popular Asian site (Firefox only)
Hi5	www.hi5.com	Photo-based social networking site with
Gangster	www.gangsterbb.net	LE sources/interdiction related to organize crime
MOBILE-ONLY APPS		
Banjo	http://ban.jo	Events and photos geolocated – smart-device only
Whisper	https://whisper.sh	Anonymous messaging, public or private
Surespot	www.surespot.me	Secure mobile messaging app
Snapchat	www.snapchat.com	Text/Photo/Video sharing app
LAW ENFORCEMENT EXPLOITATION		
Vehicles	www.nicb.org	Search VINs/stolen vehicles
Criminal Information	www.familywatchdog.us	National sex offender list
Criminal Information	www.felonspy.com	Address information for felons
Real Estate Information	www.zillow.com	House values and identify owners
Real Estate Information	www.trulia.com	Searches real estate cadasters
Shoe Model Information	www.shoeview.com	Compare shoe size, type, footprint, manufacturer
GOOGLE LANGUAGE CODES		
CTRLQ	https://ctrlq.org/code/19899-google-translate-languages	List of Google language codes
Google	https://sites.google.com/site/tomihasa/google-language-codes	List of Google language codes
Askapache	www.askapache.com/google/languagecountry-specific-google-search-engines	Language/Country specific Google Search Engines
Google Custom Search	www.google.com/cse	Google custom search engine
BLOG SITES		

WordPress	www.wordpress.com	Most popular online publishing platform, currently powering more than 26% of the web.
Blogger	www.blogger.com	Google's blog site – connected to Google account.
MISCELLANEOUS		
Random.org	www.random.org/strings	Random text string generator
Social Blade	https://socialblade.com	Social media statistical tracking website
You Get Signal	www.yougetsignal.com/tools/visual-tracert	Visual trace route tool for IP addresses
Zapier	https://zapier.com	Connects apps to automate tedious tasks
IFTTT	https://ifttt.com	Automates everyday processes through applets
Pastebin	http://pastebin.com	A website to store any text online for easy sharing
NodeXL	https://nodexl.codeplex.com	A free, open-source template for MS Excel that makes it easy to explore network graphs
Zamzar	www.zamzar.com	Free online file conversion
Giphy	https://giphy.com/create/gifmaker	Create animated GIFs from video files and YouTube links
RevEye	Extension on Chrome	Chrome Reverse Image Search Extension
NewsNow	www.newsnow.co.uk/h	The UK's first and leading homegrown and independent news aggregation service. Fully automated, and on a continuous basis, NewsNow displays breaking headlines linking to news websites all around the world.
Karma Decay	http://karmadecay.com	Reverse image search of Reddit.com
Arul's Utilities	http://aruljohn.com	Multiple network, geographic and misc. lookups
ROSA Resource Guide - GIST (Global Information Sharing Toolkit)	https://it.ojp.gov/gist	Developing a Policy on the Use of Social Media in Intelligence and Investigative Activities
Cyberthreat Real-Time Map	https://cybermap.kaspersky.com	Kaspersky map of live global cyber events
Live Cyber Attack Threat Map	https://threatmap.checkpoint.com/ThreatPortal/livemap.html	ThreatCloud map of live global cyber events
FireEye Cyber Threat Map	www.fireeye.com/cyber-map/threat-map.html	FireEye map of live global cyber events
Visual Site Mapper	http://visualsitemapper.com/	Visual map of a website with all links.
Expand URL	https://www.expandurl.net	See where a shortened URL leads to without opening link.
Osint Framework Tree	http://osintframework.com	Tree of OSINT tools by category
Start.me Technisette	https://start.me/p/wMdQMQ/tools https://start.me/p/b56G5Q/search-engines https://start.me/p/QRENnO/databases https://start.me/p/nRQNRb/addons	One stop shop for OSINT tools, search engines, databases, add-ons.

Save Video	https://savevideo.me	Download videos from Dailymotion, Facebook, Vimeo, Twitter, Vine, Aol Video, Rumble.com, Ustream, Break.com
Mashable	https://mashable.com/	Mashable is the go-to source for tech, digital culture and entertainment content
ResearchBuzz	https://researchbuzz.me/	News and information about search engines, databases, social media, and more.
Wired	www.wired.com	Technology news
Lifehacker	https://lifehacker.com/	Tips and tricks for life, many tech related tools as well
Shodan	www.shodan.io	Search engine for the Internet of Things (IoT) and other internet connected devices

WHAT IF I GET…

What If I Get…

Too many results? Focus the search by…

- Adding a word or phrase
- Specifying the order in which you want words to appear
- Using a more specific term
- Identifying ineffective terms and removing them
- Limiting to a domain or site
- Limiting to a date range
- Limiting where terms occur
- Restricting type of file
- Limiting pages to a particular language
- Limiting pages to a particular country

Too few results? Broaden the search by…

- Removing a word or phrase
- Specifying words instead of phrases
- Using more general terms
- Including synonyms or variant word forms or using a more common version of the word's spelling
- Broadening the domain
- Removing a date range
- Removing redundant terms or splitting a multi-part query
- Searching any type of file
- Translating your search terms into other languages and searching for the translated terms
- Searching the entire web

Homeland Security

Social Media Credibility Checklist

1. The web is not always as it seems
2. Trust but verify
3. What else is out there?

Twitter Credibility

- ☐ Is the profile image the default Twitter avatar or a stock image? Most users take the time to upload a photo. A bot does not add a profile photo. Most fake accounts use stock images of a profile image shared by other fake accounts.

  _____
  _____
  _____

- ☐ Is the bio empty? An empty bio is a dead giveaway that the profile is phony.

  _____
  _____
  _____

- ☐ Are there many repeated tweets and/or replies? If you see a profile's stream that is all the exact same or very similar tweets, chances are that you are viewing a fake account. Most notably, if the tweets are all @replies with the same text, you have found a bot account.

  _____
  _____
  _____

- ☐ Does the URL name match/similar to the bio name? If you see the profile URL as something like "twitter.com/john-smith" but when you view the profile, the first and last name listed above the bio has no relation to the URL. If you see an incoherent URL, the first and last name listed in the profile may not have direct relation to the URL.

  _____
  _____
  _____

- ☐ Are many of the tweets one-way or gibberish? Most of the time fake Twitter accounts simply spew off tweets that directly benefit themselves, like linking directly to their site. However,

there are many fake accounts that simply post gibberish or random incoherent thoughts that make absolutely no sense.

_____
_____
_____

- What are the time stamps of the tweets? Looking at the time stamp of the most recent tweets, you can get a good idea of the Twitter account is no longer active.

_____
_____
_____

- How many followers does the user have? Twitter has limits on certain things you can do such as how many people you can follow. This limit is set to 2,000. Once you follow 2,001 people, you must have at least 2,000 people following you back before you can exceed the 2,001 limit.

_____
_____
_____

- Are there more than a normal amount of tweets? A sure sign of an automated/fake account is typically an insane amount of tweets that is more than likely not humanly possible.

_____
_____
_____

Facebook Credibility

- ☐ What does the profile say? Read the profile carefully. Does the profile add up or are there some really hard-to-believe statements?

  _____
  _____
  _____

- ☐ Is the profile picture "too" perfect? Check out the profile picture. Touched up? Blurry? Drag photo to Google Images/TinEye to see where else the picture is found.

  _____
  _____
  _____

- ☐ Is the user's name elsewhere on the web unrelated to the current Facebook account? Search the name online. A more unusual name might bring back interesting results. If name is common, add some extra information like location or age.

  _____
  _____
  _____

- ☐ Are friends local or global? The more local the friend, the more likely the person is to be real.

  _____
  _____
  _____

- ☐ Are friends interconnected? Beware of interconnected faking. A circle of "friends" all vouching for one another.

  _____
  _____
  _____

- ☐ Are there inconsistencies in the Facebook account?

  _____
  _____
  _____

- ☐ Over time, are there strange or out of character interactions or posts?

  _____
  _____
  _____

Instagram Credibility

- ☐ Is the profile picture “too” perfect? Is the profile photo realistic? Often a fake account shows a pretty face.

  _____
  _____
  _____

- ☐ Does the bio match the photos?

  _____
  _____
  _____

- ☐ Does the account have spam comments? Do they repeat the same message, photos, links, etc? They could be in a different language.

  _____
  _____
  _____

- ☐ Are the mentions repetitive?

  _____
  _____
  _____

- ☐ Is it a verified account? See if there is a small white tick on a blue background.

  _____
  _____
  _____

- ☐ Are the photos selfies? Do they match the profile photos?

  _____
  _____
  _____

- ☐ Check user statistics on www.socialblade.com. Is the growth of followers unnatural versus number of photos posted?

  _____
  _____
  _____

Overall social media credibility

- ☐ Is the account fake?

  _____
  _____
  _____

- ☐ What are the details in the profile?
  - ☐ Where does the individual claim to be located?

    _____
    _____

  - ☐ Are the frequent topics of discussion listed?

    _____
    _____

  - ☐ What are the likes/dislikes?

    _____
    _____

  - ☐ Does the individual work? Is the employer listed?

    _____
    _____

  - ☐ When did they join the social media platform?

    _____
    _____

  - ☐ Does the background photo appear to fit with the profile?

    _____
    _____

- ☐ What topics are discussed?
  - ☐ Do some topics appear more frequently than others throughout the posts?

    _____
    _____

  - ☐ Does the subject matter match the claims of the profile?

    _____
    _____

- ☐ Is the post/tweet/photo geolocated?

- ☐ Do the photos have useful EXIF information?

  _____
  _____

- ☐ Where does the social media platform claim the photos are taken?

  _____
  _____

- ☐ Does the post itself tell you where the individual is located? (geo-inferencing)

  _____
  _____

- ☐ Does the location match the individual's profile?

  _____
  _____

- ☐ Is the location realistic?

  _____
  _____

☐ Does the post/image/photo/video appear on other social media sites?

- ☐ Using a general search engine, can you find the photos or images on other social media sites?

  _____
  _____

- ☐ Using a reverse search engine, such as TinEye, is the exact image found elsewhere on the internet?

  _____
  _____

☐ Are there associated websites or links?

- ☐ Does the user provide an associated social media link in another social media profile?

  _____
  _____

- ☐ Is there a link to a blog or employer website?

  _____
  _____

- ☐ Do the links fit with the user's profile?

  _____
  _____

- ☐ Do the links within the posts seem plausible and fit with the user's profile?

  _____
  _____

- ☐ Can you find the real name, relatives, or location of the individual using general search engines?

  _____
  _____
  _____

- ☐ Can you find PII on the user's social media site?
  - ☐ Real name?

    _____
  - ☐ Relatives?

    _____
  - ☐ Addresses?

    _____
  - ☐ Employer?

    _____
  - ☐ School?

    _____
  - ☐ Other?

    _____

Once credibility has been determined

- ☐ Is there consistency with your search results?

  _____
  _____
  _____

- ☐ Can a judgement be made regarding veracity, relevance, and/or credibility of the individual?

  _____
  _____
  _____

- ☐ What holes in your research still remain?

  _____
  _____
  _____

- Where else can you look to fill any holes that remain?

_____

_____

I-INTELLIGENCE

OPEN SOURCE INTELLIGENCE TOOLS AND RESOURCES HANDBOOK 2020

B305

OPEN SOURCE INTELLIGENCE

TOOLS AND RESOURCES HANDBOOK

2020

Aleksandra Bielska

Noa Rebecca Kurz, Yves Baumgartner, Vytenis Benetis

B306

Foreword

I am delighted to share with you the 2020 edition of the OSINT Tools and Resources Handbook. Once again, the Handbook has been revised and updated to reflect the evolution of this discipline, and the many strategic, operational and technical challenges OSINT practitioners have to grapple with.

Given the speed of change on the web, some might question the wisdom of pulling together such a resource. What's wrong with the Top 10 tools, or the Top 100? There are only so many resources one can bookmark after all. Such arguments are not without merit. My fear, however, is that they are also shortsighted. I offer four reasons why.

To begin, a shortlist betrays the widening spectrum of OSINT practice. Whereas OSINT was once the preserve of analysts working in national security, it now embraces a growing class of professionals in fields as diverse as journalism, cybersecurity, investment research, crisis management and human rights. A limited toolkit can never satisfy all of these constituencies.

Second, a good OSINT practitioner is someone who is comfortable working with different tools, sources and collection strategies. The temptation toward narrow specialisation in OSINT is one that has to be resisted. Why? Because no research task is ever as tidy as the customer's requirements are likely to suggest.

Third, is the inevitable realisation that good tool awareness is equivalent to good source awareness. Indeed, the right tool can determine whether you harvest the right information. It follows that the more tools you have in your portfolio, the more flexible your OSINT capabilities are likely to be.

Finally, the process of compiling this handbook is an intelligence exercise in its own right, alerting us to where we are at as a community and the challenges we are likely to face going forward – not least of which are disinformation, the fracturing of the internet, the proliferation of niche social media platforms, and the urgent need for better tools to monitor and analyse the content they provide.

Our hope is that this Handbook helps you plug any gaps in your collection efforts and alerts you to the many tools and resources you can consult for better intelligence, including on the discipline of OSINT itself. Of course, the Handbook makes no claim to being complete. Something new will doubtless pop-up tomorrow, and I suspect there are hundreds of tools we haven't even come across at all. With your help, we can address any omissions.

In any event, the usual caveats apply. While every effort has been made to test and validate these resources, we caution that today's wonder tool may be tomorrow's security liability. Thus, whenever testing a new script, application or browser extension, please do so in a secure environment to minimise any risk to your assets or operations.

B307

I would like to thank my colleagues at i-intelligence for their efforts in compiling this Handbook. Much of the credit belongs to Aleksandra Bielska who, as our Head of Training, evaluates hundreds of tools every year to determine which ones make it into our courses. I am also indebted to Yves Baumgartner and Vytenis Benetis for routinely updating us on new solutions. Thanks too are also due to Noa Kurz who worked tirelessly over the summer to help us get this document ready.

I close by acknowledging the contributions of the many students, practitioners and Twitter followers we've interacted with over the past two years. Your generosity, insights, suggestions and support are much appreciated.

Chris Pallaris
Director, i-intelligence GmbH

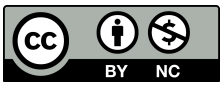


Table of Contents

Foreword 3

Search Tools 17

- General Search 17
- Meta Search 18
- Visual Search and Clustering Search Engines 20
- Decentralised Search Engines 21
- Charitable Search Engines 22
- Code Search 23
- File and FTP Search 25
- Open Database, Directories and Services Search 26
- Similar Sites Search 27
- Children-Friendly Search Engines 28
- National Search Engine Directories 29
- Custom Search 30
- Specialty Search Engines 31
- Search Tools 32

Social Media 34

- Major Social Networks 34
- Social Media Search and Monitoring 37
- Working with Hashtags 39
- Finding Influencers and Other Social Media Users 41
- Social Media Management and Content Discovery 42
- Social Media Analytics 43
- Social Media Tools: Twitter 44
- Social Media Tools: Facebook 49
- Social Media Tools: Instagram 51

Social Media Tools: Pinterest 55
Social Media Tools: Reddit 56
Social Media Tools: Voat 59
Social Media Tools: VKontakte 60
Social Media Tools: LinkedIn 61
Social Media Tools: Github 63
Social Media Tools: TikTok 65
Messaging and Chat Tools 66
Social Media Tools: Snapchat 68
Social Media Tools: WhatsApp 69
Social Media Tools: Skype 70
Social Media Tools: Kik 71
Social Media Tools: Telegram 72
Social Media Tools: IRC 74
Dating Apps and Sites 75
Fitness Apps and Communities 76
Working with Blogs 77
Blog Search 77
Working with Forums 78
Forum, Newsgroup and Discussion Board Search Tools 78
Working with Chan Boards 79
Chan Search Tools 79
Working with Q&A Sites 80
Q&A Sites 80
People Investigations 81
People Search Tools 81
Name Research 84
Public Records 85
Document Checking 87
Ancestry Research 88
Missing People 89
Address and Contact Information Search 91
Contact Detail Recovery Apps 93

Investigating Phone Numbers 95
Cell Tower Search 99
E-mail Search 100
Validating E-mails 102
Analysing E-mails 104
Analysing E-mail Headers 105
Matching E-mails to Social Media Profiles 106
IP Grabbers and E-mail Trackers 107
Username Check 108
CV and Resume Search 110
Expert Search 111
Business Research 113
Company Search Tools 113
Business Registers Lists and Directories 117
Job Search Resources 118
Company Reviews 120
Salary Search 121
Patent Research 123
Trademark Search 125
Tenders 127
Charity, NGO, and Nonprofit Research 129
Researching Leaks 131
Real Estate Research 132
Real Estate Research 132
Online Marketplaces 135
Classifieds and Online Marketplaces 135
Cryptocurrency and Banking Research 138
Cryptocurrency Research 138
Banking and Credit Card Information 141
Currency Conversion 143
Legal Research 144
Legal Research Tools and Resources 144

Researching Countries 147
Country Profiles 147
Researching Terrorism, Crime, and Cybersecurity 148
Researching Terrorism 148
Researching Crime 151
Researching Drug Trade 153
Researching Money Laundering and Corruption 154
Researching Human Trafficking 155
Requests for User Information: Information for Law Enforcement 158
Researching Cybersecurity 159
Military Research 161
Crisis Alerts and Travel Advisory 163
Researching Stolen Items 164
Researching Stolen Items 164
Transportation 166
Airplanes, Airports and Flight Trackers 166
Drones 169
Cars 171
Railways 173
Public Transport 176
Ships 178
Container and Cargo Tracking 181
Web Intelligence 182
Researching Domains 182
IP / IPv6 187
SEO Tools 191
Analysing Unique IDs 193
Subdomain Enumeration 194
Identifying Backlinks 195
Site Mapping Tools 196
Identifying Publish Date 197
Extracting Files 198
Analysing URLs 199

Identifying Technologies Behind Websites 200
Finding SSL Certificates 201
Checking Website Status 202
HTTPS Status 203
Researching Cyber Threats 204
IoT Search Engines 208
Exploit Search Engines 209
General Webint Tools and Toolkits 210
Multipurpose OSINT Frameworks 212
Web History and Site Capture 214
Wifi Search 217
Dark Web 218
Researching the Dark Web 218
Alternatives to Tor 220
Event Search 221
Event Search 221
Working with Images 222
Image Search and Reverse Image Search 222
Searching within Screenshots 225
Facial Recognition 226
Logo Search and Identification Tools 227
Investigating Objects and Symbols 228
Image Analysis 229
Stock Images 232
Image and Photo Editing 234
Creating World Clouds 237
OCR and Image Translation Tools 238
Other Image Processing Tools 239
Working with Videos 240
Video Search and Reverse Video Search 240
Live Streaming and Webcams 242
YouTube Tools 245
General Video Downloaders and Archivers 247

Downloading Videos from YouTube 249
Downloading Videos from Twitter 250
Downloading Videos from Facebook 251
Downloading Videos from Instagram 252
Downloading Videos from TikTok 253
Downloading Videos from Pinterest 254
Downloading Videos from Reddit 255
Video Players 256
Video Editors and Converters 257
Working with Video Metadata 259
Working with GIFs and Memes 260
Finding GIFs and Memes 260
Working with Audio 261
Working with Radio 261
Podcasts 263
Speech to Text Tools 265
Text to Speech Tools 266
Audio Editors 267
Working with Audio Metadata 268
3D Models and Designs 269
3D Models and Designs 269
Working with Documents 270
Searching Web-based Documents 270
Searching Personal Document Collections 271
Searching for Slides and Presentations 272
Searching Pastebins 273
Document and Reference Management 274
PDF Management 275
Working with Document Metadata 277
Academic Resources and Grey Literature 278
Academic and Grey Literature Research Tools 278
Medical Search Engines 284

Lectures, Talks, Presentations and Speeches 285
Lectures, Talks, Presentations and Speeches 285
Books and Reading 286
Books Search and Reading Tools 286
Working with Data and Statistics 290
Finding Data and Statistics 290
Infographics and Data Visualization 295
Dashboard Tools 298
Data Analysis 299
Data Scrapers 302
Working with News 304
Newspapers and News Directories 304
News Digest and Discovery Tools 305
Media Monitoring 307
Finding Newsletters 308
Fact Checking and Verification 309
Translation and Language Tools 311
Foreign Language Translation Tools 311
Slang Translators and Resources 314
Emoji Translators 315
Other Translation Tools 316
Text Transliteration 317
Acronyms and Abbreviations 318
Glossaries and Dictionaries 319
Information on Names and Naming Conventions 320
Language Research Tools 321
Web Monitoring 322
RSS Readers 322
Feed Indexes 325
RSS Search Tools 326
RSS Generators 327
RSS from Search 328
Social Media to RSS Tools 329

Twitter to RSS 330
Facebook to RSS 331
Instagram to RSS 332
RSS Bridge 333
Full-Text RSS 334
Feed Filtering 335
Feed Mixing 336
RSS to Widget Tools 337
RSS to Newsletter Tools 338
RSS to Email Tools 339
Newsletter to RSS Tools 340
Podcasts to RSS Tools 341
RSS to File System Tools 342
OPML Generation 343
Website Monitoring 344
Price Monitoring 345
Brand Protection Monitoring 346
Monitoring Newsletters 347
Data Collation and Data Processing Tools 348
Bookmarking 348
Bookmarks to Newsletter Tools 351
Notetaking 352
Annotation and Highlighting 354
Screenshot and Screen Capture Tools 355
Browsers and Browsing Tools 357
Browsers 357
Startpages 359
Customising New Tab 360
Tab Management 362
Extension Managers 364
Offline Browsing 365
Browsing History 366
User Agent Switchers 367

Download Managers 368
Other Browsing Tools 369
Writing and Dissemination 371
Writing and Office Tools 371
Text Editors 372
Grammar and Spelling 373
Working with Citations 374
Argument Analysis 375
Slideshow and Presentation Tools 376
Slide Templates 378
Digital Publishing 379
Newsletter Tools 380
Digital Storytelling 382
On-Screen Video Recorders 384
Website and App Builders 385
Website Builders 385
App Builders 387
Setting Up Forums / Groups 388
Creating Customised Workspaces 389
Mind Mapping and Idea Generation 390
Mind and Concept Mapping Tools 390
Idea Generation Tools 392
Productivity and File Management 393
Work Management and Productivity Tools 393
Calendars and Scheduling 395
E-mail Management 396
Cloud Storage and File Sharing 397
Workflow Automation 399
Collaboration and Communication 400
Collaboration and Project Management Tools 400
Communication Tools 404
Utility Tools 406
File Converters 406

PDF Converters 408
Document Tracking 410
URL Shorteners 411
URL Expanders 412
Keywords Discovery and Research 413
Android Emulators 414
Virtual Machines 415
Linux Distributions 416
User Script Managers 417
Working with Date and Time 418
Holiday Lists and Alternative Calendars 420
Unit Conversion 421
Weather 422
Country Codes 424
Language Codes 425
Working with Barcodes and QR Codes 426
Finding Open Source Software 427
Finding Software 428
Finding APIs 430
Analysis 431
Link / Network Analysis 431
Geospatial OSINT 433
World Maps 433
Satellite Imagery 436
Aerial Imagery 439
Working with Geographical Coordinates and Distance 440
GIS and Mapping Software 442
Regional Maps 444
Thematic Maps 445
Researching Buildings 448
Privacy and Security 449
Secure Operating Systems 449
Secure Browsers 450

System and Browser Cleaners 451
Browser Tests 452
Ads, Tracking, and Script Blockers 453
Blocking of Currency Miners 455
HTTPs 456
Javascript Security 457
Add-on Security 458
Working with Incognito Mode 459
Protecting Personal Data 460
Secure Account Deletion 461
Private Search Engines 462
Website Security and Reputation Check 463
Secure Data Deletion 465
Hard Drive Encryption 466
Other Encryption Tools 467
Backup Tools 468
Secure File Sharing 470
Cloud Storage Encryption 471
Encrypted Pastebins 472
Secure Communication Tools 473
E-mail Privacy Tests 475
Privacy-First E-mail Providers and Encrypting E-mails 476
Disposable E-mails and E-mail Aliases 477
Block E-mail Tracking 479
E-mail-based Scams 480
Password Management and Secure Login 481
Searching Breached Data 483
Working with Hashes 485
Second Phone Apps 486
SMS Verification Online 487
VPN Services 488
VPN Testing 490
Proxy Tools 491

Antivirus Software 492
Anti-Malware / Spyware 493
Dealing with Ransomware 494
Anti-Theft Software 495
Copyright Infringement, Plagiarism and Takedowns 496
General Privacy Resources 497
Other OSINT Research Tools 498
OSINT Platforms 498
Tools for Creating Sock Puppets 499
Tracking Investigation 501
OSINT Resources 502
OSINT Tools Lists 502
Blogs and Websites 506
Forums and Discussion Boards 507
Podcasts 508
Quizzes and Challenges 509

Search Tools

General Search

Tool	Link
Aol	http://search.aol.com
Ask	http://www.ask.com
Baidu	http://www.baidu.com
Bing	http://www.bing.com
DuckDuckGo	https://duckduckgo.com
entireweb	https://www.entireweb.com
Exalead	https://www.exalead.com/search
Gigablast	http://gigablast.com
Goodsearch	http://www.goodsearch.com
Google Search	http://www.google.com
Infospace	http://www.infospace.com
Lycos	http://www.lycos.com
MyWebSearch	http://home.mywebsearch.com
Naver	https://www.naver.com
Sogou	https://www.sogou.com
Soso	http://soso.com
Teoma	http://www.teoma.com
Wolfram Alpha	http://www.wolframalpha.com
Yahoo! Search	http://www.yahoo.com
Yandex	https://www.yandex.com

Meta Search

Tool	Link
100SearchEngines	https://www.100searchengines.com
All-in-One	http://all-io.net
AllTheInternet	http://www.alltheinternet.com
Bing vs. Google	http://bvsg.org
Creafy	http://www.creafy.com
DADgogo	http://dadgogo.com
Dogpile	http://www.dogpile.com
Etools	http://www.etools.ch
Excite	https://www.excite.com
FaganFinder	https://www.faganfinder.com
Findwith.me	http://www.findwith.me
Info.com	http://www.info.com
iZito	http://www.izito.com
The Lookup	http://the-lookup.com
occusearch	https://occusearch.net
runnaroo	https://www.runnaroo.com
Search	https://www.search.com
Search	https://search-it.netlify.app
SearchAll	https://www.searchall.net
searchlino	https://www.searchlino.com
Search-it	https://search-it.netlify.app
SEARCHtify	https://www.searchtify.com
SonicRun	http://www.sonicrun.com
toki	https://toki.com
WebCrawler	http://www.webcrawler.com

weboasis	https://weboas.is
Zapmeta	http://www.zapmeta.com
ZUREU	http://zureu.com

Visual Search and Clustering Search Engines

Tool	Link
Carrot2	http://search.carrot2.org
Yippy	http://yippy.com

Decentralised Search Engines

Tool	Link
Almonit	http://almonit.eth.link
boogle	https://boogle.com
IPFS Search	https://ipfs-search.com
Presearch	https://presearch.org
Susper	https://susper.com
Yacy	https://yacy.net

Charitable Search Engines

Tool	Link
Blue Search	https://blue-search.org
Ekoru	https://ekoru.org
Ecolee	https://ecolee.com
Ecosia	https://www.ecosia.org
Elliot	https://elliotforwater.com
Every Click	https://www.everyclick.com
Gaia Mission	https://gaiamission.org
gexsi	https://gexsi.com
Givero	https://www.givero.com
giveWater	https://www.givewater.com
goodsearch	https://www.goodshop.com/search
helpuu	http://helpuu.com
hopely	https://hopely.org
Lilo	https://www.lilo.org
OCG	https://ocg.org
Ocean Hero	https://oceanhero.today
okeano	https://okeano.com
Onbibi	https://onbibi.org
Rapusia	https://rapusia.org
SearchScene	https://www.searchscene.com
youcare	https://youcare.world

Code Search

Tool	Link
Android Code Search	https://cs.android.com
Bazel	https://cs.opensource.google/bazel
Chromium Code Search	https://source.chromium.org/chromium
Code Finder	http://codefinder.org
CodeSeek	https://www.codeseek.co
Codota	https://www.codota.com/code
Debian Code Search	http://codesearch.debian.net
Ember Observer: Code Search	https://emberobserver.com/code-search
Google Code Search	https://code.google.com
JExample	http://jexamples.com
krugle	http://www.krugle.com
Libraries.io	https://libraries.io
merobase	https://merobase.com
NerdyData	https://search.nerdydata.com
Nullege	http://nullege.com
Open Hub	https://www.openhub.net
Piwik Code Search	http://piwikcodesearch.herokuapp.com
PublicWWW	https://publicwww.com
Programmable Web	https://www.programmableweb.com
Reference Source Microsoft	https://referencesource.microsoft.com
Scala	https://www.programcreek.com/scala
SearchCode	https://searchcode.com

B327

Snipplr	https://snipplr.com
SourceCodeOnline	http://www.sourcecodeonline.com
Sourcegraph	https://sourcegraph.com/search
Symbol Hound	http://symbolhound.com
TechQ	http://techq.com
UnityList	https://unitylist.com
Woboq	https://code.woboq.org

File and FTP Search

Tool	Link
4shared	https://www.4shared.com
Archie	http://archie.icm.edu.pl/archie_eng.html
Aware Online: File Search	https://www.aware-online.com/osint-tools/bestandstypen-search-tool
Fagan Finder: Search by File Format	http://www.faganfinder.com/filetype
FileChef	https://www.filechef.com
FileSearching	http://www.filesearching.com
FreewareWeb	http://www.freewareweb.com/ftpsearch.shtml
Gegereka	http://www.gegereka.com
Global File Search	http://globalfilesearch.com
goofile	https://tools.kali.org/information-gathering/goofile
_IntelligenceX: File	https://intelx.io/tools?tab=file
Megasearch	http://megasearch.co
MMNT	http://www.mmnt.ru
NAPALM FTP Indexer	http://www.searchftps.net
SearchFiles.de	https://searchfiles.de
Search Shared	https://www.searchshared.info
Wenjian	http://s.wenjian.net

B329

Open Database, Directories and Services Search

Tool	Link
Cloud_enum	https://github.com/initstring/cloud_enum
CloudScraper	https://github.com/jordanpotti/CloudScraper
Fonetask	http://fonetask.com
GIIT IT	http://giitit.com
Grayhat Warfare	https://buckets.grayhatwarfare.com
LeakLooker	https://github.com/woj-ciech/LeakLooker
Lendx	http://lendx.org
ODBParser	https://github.com/citcheese/ODBParser
OD Finder	https://odfinder.github.io
Open Directory Crawler	https://odcrawler.xyz
Open Directory Search	https://opendirsearch.abifog.com
Open Directory Search	https://open-directories.reecemercer.dev
Open Directory Search	https://doyou.needmorehdd.space
Open Directory Search	https://sites.google.com/view/l33tech/tools/ods
Open Directory Search Finder	https://ewasion.github.io/opendirectory-finder
Palined Search	http://palined.com/search
S3Scanner	https://github.com/sa7mon/S3Scanner
Shodan	https://www.shodan.io
/r/opendirectories	https://www.reddit.com/r/opendirectories

Similar Sites Search

Tool	Link
Find Similar Sites	http://www.findsimilarsites.com
Google Similar Pages	https://chrome.google.com/webstore/detail/google-similar-pages/pjnfggphgdjblhfjaphkjhfpiiekbbej
moreofit	http://www.moreofit.com
SimilarSites	http://www.similarsites.com | https://chrome.google.com/webstore/detail/similar-sites-discover-re/necpbmbhhdiplmfhmjicabdeighkndkn?hl=en | https://addons.mozilla.org/en-US/firefox/addon/similarsites
SimilarSiteSearch	http://www.similarsitesearch.com
SitesLike	http://www.siteslike.com
SitesLike	https://www.sitelike.org

Children-Friendly Search Engines

Tool	Link
Fact Monster	https://www.factmonster.com
Kiddle	https://www.kiddle.co
KidRex	http://www.kidrex.org
Kid's Search	https://kidssearch.com
kidtopia	http://www.kidtopia.info
KidzSearch	https://www.kidzsearch.com
Topmarks	https://www.topmarks.co.uk
WackySafe	https://wackysafe.com

National Search Engine Directories

Tool	Link
European Search Engines, Directories and Lists	http://www.searchenginesoftheworld.com/search_engines_of_europe
Search Engine Colossus	https://www.searchenginecolossus.com
Search Engine Index	https://www.searchenginesindex.com
Search Engines of the World	https://www.searchenginesoftheworld.com

Custom Search

Tool	Link
CSE Utopia	https://start.me/p/EL84Km/cse-utopia
GoFindWho	https://gofindwho.com
Google Custom Search	http://www.google.com/cse
Stefanie Proto's Custom Search Engines	https://docs.google.com/spreadsheets/d/1fBPz6KHsFXryhu6JNrj1l-Rl04bEKLfinyCgCIqTyzU/edit#gid=436019663

Specialty Search Engines

Tool	Link
Athlinks (Search for Athletes)	https://www.athlinks.com
Biznar (Business Search Engines)	http://biznar.com
Crunchbase (Search Innovative Companies and People Behind Them)	https://www.crunchbase.com
Digle (Crowdsource Search)	https://www.digle.com
FindSounds (Search the Web for Sounds)	https://findsounds.com
Harmari (Ads Search)	https://www.harmari.com/search/unified
Million Short (Filter Top Results)	https://millionshort.com
Secret Search Engine Labs (Alternative Search Engine)	http://www.secretsearchenginelabs.com
Think Tank Search	https://guides.library.harvard.edu/hks/think_tank_search
Wiby (Search Engine for Older Style Pages)	https://wiby.me

Search Tools

Tool	Link
2lingual Search	http://www.2lingual.com
Advangle	http://advangle.com
AOL Search Database	https://search-id.com
BOOL	https://chrome.google.com/webstore/detail/bool/cfpmoigmhcehoegokjllchipdiindpkc
Command E	https://getcommande.com
Context Menu Search	https://chrome.google.com/webstore/detail/context-menu-search/ocpcmghnefmdhljkoiapafejjohldoga
Impersonal.me	http://www.impersonal.me
falla	https://github.com/Sanix-Darker/falla
Foregear	https://chrome.google.com/webstore/detail/foragear-quick-search-too/cldhjjcfiadipgdiiklpdhdkkakacdbm
Google Search Filter	https://chrome.google.com/webstore/detail/google-search-filter/eidhkmnbiahhgbgpjpiimdogfidfikgf | https://addons.mozilla.org/en-US/firefox/addon/g-search-filter
Google When	https://chrome.google.com/webstore/detail/google-when/dgafcidlgmbcehokgdeghmfnbpbfhihh
GSEARCH.ONE	https://www.gsearch.one
Infinite Scroll	https://chrome.google.com/webstore/detail/infinite-scroll-for-googl/acjdmkdcbbhokaleofmalpcnnkpgphpb?hl=en-US
Infoscope	https://chrome.google.com/webstore/detail/infoscope/gnnlgfolofpjdgjhfejmlcabaedmdfcn
Instant Preview	https://chrome.google.com/webstore/detail/search-preview/majhgbekihmliceijipbdccgicepmmei
I Search From	https://isearchfrom.com
Katana	https://github.com/adnane-x-tebbaa/katana

Klug Suchen	http://www.klug-suchen.de
MultiFind	https://chrome.google.com/webstore/detail/multifind/amegoafkcikfmdbfeldmchinkjfdgoog
Neuskool	http://neuskool.com
pagodo	https://github.com/opsdisk/pagodo
Query Tool	https://github.com/oryon-osint/querytool
RESULTER	https://chrome.google.com/webstore/detail/resulter-google-search-sh/chojfhfgbdaeokblbdeahgbijodikdpk
Result Preview	https://chrome.google.com/webstore/detail/result-preview/geogklgaaafmfijgfninjjbcinicfafb
SCANNER-INURLBR	https://github.com/googleinurl/SCANNER-INURLBR
Search All	https://chrome.google.com/webstore/detail/search-all/kpdkbemdpepjjppbfgeapjienologapa
Search the current site	https://chrome.google.com/webstore/detail/search-the-current-site/jliolpcnkmolaaecncdfeofombdekjcp
Selection Search	https://chrome.google.com/webstore/detail/selection-search/gipnlpdeieaidmmeaichnddnmjmcakoe | https://addons.mozilla.org/en-US/firefox/addon/selection-search-ff
Sensebot	http://sensebot.com
Site Dorks	https://github.com/Zarcolio/sitedorks
Suchmaschinen Datenbank	http://www.suchmaschinen-datenbank.de
thedorkbox	https://github.com/cybersafeblr/thedorkbox
URL Render	https://url-render.com

B337

Social Media

Major Social Networks

Tool	Link
Ameba	https://www.ameba.jp
badoo	https://badoo.com
BlackPlanet	https://www.blackplanet.com
Bubbly	http://bubbly.net
Care2	https://www.care2.com
Cellufun	http://www.cellufun.com
Classmates	https://www.classmates.com
Cloob (Iran)	https://www.cloob.com
Couch Surfing	https://www.couchsurfing.com
Crunchyroll	https://www.crunchyroll.com
DevianArt	https://www.deviantart.com
Diaspora	https://diasporafoundation.org
The Dots	https://the-dots.com
Douban (China)	https://www.douban.com
Draugiem (Latvia)	https://www.draugiem.lv
Ello	https://ello.co
Facebook	http://www.facebook.com
Facenama (Iran)	http://facenama.com
FaceParty	https://www.faceparty.com
Fediverse	https://fediverse.party
Flickr	https://www.flickr.com

B338

Flixster	https://www.flixster.com
Foursquare	https://foursquare.com
gab	https://gab.com
Gaia Online	https://www.gaiaonline.com
Giphy	https://giphy.com
Goodreads	https://www.goodreads.com
Hi5	https://secure.hi5.com
Imgur	https://imgur.com
influenster	https://www.influenster.com
Instagram	https://www.instagram.com
italki	https://www.italki.com
Kuaishou (China)	https://www.kuaishou.com
Line Play	http://lp.play.line.me
Linkedin	https://www.linkedin.com
LiveJournal	https://www.livejournal.com
Mastodon	https://mastodon.social
MeetMe	https://www.meetme.com
Meetup.com	https://www.meetup.com
MeWe	https://mewe.com
Mixi (Japan)	https://mixi.jp
MocoSpace	https://www.mocospace.com
MyMFB	https://mymfb.com
MyMuslimPage	http://www.mymuslimpage.com
Naijapals	https://www.naijapals.com
Naseeb	http://www.naseeb.com
Nextdoor	https://nextdoor.com
Odnoklassniki (Russia)	http://ok.ru
OpenDiary	https://www.opendiary.com
Parler	https://parler.com
Periscope	https://www.pscp.tv
Pinterest	http://www.pinterest.com
QQ (China)	https://www.qq.com
Qzone (China)	http://qzone.qq.com

ravelry	https://www.ravelry.com
Reddit	https://www.reddit.com
Renren (China)	http://www.renren.com
Skyrock	https://www.skyrock.com
sociall	https://sociall.io
Spreely	https://www.spreely.com
Tagged	https://secure.tagged.com
Taringa (Latin America)	http://www.taringa.net
Tinder	https://www.gotinder.com
Tumblr	https://www.tumblr.com
Twitch	https://www.twitch.tv
Twitter	https://twitter.com
Twoo	https://www.twoo.com
Vero	https://vero.co
Vigo Video	https://www.vigovideo.net
Vimeo	https://vimeo.com
VKontakte	https://vk.com
Voat	https://voat.co
wattpad	https://www.wattpad.com
Wayn	https://www.wayn.com
WeHeartIt	https://weheartit.com
Weibo (China)	http://weibo.com
Xanga	http://xanga.com
Xing	https://www.xing.com
Yelp	https://www.yelp.com
YY (China)	https://www.yy.com
YouTube	https://www.youtube.com
Zalo	https://zalo.me

Social Media Search and Monitoring

Tool	Link
AIDR	http://aidr.qcri.org
Awario	https://awario.com
Brand24	https://brand24.com
Brandwatch	https://www.brandwatch.com
buzzglobe	https://buzzglobe.com
BuzzMonitor	https://home.getbuzzmonitor.com
CrowdAnalyzer	https://www.crowdanalyzer.com
CrowdTangle	https://www.crowdtangle.com
Dataminr	https://www.dataminr.com
Digimind	https://www.digimind.com
Echosec	https://www.echosec.net
Evolve Social Search	https://bonobos.github.io/evolve-social-search
Hootsuite	http://hootsuite.com
isearchsocial	https://isearchsocial.com
Keyhole	https://keyhole.co
Meltwater	https://www.meltwater.com
Mention	https://mention.com
Mentionlytics	https://www.mentionlytics.com
Netvibes	http://www.netvibes.com
NewsWhip Spike	https://www.newswhip.com/spike-social-media-monitoring
NexusXplore	https://www.nexusxplore.com
Reputology	https://www.reputology.com
ReviewInc	https://reviewinc.com
reviewtrackers	https://www.reviewtrackers.com
Samdesk	https://www.samdesk.io

B341

SentiOne	https://sentione.com
SocialBakers	http://www.socialbakers.com
Social History	https://chrome.google.com/webstore/detail/ookkdggjamhmjdmoconpcdefjgpejhem
Social Links	https://www.mtg-bi.com
Social Media Monitoring Solutions	http://wiki.kenburbary.com/social-meda-monitoring-wiki
Social Mention	http://socialmention.com
SocialPath	https://github.com/woj-ciech/SocialPath
Social Searcher	http://www.social-searcher.com
Storyful	https://storyful.com
Synthesio	https://www.synthesio.com
Talkwalker	https://www.talkwalker.com
Trendolizer	http://get.trendolizer.com
UVRX	http://www.uvrx.com/social.html
Webhose	https://webhose.io
X1	https://www.x1.com
YouScan	https://youscan.io
Zoho Social	https://www.zoho.com/social/social-media-monitoring.html

Working with Hashtags

Tool	Link
All Hashtag	https://www.all-hashtag.com
Best Hashtags	http://best-hashtags.com
Display Purposes	https://displaypurposes.com
Hashtag Directory	https://www.thehashtagdirectory.com
Hashtag Hub	https://hashtaghub.herokuapp.com
Hashtagify	https://hashtagify.me
Hashtags for Likes	https://www.hashtagsforlikes.co
Hashtags.org	https://www.hashtags.org
Hashtracking	https://www.hashtracking.com
Hashtatit	http://www.hashatit.com
Iconosquare	https://www.iconosquare.com
In Tags	https://play.google.com/store/apps/details?id=com.sunraylabs.socialtags
Keyhole	https://keyhole.co
Keyword.io	https://keywordtool.io
Leetags	https://www.leetags.com
MetaHashtags	https://metahashtags.com
#onemilliontweetmap	https://onemilliontweetmap.com
Panoramiq	https://apps.hootsuite.com/apps/panoramiq
RiteTag	https://ritetag.com
SMAT Streamlit	https://smat-streamlit.herokuapp.com
Social Bearing	http://www.socialbearing.com
Socialert	https://socialert.net
SproutSocial	https://sproutsocial.com
Tagdef	https://tagdef.com

TagsFinder	https://www.tagsfinder.com
Tweetbinder	https://www.tweetbinder.com
Twubs	https://twubs.com

Finding Influencers and Other Social Media Users

Tool	Link
Aspire IQ	https://www.aspireiq.com
Buzzsumo	https://buzzsumo.com
Fourstarzz Influencer Recommendation Engine	https://apps.hootsuite.com/apps/fourstarzz-influencer-recommendation-engine
GroupHigh	https://www.grouphigh.com
Heepsy	https://www.heepsy.com
HypeAuditor	https://hypeauditor.com
Keyword.io	https://keywordtool.io
Klear	http://klear.com
Kred	http://kred.com
ManyContacts Mail Check	https://www.manycontacts.com/en/mail-check
Mentionlytics	https://www.mentionlytics.com
NinjaOutreach	https://ninjaoutreach.com
Picodash	https://www.picodash.com
Post for Rent	https://www.postforrent.com
Publicfast	https://www.publicfast.com
scoutzen	https://www.scoutzen.com
socialbakers	https://www.socialbakers.com
socialhootownl	https://socialhootowl.com
Trufan	https://apps.hootsuite.com/apps/trufan
Upfluence	https://www.upfluence.com

B345

Social Media Management and Content Discovery

Tool	Link
Agora pulse	https://www.agorapulse.com
Buffer	https://buffer.com
Buzzsumo	http://buzzsumo.com
Coosto	https://www.coosto.com
Crowdfire	https://www.crowdfireapp.com
e-clincher	https://eclincher.com
Falcon	https://www.falcon.io
Hootsuite	http://hootsuite.com
hopper	https://www.hopperhq.com
Meet Edgar	https://meetedgar.com
Post Planner	https://www.postplanner.com
Revive Social	https://revive.social
Sendible	https://www.sendible.com
Sked Social	https://skedsocial.com
SocialBakers	http://www.socialbakers.com
Social Flow	http://www.socialflow.com
SocialPilot	https://www.socialpilot.co
Social Report	https://www.socialreport.com
SproutSocial	https://sproutsocial.com
tailwind	https://www.tailwindapp.com
Zoho Social	https://www.zoho.com/social/social-media-monitoring.html

B346

Social Media Analytics

Tool	Link
Audiense	https://www.audiense.com
Brandwatch	https://www.brandwatch.com
Cyfe	http://www.cyfe.com
Hootsuite	http://hootsuite.com
hopper	https://www.hopperhq.com
Iconosquare	https://www.iconosquare.com
Minter.io	https://minter.io
netlytic	https://netlytic.org
OpinionCrawl	http://www.opinioncrawl.com
quintly	https://www.quintly.com
Rival IQ	https://www.rivaliq.com
Shared Count	https://www.sharedcount.com
SocialBakers	http://www.socialbakers.com
Social Report	https://www.socialreport.com
SproutSocial	https://sproutsocial.com
UnionMetrics	https://unionmetrics.com
Visibrain	https://www.visibrain.com
Webometric	http://lexiurl.wlv.ac.uk

B347

Social Media Tools: Twitter

Tool	Link
AccountAnalysis	https://accountanalysis.app
Affinit Tweet	https://affinitweet.com
Ads Twitter	https://ads.twitter.com/transparency
AllDeletedTweets From Politicians	https://politwoops.com/countries
AllMyTweets	https://www.allmytweets.net/connect
Aware Online Twitter Search	http://www.aware-online.com/en/osint-tools/twitter-search-tool
BirdIQ	https://birdiq.net/twitter-search
Birdwatcher	https://awesomeopensource.com/project/michenriksen/birdwatcher
Blue Nod	http://bluenod.com
Botometer	https://botometer.iuni.iu.edu
BotSight	https://download.botsight.nlok-research.me
BotSlayer	https://osome.iuni.iu.edu/tools/botslayer
Burrrd	https://burrrd.com
Cawbird	https://snapcraft.io/cawbird
Charm	https://collectcharm.app
Chatter	https://github.com/visualbasic6/chatter
Check for Repeated Posts	https://makeadverbsgreatagain.org/allegedly
Chorus	http://chorusanalytics.co.uk
Code of Ninja: Find Twitter ID	https://codeofaninja.com/tools/find-twitter-id
Commun.it	http://commun.it
COSMOS	http://socialdatalab.net/COSMOS

DMI-TCAT	https://github.com/digitalmethodsinitiative/dmi-tcat
doesfollow	https://doesfollow.com
DownAlbum	https://chrome.google.com/webstore/detail/downalbum/cgjnhhjpfcdhbhlcmmjppicjmgfkppok
Download Twitter Video	http://www.downloadtwittervideo.com
eInsightData	https://www.einsightdata.com
Export Comments	https://exportcomments.com
First Tweet	http://ctrlq.org/first
First Tweet	https://irumble.com/firsttweet
Foller.me	http://foller.me
Followers Analysis	https://www.followersanalysis.com
Followerwonk	http://followerwonk.com
FollowFly	http://followfly.co
GetTwitterID	http://gettwitterid.com
Gigatweeter	http://gigatweeter.com
Hashtagify	http://hashtagify.me
Hashtags.org	http://www.hashtags.org
Help Twitter Law Enforcement Request	https://help.twitter.com/forms/lawenforcement
_IntelligenceX: Twitter	https://intelx.io/tools?tab=twitter
iTrended	https://itrended.com
LessNoise	https://www.lessnoise.net
ManageFlitter	http://manageflitter.com
MentionMapp	http://mentionmapp.com
OneMillionTweetMap	http://onemilliontweetmap.com
Owlead	https://owlead.com
Phantom Buster	https://phantombuster.com/phantombuster
RiteTag	https://ritetag.com
Same.energy	https://same.energy
SaveVideo	http://savevideo.me
Scylla	https://github.com/josh0xA/Scylla
Secateur	https://secateur.app

Search for Tweets	http://searchfortweets1.com
Seek a Tweet	https://www.seekatweet.com
Shadowban	https://shadowban.eu
Sleeping Time	http://sleepingtime.org
smat	https://www.smat-app.com/timeline
SparkScore	https://sparktoro.com/tools
Social-alerts	https://github.com/mamoedo/social-alerts
Social Bearing	http://www.socialbearing.com
Social Rank First Follower	http://socialrank.com/firstfollower
SocioViz	http://socioviz.net
SourcingLab: Twitter	https://sourcinglab.io/search/twitter
Spoonbill	https://spoonbill.io
t	https://github.com/sferik/t
TAF ferugli	https://www.tafferugli.io | https://github.com/sowdust/tafferugli
Tagdef	https://tagdef.com
Thoracle	https://www.thoracle.net
Threadia	https://threadia.com
Thread Reader	https://threadreaderapp.com
Tinfoleak	https://tinfoleak.com | https://github.com/vaguileradiaz/tinfoleak
Treeverse	https://chrome.google.com/webstore/detail/treeverse/aahmjdadniahaicebomlagekkcnlcila | https://addons.mozilla.org/en-US/firefox/addon/treeverse | https://github.com/paulgb/Treeverse
Trends24	http://trends24.in
TrendsMap	http://trendsmap.com
Truthnest	https://www.truthnest.com/
Twayback Machine	http://staringispolite.github.io/twayback-machine
twDocs	https://www.twdocs.com
TWDOWN	https://twdown.net
TweepDiff	http://tweepdiff.com
Tweepi	https://tweepi.com
Tweeple Search	https://tweeplesearch.com

Tweeplers	https://www.tweeplers.com/map/
Tweepsmap	http://tweepsmap.com
Tweet Archiver	https://chrome.google.com/webstore/detail/twitter-archiver/pkanpfekacaojdncfgbjadedbggbbphi?hl=en
TweetArchivist	http://www.tweetarchivist.com
Tweetbeaver	https://tweetbeaver.com
TweetDeck	https://www.tweetdeck.com
TweetDelete	https://tweetdelete.net
TweeterID	https://tweeterid.com
TweetMap	http://mapd.csail.mit.edu/tweetmap
TweetMap	https://www.mapd.com/demos/tweetmap
TweetMap	https://www.omnisci.com/demos/tweetmap
Tweet Mapper	https://keitharm.me/projects/tweet
Tweetreach	http://tweetreach.com
Tweets_analyzer	https://github.com/x0rz/tweets_analyzer
TweetStats	http://www.tweetstats.com
Tweriod	http://www.tweriod.com
Twicsy	http://twicsy.com
Twiends	https://twiends.com
Twilert	http://www.twilert.com
Twint	https://github.com/twintproject/twint | https://pypi.org/project/twint
Twint-utils	https://github.com/twintproject/twint-utils
Twipho	http://www.twipho.net
Twish	https://twish.xyz
TwiSSR	http://www.twissr.com
Twitonomy	http://www.twitonomy.com
TwitRSS	https://twitrss.me
Twitscoop	https://www.twitscoop.com
Twitter 3D	https://twitter.jeffprod.com
Twitter Developer	https://developer.twitter.com/en
Twitter Advanced Search	https://twitter.com/search-advanced?lang=en

Twitter Advanced Search	https://github.com/igorbrigadir/twitter-advanced-search
Twitter Audit	https://www.twitteraudit.com
Twitter BFTD	https://github.com/misterch0c/twitterBFTD
Twitterfall	http://twitterfall.com
Twitter List Copy	http://projects.noahliebman.net/listcopy/connect.php
Twitter Search	http://search.twitter.com
TwitterSearch2Gephi	https://github.com/hjunker/TwitterSearch2Gephi
Twittimer	https://twittimer.com
Twitual	http://twitual.com
TwitWork	https://github.com/atmoner/TwitWork
Twlets	http://www.twlets.com
Twopcharts	http://twopcharts.com
twoogel	http://twoogel.com
twXplorer	https://twxplorer.knightlab.com
TWUBS	http://twubs.com
Twugi	https://www.twugi.com
Warble	https://warble.co
Yotter	https://github.com/ytorg/Yotter

Social Media Tools: Facebook

Tool	Link
Agora Pulse	http://barometer.agorapulse.com
Aware Online: Facebook Search	https://www.aware-online.com/osint-tools/facebook-search-tool
DownAlbum	https://chrome.google.com/webstore/detail/downalbum/cgjnhhjpfcdhbhlcmmjppicjmgfkppok
DumpItBlue	https://sourceforge.net/projects/dumpitblue
Expand All Facebook Comments	http://com.hemiola.com/bookmarklet
Export Comments	https://exportcomments.com
Facebook Ads Library	https://www.facebook.com/ads/library
Facebook Live	https://www.facebook.com/watch/live
Facebook Search Engine	https://www.social-searcher.com/facebook-search
Facebook Transcripts	https://github.com/lorenzoromani1983/facebookTranscripts
Fanpage Karma	http://www.fanpagekarma.com
Fb-sleep-stats	https://github.com/sqren/fb-sleep-stats
Graph Tips	http://graph.tips
Grouply	https://groouply.com
_IntelligenceX: Facebook Search	https://intelx.io/tools?tab=facebook
Lookup-ID.com	https://lookup-id.com
new-fb-search.md	https://gist.github.com/nemec/2ba8afa589032f20e2d6509512381114
Osint Support Facebok Chrome Extensions	https://osint.support/chrome-extensions
Phantom Buster	https://phantombuster.com/phantombuster

socid_extractor	https://github.com/soxoj/socid_extractor
SourcingLab: Facebook	https://sourcinglab.io/search/facebook
Sowdust FB Search	https://sowdust.github.io/fb-search
Ultimate Facebook Scraper	https://github.com/harismuneer/Ultimate-Facebook-Scraper
Who posted what?	https://whopostedwhat.com
Ultimate Facebook Scraper	https://www.kitploit.com/2019/11/ultimate-facebook-scraper-bot-which.html

B354

Social Media Tools: Instagram

Tool	Link
4kStogram	https://www.4kdownload.com/de/products/product-stogram
Aware Online: Instagram Search Tool	https://www.aware-online.com/osint-tools/instagram-search-tool
Blocked and Banned Instagram Hashtag Search	http://thedatapack.com/tools/blocked-hashtag-search
Combin	https://www.combin.com
Command for IG	https://commandforig.com
Comment Picker	https://commentpicker.com
Dinsta	https://www.dinsta.com
Display Purposes	https://displaypurposes.com
DownAlbum	https://chrome.google.com/webstore/detail/downalbum/cgjnhhjpfcdhbhlcmmjppicjmgfkppok
Downloader for Instagram	https://chrome.google.com/webstore/detail/downloader-for-instagram/olkpikmlhoaojbbmmpejnimiglejmboe?hl=en
DownloadGram	https://downloadgram.com
Everliker Standalone	https://chrome.google.com/webstore/detail/everliker-standalone-soci/nbohdphjekodehfnilakihailcpjcdkm
Export Comments	https://exportcomments.com

Export List of Followers from Instagram	https://chrome.google.com/webstore/detail/export-list-of-followers/hcdbfckhdcpepllecbkaaojfgipnpbpb
Find Instagram User ID	https://codeofaninja.com/tools/find-instagram-user-id
Gramfind	http://gramfind.com
GrowBot Automator for Instagram	https://chrome.google.com/webstore/detail/growbot-automator-for-ins/abhcgokmndbiegmmbjffdlpihgdmeejf?hl=es-419
Hashtagify	http://hashtagify.me
Hashtags for Likes	https://www.hashtagsforlikes.co
Helper Tools for Instagram	https://chrome.google.com/webstore/detail/helper-tools-for-instagra/hcdbfckhdcpepllecbkaaojfgipnpbpb
HypeAuditor	https://hypeauditor.com
Iconosquare	http://iconosquare.com
igpublicalert	https://igpublicalert.ga
IGSuperStar	https://igsuperstar.com
Imgbunk	https://imgbunk.com
ImgInn	https://imginn.com
Influencer Marketing Analytics by WeFind	https://chrome.google.com/webstore/detail/influencer-marketing-anal/kiadoddngdeggkkmlaedmhghhoigccpf?hl=en-US
INSSIST	https://chrome.google.com/webstore/detail/inssist-post-stories-dm-w/bcocdbombenodlegijagbhdjbifpiijp
Instadp	https://www.instadp.com
InstaFollowers	https://www.instafollowers.co
Insta Gone Public Alert	https://igpublicalert.ga
Instagram Crawler	https://github.com/hehpollon/Instagram-Crawler
Instagram Explorer	https://www.osintcombine.com/instagram-explorer
Instagram OSINT	https://github.com/sc1341/InstagramOSINT

Instagram Scraper	https://apify.com/jaroslavhejlek/instagram-scraper
Instagram-scraper	https://github.com/arc298/instagram-scraper
Instagram Search Tool (NetBootCamp)	http://netbootcamp.org/instagram.html
Instagram Search Tool (Aware Online)	http://www.aware-online.com/en/osint-tools/instagram-search-tool
Instagram User ID	http://www.ershad7.com/InstagramUserID
Instagram Stories Download	https://storiesig.com/
InstaLoader	https://github.com/instaloader/instaloader
instaloctrack	https://github.com/bernsteining/instaloctrack
InstaLooter	https://github.com/althonos/InstaLooter
Instalyzer	http://ershad7.com/instalyzer
Instasave	https://instasave.io
InstaSave	https://github.com/alshf89/InstaSave
In Tags	https://play.google.com/store/apps/details?id=com.sunraylabs.socialtags
Izuum	http://izuum.com
Leetags	https://www.leetags.com
LIKEPOOL	https://chrome.google.com/webstore/detail/likepool-get-10x-more-lik/mambmbfnejfjgihdebahcddfgclmllap
Keyhole	http://keyhole.co
MetaHashtags	https://metahashtags.com
Minter.io	https://minter.io
noninstagram	https://github.com/datvance/noinstagram
Osi.ig	https://github.com/th3unkn0n/osi.ig
Osintgram	https://github.com/Datalux/Osintgram
Otzberg.net	https://www.otzberg.net/iguserid/index.php
Panoramiq	https://apps.hootsuite.com/apps/panoramiq

Phantom Buster	https://phantombuster.com/phantombuster
Phlanx: Instagram Engagement Calculator	https://phlanx.com/engagement-calculator
Picodash	https://www.picodash.com
Pic stalker	https://pic-stalker.com
Pikamu	https://pikamu.com
Pikdo	https://pikdo.info
Piwox	https://www.piwox.com
Scylla	https://github.com/josh0xA/Scylla
Searchmybio	https://www.searchmy.bio
Skimagram	https://skimagram.com
snoopreport	https://snoopreport.com
Social-alerts	https://github.com/mamoedo/social-alerts
Social Rank	https://www.socialrank.com
SocialInsider	https://www.socialinsider.io
socid_extractor	https://github.com/soxoj/socid_extractor
SoIG	https://github.com/yezz123/SoIG
Storiesig	https://storiesig.com
tailwind	https://www.tailwindapp.com
ThumbTube	https://thumbtube.com/instagram-profile-picture-downloader
trendHERO	https://trendhero.io
Webstagram	https://webstagram.org
Webstagram Site	https://www.webstagramsite.com
Wopita	https://wopita.com
Yooying	https://www.yooying.com

B358

Social Media Tools: Pinterest

Tool	Link
DownAlbum	https://chrome.google.com/webstore/detail/downalbum/cgjnhhjpfcdhbhlcmmjppicjmgfkppok
Experts PHP: Pinterest Photo Downloader	https://www.expertsphp.com/pinterest-photo-downloader.html
Phantom Buster	https://phantombuster.com/phantombuster
Pingroupie	http://pingroupie.com
Pinontop	https://chrome.google.com/webstore/detail/pinontop-stay-on-top-of-p/ompbffakmhdgkeeholbbhpjlcmbdcnme?hl=en
Pinterest Guest	https://addons.mozilla.org/en-US/firefox/addon/pinterest-guest
SourcingLab: Pinterest	https://sourcinglab.io/search/pinterest
Tailwind	https://www.tailwindapp.com

Social Media Tools: Reddit

Tool	Link
Aware Online: Reddit Search	http://www.aware-online.com/en/osint-tools/reddit-search-tool
Ceddit	https://snew.notabug.io/r/all
Chatter	https://github.com/visualbasic6/chatter
F5BOT	https://f5bot.com
Imagoid	http://www.imagoid.com
Imgur	http://imgur.com
Karma Decay	http://karmadecay.com
Koalabear Reddit	https://koalabear.nl/reddit
Minimalism for Reddit	https://reddit.qnzl.co
Mostly Harmless	http://kerrick.github.io/Mostly-Harmless/#features
OSINT Combine: Reddit Post Analyzer	https://www.osintcombine.com/reddit-post-analyser
Phantom Buster	https://phantombuster.com/phantombuster
rarchives	https://i.rarchives.com
rdddeck	https://rdddeck.com
Readr for Reddit	https://chrome.google.com/webstore/detail/readr-for-reddit/molhdaofohigaepljchpmfablknhabmo
Reddit Archive	http://www.redditarchive.com
Reddit Comment Collapser	https://chrome.google.com/webstore/detail/reddit-comment-collapser/njmimaecgocggclbecipdimilidimlpl | https://addons.mozilla.org/en-US/firefox/addon/reddit_comment_collapser | https://github.com/tom-james-watson/reddit-comment-collapser

B360

Reddit Comment Search	https://redditcommentsearch.com
Redditery	http://www.redditery.com
Reddit Guide	https://reddit.guide
Reddit Hacks	https://github.com/EdOverflow/hacks
Reddit List	http://redditlist.com
Reddit Insight	https://www.redditinsight.com/
Reddit Investigator	http://www.redditinvestigator.com
Reddit Metrics	http://redditmetrics.com
reddtip	https://www.redditp.com
Reddit Profile	https://redditprofile.com
Reddit Search	https://realsrikar.github.io/reddit-search
Reddit Search	https://camas.github.io/reddit-search
Reddit Search	http://cemulate.github.io/reddit-search
Reddit Search	https://www.redditsearch.io
Reddit Search	https://reddysearchgo.herokuapp.com
Reddit Search	http://reddit-search.surge.sh
Reddit Search	https://react-reddit-search-app.web.app
Reddit Search	https://viralharia.github.io/finddit
Reddit Search Tool (Aware Online)	http://www.aware-online.com/en/osint-tools/reddit-search-tool
Reddit Shell	https://redditshell.com
Reddit Stream	http://reddit-stream.com
Reddit Suite	https://chrome.google.com/webstore/detail/reddit-enhancement-suite/kbmfpngjjgdllneeigpgjifpgocmfgmb | https://addons.mozilla.org/en-GB/firefox/addon/reddit-enhancement-suite
Reddit User Analyser	https://atomiks.github.io/reddit-user-analyser
redditvids	https://redditvids.com
Redective	http://redective.com
Reditr	http://reditr.com
Reeddit	https://reedditapp.com
ReSavr	https://www.resavr.com
Savvit.io	http://savvit.io

Sayit	https://anvaka.github.io/sayit/?query=
Searcheddit	http://searcheddit.com
Search Reddit	https://searchreddit.blogspot.com
SHINE for Reddit	https://chrome.google.com/webstore/detail/shine-for-reddit-unoffici/dlbccbcpelghmhkhmpefncahafgigkek?hl=en
Simpleddit	http://www.simpleddit.com
smat	https://www.smat-app.com/timeline
Snew	https://snew.notabug.io/r/all
SnoopSnoo	http://snoopsnoo.com
socid_extractor	https://github.com/soxoj/socid_extractor
Subbed	https://subbed.org
Suggest me a subreddit	https://nikas.praninskas.com/suggest-subreddit
Subreddits	http://subreddits.org
Tidder	http://tidder.xyz
TrackReddit	https://www.trackreddit.com/dashboard.php
Trending Words of Reddit	https://trendingwordsofreddit.herokuapp.com
uforio	http://uforio.com
Universal Reddit Scraper (URS)	https://github.com/JosephLai241/URS
Vizit	https://redditstuff.github.io/sna/vizit
Wisdom of Reddit	https://wisdomofreddit.com

B362

Social Media Tools: Voat

Tool	Link
Search Voat	https://searchvoat.co

Social Media Tools: VKontakte

Tool	Link
Дезертир	http://vk.com/app3046467
Barkov.net	http://vk.barkov.net
FindFace	https://findface.pro
Report Tree	http://dcpu.ru/vk_repost_tree.php
RusFinder	https://rusfinder.pro
SnRadar	http://snradar.azurewebsites.net
socid_extractor	https://github.com/soxoj/socid_extractor
Target Hunter	https://targethunter.ru
Target Log	http://targetolog.com
VK5	http://vk5.city4me.com
VK Community Search	http://vk.com/communities
VK Faces	https://vkfaces.com
VK-geosearch	https://github.com/yevgen2020/vk-geosearch
VK Parser	http://vkparser.ru
VK People Search	http://vk.com/people
VK to RSS Appspot	http://vk-to-rss.appspot.com
VK Scraper	https://github.com/vanyasem/VK-Scraper
VK User Info	https://telegram.me/VKUserInfo_bot
vMetaDate	https://gist.github.com/cryptolok/8a023875b47e20bc5e64ba8e27294261

B364

Social Media Tools: LinkedIn

Tool	Link
BridgeKeeper	https://github.com/0xZDH/BridgeKeeper
CrossLinked	https://github.com/m8r0wn/crosslinked
Dux-Soup	http://www.dux-soup.com
The-endorser	https://github.com/eth0izzle/the-endorser
Free People Search Tools	https://freepeoplesearchtool.com
InSpy	https://github.com/leapsecurity/InSpy
_IntelligenceX: Linkedin	https://intelx.io/tools?tab=linkedin
linky	https://github.com/mez-0/linky
Linkedin2username	https://github.com/initstring/linkedin2username
Linkedin Bookmarklet	https://github.com/sinwindie/OSINT/blob/master/LinkedIn/Bookmarklet%20Tools
Linkedin Boolean Search Tools	http://trevisansocial.com/linkedtool
Linkedin Profile Scraper	https://github.com/Monst3rSec/linkedin-profile-scraper
Linkedin Search TGC	https://www.anantha.co.in/linkedin
LinkedInt	https://github.com/vysecurity/LinkedInt
lk_scraper	https://github.com/jqueguiner/lk_scraper
OSINT_Spider	https://github.com/rebootORZ/OSINT_Spider.py
Osint Support Linkedin Email Reverse Loopkup	https://osint.support/chrome-extensions
Phantom Buster	https://phantombuster.com/phantombuster
raven	https://github.com/0x09AL/raven
Recruit'em	https://recruitin.net
Recruitment Geek	https://recruitmentgeek.com/tools/linkedin

B365

ScrapedIn	https://github.com/dchrastil/ScrapedIn
Social List	https://sociallist.io
Sourcing Lab: Linkedin	https://sourcinglab.io/search/linkedin

B366

Social Media Tools: Github

Tool	Link
Awesome Lists	http://awesomelists.top
CoderStats	https://coderstats.net
Commit-stream	https://github.com/x1sec/commit-stream
Digital Privacy	https://github.com/ffffffff0x/Digital-Privacy
Find Github User ID	http://caius.github.io/github_id
GH Archive	http://www.gharchive.org
Git-Awards	http://git-awards.com
GitGot	https://github.com/BishopFox/GitGot
gitGraber	https://github.com/hisxo/gitGraber
git-hound	https://github.com/tillson/git-hound
Github Dorks	https://github.com/techgaun/github-dorks
Github Stars	http://githubstars.com
Github Trending RSS	https://mshibanami.github.io/GitHubTrendingRSS
Github Username Search Engine	https://jonnygovish.github.io/Github-username-search-engine
Github Username Search Engine	https://githubnotes-47071.firebaseapp.com/#/?_k=n0bgxn
GitHut	https://githut.info
GitLive	https://www.gitlive.net
Gitstar Ranking	https://gitstar-ranking.com
Gitrob	https://github.com/michenriksen/gitrob
Phantom Buster	https://phantombuster.com/phantombuster
shhgit	https://github.com/eth0izzle/shhgit
socid_extractor	https://github.com/soxoj/socid_extractor
SourcingLab: Github	https://sourcinglab.io/search/github

truffleHog	https://github.com/dxa4481/truffleHog
Zen	https://github.com/s0md3v/Zen

Social Media Tools: TikTok

Tool	Link
Hashtags for Likes	https://www.hashtagsforlikes.co
HypeAuditor	https://hypeauditor.com
Influence Grid	https://www.influencegrid.com
InstaFollowers	https://www.instafollowers.co/find-tiktok-user-id
Inviito	https://inviito.com
OSINT Combine TikTok Quick Search	https://www.osintcombine.com/tiktok-quick-search
Savefrom.net	https://en.savefrom.net/download-from-tiktok
Sinwindie TikTok Bookmarklet Tools	https://github.com/sinwindie/OSINT/blob/master/TikTok/Bookmarklet%20Tools
socid_extractor	https://github.com/soxoj/socid_extractor
TikRank	https://tikrank.com
TikToka	https://tiktoka.com
TikTok API	https://github.com/szdc/tiktok-api
TikTok Hashtags	https://tiktokhashtags.com
TikTok OSINT	https://github.com/sc1341/TikTok-OSINT
TikTok Scraper	https://github.com/Dutchosintguy/tiktok-scraper
TikView	https://tikview.com/tiktok-search
tikvstock	https://tikvstok.com/tiktok
Tokvid	https://tokvid.com
TubeHi	https://tubehi.com
Vidnice	https://vidnice.com

B369

Messaging and Chat Tools

Tool	Link
Adium	https://adium.im
Band	https://band.us
BBM Enterprise	https://www.blackberry.com/us/en/products/bbm-enterprise
chanty	https://www.chanty.com
ChatSecure	https://chatsecure.org
ChatWork	https://go.chatwork.com
Cliq	https://www.zoho.com/cliq
Crugo	https://crugo.com
Discord	https://discord.com
Dust	https://usedust.com
FaceTime	https://apps.apple.com/us/app/facetime/id1110145091
flock	https://flock.com
Flowdock	https://www.flowdock.com
Get Session	https://getsession.org
Glip	https://glip.com
Google Duo	https://duo.google.com
Google Hangouts	https://hangouts.google.com
GroupMe	https://groupme.com
Hibox	https://www.hibox.co
Highside	https://highside.io
hubgets	https://www.hubgets.com
icq	https://icq.com
imo	https://imo.im
ircsnapshot	https://github.com/bwall/ircsnapshot
Jandi	https://www.jandi.com

Line	https://line.me
kakaotalk	https://www.kakaocorp.com/service/KakaoTalk
kik	https://www.kik.com
Mattermost	https://mattermost.com
Messenger	https://www.messenger.com
Microsoft Teams	https://www.microsoft.com/en-us/microsoft-365/microsoft-teams/group-chat-software
missive	https://missiveapp.com
ProofHub	https://www.proofhub.com
Ricochet	https://ricochet.im
Rocket.chat	https://rocket.chat
Ryver	https://ryver.com
Semaphor	https://spideroak.com/semaphor
Signal	https://signal.org
Silent Circle	https://www.silentcircle.com
Slack	https://slack.com
Skype	https://www.skype.com
Snapchat	https://www.snapchat.com
spike	https://www.spikenow.com
Telegram	https://telegram.org
Threema	https://threema.ch
Troop Messenger	https://www.troopmessenger.com
twist	https://twist.com
Viber	https://www.viber.com
voxer	https://www.voxer.com
WeChat (China)	http://www.wechat.com
WhatsApp	https://www.whatsapp.com
wickr	https://wickr.com
wire	https://wire.com
Workplace	https://www.workplace.com

Social Media Tools: Snapchat

Tool	Link
addmeContacts	http://add-me-contacts.com
AddMeSnaps	https://www.addmesnaps.com
ChatToday	https://chattoday.com
Dizkover	https://www.dizkover.com
Gebruikersnamen: Snapchat	https://gebruikersnamen.nl/snapchat
GhostCodes	https://www.ghostcodes.com
Listchats	https://www.listchats.com
OSINT Combine: Snapchat Multi-Viewer	https://www.osintcombine.com/snapchat-multi-viewer
snapdex	https://www.snapdex.com
Snap Map	https://map.snapchat.com
Snapchat-map-scraper	https://github.com/nemec/snapchat-map-scraper
Snapmap-dl	https://github.com/sdushantha/snapmap-dl
Snap Nickname	https://snapnickname.com
Snap Political Ads Library	https://www.snap.com/en-GB/political-ads
SnapStory	https://github.com/sdushantha/SnapStory
Snapyfox	https://snapyfox.com
Social Finder	https://socialfinder.app

Social Media Tools: WhatsApp

Tool	Link
checkwa	https://checkwa.online
Listchats	https://www.listchats.com
WhatsAllApp	https://github.com/LoranKloeze/WhatsAllApp
WhatsApp Fake Chat	http://www.fakewhats.com/generator
Whatsapp-Group-Contacts-Scraper	https://github.com/situmorang-com/Whatsapp-Group-Contacts-Scraper
Whatsapp Monitor	https://github.com/ErikTschierschke/WhatsappMonitor
whatsfoto	https://github.com/zoutepopcorn/whatsfoto

Social Media Tools: Skype

Tool	Link
addmeContacts	http://add-me-contacts.com
ChatToday	https://chattoday.com
Listchats	https://www.listchats.com
Skypli	https://www.skypli.com

Social Media Tools: Kik

Tool	Link
addmeContacts	http://add-me-contacts.com
ChatToday	https://chattoday.com
KikFriender	https://kikfriender.com
kikusernames	https://kikusernames.com
Listchats	https://www.listchats.com
Usernamefinder	https://usernamesfinder.com

Social Media Tools: Telegram

Tool	Link
Buzz.Im	https://search.buzz.im
ChatBottle: Telegram	https://chatbottle.co/bots/telegram
ChatToday	https://chattoday.com
fabledowl	https://gist.github.com/fabledowl
HowToFindBot	https://t.me/howtofind_bot
informer	https://github.com/paulpierre/informer
_IntelligenceX: Telegram	https://intelx.io/tools?tab=telegram
IxGram	https://www.telegramgroup1.com
Lyzem.com	https://lyzem.com
Save Telegram Chat History	https://github.com/pigpagnet/save-telegram-chat-history
Telegago	https://cse.google.com/cse?q=+&cx=006368593537057042503:efxu7xprihg#gsc.tab=0&gsc.q=%20&gsc.page=1
Telegram Channels	https://telegramchannels.me
Telegram Channels	https://tlgrm.eu/channels
Telegram Channels Search	https://xtea.io/ts_en.html
Telegram Directory	https://tdirectory.me
Telegram Group	https://www.telegram-group.com
Telegram.im	https://telegram.im/tools/index.php
telegram-history-dump	https://github.com/tvdstaaij/telegram-history-dump
Telegram List	https://telegramlist.com
Telegram-osint-lib	https://github.com/Postuf/telegram-osint-lib
Telegram Scraper	https://github.com/th3unkn0n/TeleGram-Scraper
Tele.me: Hashtags	http://tele.me/hashtags

Tfind.me	https://tfind.me
There Is A Bot For That	https://thereisabotforthat.com
Tgram.io	https://tgram.io
Tgstat.com	https://tgstat.com
Tgstat RU	https://tgstat.ru

B377

Social Media Tools: IRC

Tool	Link
Irc2go	https://irc2go.com
IRC Channel Search	http://www.efnet.org/?module=channels
IRC Chat Rooms	https://netsplit.de/channels
IRC SOURCE: Channels	https://irc-source.com/channels
ixIRC	http://ixirc.com
KIWI IRC Search	https://kiwiirc.com/search
Search IRC	https://search.mibbit.com
sunxdcc	https://sunxdcc.com
XDCC Search Engine	https://www.xdcc.eu

B378

Dating Apps and Sites

Tool	Link
Badoo	https://badoo.com
Bumble	https://bumble.com
Clover	https://clover.co
Coffee Meets Bagel	https://coffeemeetsbagel.com
Curtn	https://www.curtn.com
eHarmony	https://www.eharmony.com
Grindr	https://www.grindr.com
happn	https://www.happn.com
HER	https://weareher.com
heybaby	https://www.heybaby.com
Hinge	https://hinge.co
The Inner Circle	https://theinnercircle.co
The League	https://www.theleague.com
Match.com	https://www.match.com
MeetMe	https://www.meetme.com
muzmatch	https://muzmatch.com
OkCupid	https://www.okcupid.com
Plenty of Fish	https://pof.com
Scruff	https://www.scruff.com
Tastebuds	https://tastebuds.fm
Tinder	https://tinder.com
XO	https://www.joinxo.app
zoosk	https://www.zoosk.com

Fitness Apps and Communities

Tool	Link
BodyBuilding	https://bodyspace.bodybuilding.com
Charity Miles	https://charitymiles.org
Daily Burn	http://dailyburn.com
endomondo	https://www.endomondo.com
JEFIT	https://www.jefit.com/forum
Fitbit Community	https://community.fitbit.com/t5/Community/ct-p/EN#
Fitocracy	https://www.fitocracy.com
Garmin Connect	https://connect.garmin.com
MapMyFitness	https://www.mapmyfitness.com/app
MyFitnessPal	https://www.myfitnesspal.com
Nike Training Club	https://www.nike.com/ie/ntc-app
Polar Beat	https://www.polar.com/uk-en/beat
Relive	https://www.relive.cc
Runkeeper	https://runkeeper.com/cms
Runtastic	https://www.runtastic.com
Spark People	https://www.sparkpeople.com
Strava	https://www.strava.com
Suunto App	https://www.suunto.com/en-gb/suunto-app/suunto-app
SWORKIT	https://sworkit.com

Working with Blogs

Blog Search

Tool	Link
Best of the Web	https://blogs.botw.org
Blogarama	https://www.blogarama.com
Bloggernity	http://www.bloggernity.com
Blogging Fusion	https://www.bloggingfusion.com
BlogHub	http://www.bloghub.com
Blog-Search	https://www.blog-search.com
Blog Seacrh Engine	https://www.blogsearchengine.com
Blog Seacrh Engine	http://www.blogsearchengine.org
Blogspot Blog Search	https://www.searchblogspot.com
Twingly	http://www.twingly.com
Webhose.io	https://webhose.io
Wordpress.com	https://en.search.wordpress.com

Working with Forums

Forum, Newsgroup and Discussion Board Search Tools

Tool	Link
binsearch	http://www.binsearch.info
BoardReader	http://boardreader.com
Craiglist Forums	https://forums.craigslist.org
Create a Forum: Forum Directory	https://www.createaforum.com/directory.php
Delphi Forums	http://www.delphiforums.com
Facebook Groups	https://www.facebook.com
Find a Forum	https://www.findaforum.net
Google Groups	https://groups.google.com
Iron March Exposed	https://www.ironmarch.exposed
The Joomla! Forum	https://forum.joomla.org/results.php
Linkedin Groups	http://www.linkedin.com
Ning	http://www.ning.com
NZBIndex	https://www.nzbindex.com/groups
Omgili	http://omgili.com
ProBoards: Forum Directory	https://www.proboards.com/forum-directory
Xing Groups	https://www.xing.com/communities
Webhose.io	https://webhose.io
Wikipedia: List of Internet Forums	https://en.wikipedia.org/wiki/List_of_Internet_forums
Yahoo Groups	https://groups.yahoo.com

Working with Chan Boards

Chan Search Tools

Tool	Link
4chansearch	https://4chansearch.com
4chansearch	https://4chansearch.org
4chan Search	https://boards.4chan.org/search
8chan/8kun QResearch Board Search	https://qresear.ch
All Chans	https://www.allchans.org
Chatter	https://github.com/visualbasic6/chatter
QResear.ch	https://qresear.ch
smat	https://www.smat-app.com/timeline

B383

Working with Q&A Sites

Q&A Sites

Tool	Link
Answer Bag	http://www.answerbag.com
The Answer Bank	https://www.theanswerbank.co.uk
Answeree	https://www.answeree.com
Answers.com	http://www.answers.com
ASKDEB	https://www.askdeb.com
Ask.fm	https://ask.fm
Ask Me Help Desk	https://www.askmehelpdesk.com
Blurtit	https://www.blurtit.com
Findinfo.com	https://findinfo.com
gutefrage	https://www.gutefrage.net
Quora	http://www.quora.com
Reddit	https://www.reddit.com
Slant.co	https://www.slant.co
StackExchange	http://stackexchange.com
Super User	https://superuser.com
Wantoask	https://www.wantoask.com
What Should I Do?	https://www.wsid.com
Yahoo Answers	http://answers.yahoo.com

People Investigations

People Search Tools

Tool	Link
Addresses (US)	http://www.addresses.com
Aleph	https://github.com/alephdata/aleph
Alumni.net	http://www.alumni.net
AnyWho (US)	https://www.anywho.com/whitepages
Australia Lookup	http://www.australialookup.com
Aware Online: People Search	https://www.aware-online.com/osint-tools/personen-search-tool
Classmates	http://www.classmates.com
Connectifier Social Links	https://chrome.google.com/webstore/detail/connectifier-social-links/dalkcdejepnndhaijgjbfhnoocpfickn
CrunchBase	http://www.crunchbase.com
Cyber Background Checks (US)	https://www.cyberbackgroundchecks.com
dataScrape	https://github.com/khayes-r7/dataScrape
facesearch	http://facesaerch.com
Full Contact	https://www.fullcontact.com
GoFindWho	https://gofindwho.com
Gravatar	http://en.gravatar.com
Hauziz (US)	https://hauziz.com
hedd	https://hedd.ac.uk
Hitta.se (Sweden)	https://www.hitta.se
Hola Connect	https://holaconnect.com
How Many of Me	http://howmanyofme.com/search
IDCrawl	https://www.idcrawl.com

Intelius (US)	https://www.intelius.com/people-search
_IntelligenceX: Person Lookup by Full Name	https://intelx.io/tools?tab=person
Itools	http://itools.com/search/people-search ll http://itools.com/tool/wink-people-search
John Doe (US)	https://johndoe.com
Keybase	https://keybase.io
LeadFerret (US)	https://leadferret.com/search
LittleBrother	https://github.com/Lulz3xploit/LittleBrother
LittleSis	https://littlesis.org
ManyContacts Mail Check	https://www.manycontacts.com/en/mail-check
MarketVisual	http://www.marketvisual.com
NameScan	https://namescan.io
National Student Clearinghouse	https://nscverifications.org/welcome-to-verification-services
Neighbor Report (US)	https://neighbor.report
Nextdoor (US)	https://nextdoor.com
Nuwber	https://nuwber.com
peekyou	https://www.peekyou.com
Peoplefinders (US)	https://www.peoplefinders.com
People Looker (US)	https://www.peoplelooker.com
People Search	http://netbootcamp.org/peoplesearch.html
People Search (Australia)	http://www.peoplesearch.com.au
PeopleSmart (US)	https://www.peoplesmart.com
People Yandex (RU)	https://yandex.ru/people?lr=100
PimEye	https://pimeyes.com/en
pipl	https://pipl.com
PrivateEye	https://www.privateeye.com
Qualification Check	https://www.qualificationcheck.com
Radaris (US)	https://radaris.com
Recruit'em	http://recruitin.net
Reverse Genie	http://www.reversegenie.com
SearchBug (US)	https://www.searchbug.com
Search GB	https://www.searchgb.co.uk

Search People Online	https://www.search-people.online
Search Systems (US)	https://publicrecords.searchsystems.net
Skipease (US)	http://www.skipease.com
Skopenow	https://www.skopenow.com
Smugmug	https://www.smugmug.com/search
Social Catfish	https://socialcatfish.com
Social List	https://sociallist.io
SocialPath	https://github.com/woj-ciech/SocialPath
SMWYG-Show-Me-What-You-Got	https://github.com/Viralmaniar/SMWYG-Show-Me-What-You-Got
Snitch.name	http://www.snitch.name
Snoop Station (US)	http://snoopstation.com
Social catfish	https://socialcatfish.com
Spokeo	http://www.spokeo.com
Spytox (US)	https://www.spytox.com
Strava	https://labs.strava.com/heatmap
Sydex	http://sydex.net
TalentBin	https://www.talentbin.com
That's Them (US)	https://thatsthem.com
Trape 2.0	https://www.kitploit.com/2018/11/trape-v20-people-tracker-on-internet.html?amp=0
TruePeopleSearch (US)	https://www.truepeoplesearch.com
Truth Finder	https://www.truthfinder.com
ufind.me	http://ufind.name
UserSearch	https://usersearch.org
USSEARCH (US)	https://www.ussearch.com
WebMii	http://www.webmii.com
Xlek (US)	https://www.xlek.com
Yasni	http://www.yasni.com
Zaba Search	https://www.zabasearch.com
Zoominfo	http://www.zoominfo.com

Name Research

Tool	Link
Baby Names	https://www.babynames.com
Baby Names	https://www.babynames.net
Baby Name Wizard	https://www.babynamewizard.com
Behind The Name	https://www.behindthename.com
Nameberry	https://nameberry.com
Namepedia	http://www.namepedia.org

Public Records

Tool	Link
Australia Public Records	http://australiapublicrecord.com
BeenVerified	https://www.beenverified.com
Black Book Online (US)	https://www.blackbookonline.info
BRBPub.com	http://www.brbpub.com
BRB Publications	https://www.brbpublications.com
City Protect	https://cityprotect.com
DOBSEARCH	https://www.dobsearch.com
Echovita	https://www.echovita.com
Family Watchdog (US)	https://www.familywatchdog.us
Federal Bureau of Prisons - Inmate Locator (US)	http://www.bop.gov/inmateloc
Find A Grave (US)	https://www.findagrave.com
Find People Search (US)	https://findpeoplesearch.com
Fold3 (US Military Records)	http://www.fold3.com
Free Public Records Directory (US)	http://publicrecords.onlinesearches.com
golookup (US)	https://golookup.com
GOVDATACA (Canada)	https://govdataca.com
GPublic	https://qpublic.schneidercorp.com
Grave Info (US)	http://www.graveinfo.com
Inmate Locator (US)	http://www.theinmatelocator.com
Intelius (US)	https://www.intelius.com
Interment (Cemetery Records)	http://www.interment.net/data/search.htm
Instant Checkmate	https://www.instantcheckmate.com
Investigative Dashboard Search	https://aleph.occrp.org
Legacy.com (US)	http://www.legacy.com

B389

Melissa (US)	http://melissadata.com
NETR ONLINE (US)	https://publicrecords.netronline.com
National Sex Offender Public Website (US)	https://www.nsopw.gov/en/Search/Verification
ObitTree	https://obittree.com
Orbituaries Australia	http://oa.anu.edu.au
Peoplefinder (US)	https://www.peoplefinders.com
Peoplefinders (US) Criminal Records	https://www.peoplefinders.com/criminal-records
Political MoneyLine (US)	http://www.politicalmoneyline.com
Public Info Directory (US)	https://publicrecords.directory
Public Records (Australia)	https://www.publicrecords.com.au
Public Record Online Searches	https://publicrecords.onlinesearches.com
Radaris	http://radaris.com
RecordsPedia	http://recordspedia.com
Reunion (US)	http://www.reunion.com
SCRA Website (US)	https://scra.dmdc.osd.mil/scra/#/home
Sorted by Birth Date	http://sortedbybirthdate.com
SSN Validator	https://www.ssnvalidator.com
UniCourt	https://unicourt.com
USSEARCH (US)	https://www.ussearch.com
xlek	https://xlek.com

Document Checking

Tool	Link
documentchecker	https://www.documentchecker.com
edisontd	http://www.edisontd.net
iFado	https://www.ifado.consilium.europa.eu
International Court of Justice: Document Search	https://www.icj-cij.org/en/advanced-search
Keesing International ID Documents	https://www.keesingtechnologies.com/reference-database/id-documents
Nasjonalt ID-senter	https://www.nidsenter.no
Passport Index	https://www.passportindex.org
PRADO	https://www.consilium.europa.eu/prado/EN/search-by-document-country.html
Vehicle Documents	http://www.vehicle-documents.it

Ancestry Research

Tool	Link
Ancestor Hunt	http://ancestorhunt.com
Ancestry	http://www.ancestry.com
Archives	https://www.archives.com/search/ancestor
Cyndi's List	https://www.cyndislist.com
Family Search	https://familysearch.org
Find my past	https://www.findmypast.com
Forebears	http://forebears.io
FreeBMD	https://www.freebmd.org.uk
The Genealogist	https://www.thegenealogist.co.uk
Genealogy	https://www.genealogy.com
Genealogy Bank	http://www.genealogybank.com
Genealogy in Time	http://www.genealogyintime.com
Genealogy Links	http://www.genealogylinks.net
Genes Reunited	https://www.genesreunited.com
Legacy.com	https://www.legacy.com
Locate Family	https://www.locatefamily.com
MyHeritage	https://www.myheritage.com
The National Archives UK	http://www.nationalarchives.gov.uk
Rootsweb	http://home.rootsweb.ancestry.com
Search for Ancestors	http://www.searchforancestors.com
Sorted By Name	http://sortedbyname.com

Missing People

Tool	Link
Child Rescue	https://www.childrescue.eu
DOE Network	http://www.doenetwork.org
FBI: Kidnappings and Missing Persons	https://www.fbi.gov/wanted/kidnap
Global Missing Kids	https://globalmissingkids.org
International Centre for Missing and Exploited Children	https://www.icmec.org
International Commission on Missing Persons	https://www.icmp.int
Interpol: Yellow Notices	https://www.interpol.int/How-we-work/Notices/View-Yellow-Notices
LOST	https://lost.team
Missing Children Europe	https://missingchildreneurope.eu
Missing Kids	https://www.missingkids.org
Missing People	https://www.missingpeople.org.uk
Missing Persons	https://www.missingpersons.ie
Missing Persons Australia	https://missingpersons.gov.au
Missing You	https://missing-you.net
NamUs	https://www.namus.gov
National Center for Missing and Exploited Children	https://www.missingkids.org
Polly Klaas Foundation	http://www.pollyklaas.org
Restoring Family Links	https://familylinks.icrc.org

B393

South African Centre for Missing and Exploited Children	http://www.missingkids.co.za
UK Police Missing Persons	https://www.missingpersons.police.uk

Address and Contact Information Search

Tool	Link
118172	https://www.118712.fr
192	http://world.192.com
Addresses (US)	http://www.addresses.com
Address Search (US)	http://www.addresssearch.com
AnyWho (US)	https://www.anywho.com/yellow-pages
Australia Lookup	http://www.australialookup.com
BeenVerified (US)	https://www.beenverified.com
BT (UK)	https://www.btexchanges.com
Canada411(Canada)	http://www.canada411.ca
Find People Search (US)	http://www.findpeoplesearch.com
HomeMetry	https://homemetry.com
Infobel	https://www.infobel.com
John Doe (US)	https://johndoe.com
PeopleSmart (US)	https://www.peoplesmart.com
Phone Books (US)	https://www.phonebooks.com
Phone Books: International Phone Book	https://www.phonebooks.com/international-phone-book.html
SearchBug (US)	http://www.searchbug.com
Spytox (US)	https://www.spytox.com
That'sThem	https://thatsthem.com
This Number	https://www.thisnumber.com
UK Phone Book	https://www.ukphonebook.com
USSearch (US)	https://www.ussearch.com
Verispy (US)	https://www.verispy.com/people-search
Zabasearch	http://www.zabasearch.com

Contact Detail Recovery Apps

Tool	Link
Amazing Hiring	https://amazinghiring.com | https://chrome.google.com/webstore/detail/amazinghiring/didkfdopbffjkpolefhpcjkohcpalicd?hl=en
Clearbit	http://clearbit.com | https://chrome.google.com/webstore/detail/clearbit-connect-supercha/pmnhcgfcafcnkbengdcanjablaabjplo?hl=en
Contact Out	https://contactout.com | https://chrome.google.com/webstore/detail/find-anyones-email-contac/jjdemeiffadmmjhkbbpglgnlgeafomjo?hl=en
Contact+	https://www.contactsplus.com | https://chrome.google.com/webstore/detail/contacts%20-for-gmail/cnaibnehbbinoohhjafknihmlopdhhip
Datanyze	https://www.datanyze.com | https://chrome.google.com/webstore/detail/sales-prospecting-datanyz/mlholfadgbpidekmhdibonbjhdmpmafd/reviews?utm_source=chrome-ntp-icon
Discoverly	https://discover.ly | https://chrome.google.com/webstore/detail/discoverly/dijhcpbkalfgkcebgoncjmfpbamihgaf
FindThatLead	https://findthatlead.com | https://chrome.google.com/webstore/detail/findthatlead/lkpekgkhmldknbcgjicjkomphkhhdkjj?hl=en-GB
Hiretual	https://hiretual.com | https://chrome.google.com/webstore/detail/hiretual-10x-faster-talen/jeablngoapekimaeoeclgcefdcpjhjcg
Improver	https://improver.io | https://chrome.google.com/webstore/detail/improver/gnnlkejcihagecnbgfjcghecbaemeaho?hl=en
loxo	https://loxo.co | https://chrome.google.com/webstore/detail/loxo-chrome-extension/fcbgokodjegegkilocggnlekdmebfcpl
Lusha	https://www.lusha.com | https://chrome.google.com/webstore/detail/lusha-easily-find-b2b-con/mcebeofpilippmndlpcghpmghcljajna?hl=en

Nymeria	https://www.nymeria.io | https://chrome.google.com/webstore/detail/nymeria-the-best-personal/aapfglkgnhmiaabhiijkjpfmhllaodgp?hl=en
Precontact Tool	https://www.precontacttool.com | https://chrome.google.com/webstore/detail/precontact-tool/iabijhdomdkpabfoipoifajnlmidjihg?hl=en
RocketReach	https://rocketreach.co | https://chrome.google.com/webstore/detail/rocketreach-chrome-extens/oiecklaabeielolbliiddlbokpfnmhba
Seekout	https://www.seekout.io | https://chrome.google.com/webstore/detail/seekout-sourcing-assistan/fpeamfhkkhdjdikhbalglpemmhcaikmf
Sellhack	https://sellhack.com | https://sellhack.com/install.html
SignalHire	https://www.signalhire.com | https://chrome.google.com/webstore/detail/signalhire-find-email-or/aeidadjdhppdffggfgjpanbafaedankd?hl=en
Snov.io	https://snov.io | https://chrome.google.com/webstore/detail/email-finder/einnffiilpmgldkapbikhkeicohlaapj
Swordfish	https://www.swordfishapp.com | https://chrome.google.com/webstore/detail/swordfish-find-personal-c/oahjfinghkkolgfkbfanpmhpiafmnepn?hl=en
Voila Norbet	https://www.voilanorbert.com | https://chrome.google.com/webstore/detail/email-finder-by-voilanorb/aikhclibkhmmkpafjdchlnmemagbjgdk

Investigating Phone Numbers

Tool	Link
192	http://world.192.com
Abc telefonos	http://www.abctelefonos.com
Addresses (US)	http://www.addresses.com
AeroLeads	https://aeroleads.com
AnyWho (US)	https://www.anywho.com/reverse-phone-lookup
AQL Network Lookup	https://portal.aql.com/telecoms/network_lookup.php
Australia Lookup	http://www.australialookup.com
Aware Online: Phone Investigation Tool	https://www.aware-online.com/osint-tools/telefoonnummer-search-tool
Bmobile.in	https://bmobile.in
British Phone Book	http://www.britishphonebook.com
BT (UK)	https://www.btexchanges.com
BT Phone Book	https://www.thephonebook.bt.com
CallAp	https://callapp.com
CallerID Service	https://secure.calleridservice.com
CallerID Test	https://www.calleridtest.com
CallerSmart	https://www.callersmart.com
Carrier Lookup	https://www.carrierlookup.com
Carrier Lookup Service	http://freecarrierlookup.com
CellRevealer	https://cellrevealer.com
CodeLook	https://www.telecom-tariffs.co.uk/codelook.htm
Country Calling Codes	https://www.countrycallingcodes.com
CountryCode	https://countrycode.org
Cyber Background Checks (US)	https://www.cyberbackgroundchecks.com
Data247	https://www.data247.com

DeadTrap	https://github.com/Chr0m0s0m3s/DeadTrap
Emobile Tracker	https://www.emobiletracker.com
Every Caller	https://www.everycaller.com
Fone Finder	http://www.fonefinder.net
Free Carrier Lookup (US)	https://freecarrierlookup.com
getcontact	https://www.getcontact.com
GoFindWho	https://gofindwho.com
golookup	https://golookup.com
Gsmarena	https://www.gsmarena.com
HowtoCallAbroad	https://www.howtocallabroad.com
hiya	https://hiya.com
IMEI24	https://imei24.com
Infobel	https://www.infobel.com
_IntelligenceX: Telephone Number	https://intelx.io/tools?tab=telephone
International Numbering Plans	https://www.numberingplans.com
International White and Yellow Pages	http://www.wayp.com
John Doe (US)	https://johndoe.com
LeadFuze	https://www.leadfuze.com
Moriarty Project	https://github.com/AzizKpln/Moriarty-Project
nextcaller	https://nextcaller.com
Number Guru	https://www.numberguru.com
NumberVille	https://numberville.com
numpi	https://numpi.com
NumSpy	https://bhattsameer.github.io/numspy
Peoplebyname (US)	http://www.peoplebyname.com
People Call	https://www.peoplecall.com
Peoplefinders (US)	https://www.peoplefinders.com
People Looker (US)	https://www.peoplelooker.com
PeopleSmart (US)	https://www.peoplesmart.com
Phone Book of the World	http://pbof.com | https://phonebookoftheworld.com
Phone Books (US)	https://www.phonebooks.com

Phone Books: International Phone Book	https://www.phonebooks.com/international-phone-book.html
PhoneInfoga	https://github.com/sundowndev/PhoneInfoga
phoneowner	https://phoneowner.com
PhoneValidator	https://www.phonevalidator.com
Phonia	https://github.com/entynetproject/phonia
Privacy Star	https://privacystar.com
Open Cnam	https://www.opencnam.com
Reveal Name	https://www.revealname.com
Reverse Phone Check	https://www.reversephonecheck.com
SayNoTo0870.com	https://www.saynoto0870.com/search.php
Scylla	https://github.com/josh0xA/Scylla
SearchYellowDirectory	http://www.searchyellowdirectory.com
Social catfish: Reverse Phone Lookup	https://socialcatfish.com/reverse-phone-lookup
Spy Dialer (US)	https://www.spydialer.com
Spytox (US)	https://www.spytox.com
SynapsInt	https://synapsint.com
Sync.me	https://sync.me
Telefonbuch	http://www.telefonbuch.com
Telefone Directories	https://telephonedirectories.us
Tellows	https://www.tellows.com
TextMagic Free Carrier Lookup	https://www.textmagic.com/free-tools/carrier-lookup
That's Them: Reverse Phone Lookup	https://thatsthem.com/reverse-phone-lookup
This Number	https://www.thisnumber.com
Truecaller	https://www.truecaller.com
Twilio	https://www.twilio.com/lookup
UK Phone Book	https://www.ukphonebook.com
USSEARCH (US)	https://www.ussearch.com
Who Called Me (US)	https://www.whocalledme.com
WhoCallsMe	https://whocallsme.com
whoscall	https://global.whoscall.com

World Telephone Numbering Guide	http://www.wtng.info
Zlookup	https://www.zlookup.com
Zonzoo	http://zonzoo.nl

Cell Tower Search

Tool	Link
AntennaSearch	http://antennasearch.com
Cell ID Finder	https://cellidfinder.com
Cell Mapper	https://www.cellmapper.net/map
Cell Phone Trackers	https://cellphonetrackers.org
Cell Reception: Search for Cell Towers	http://www.cellreception.com/towers
Find Cell Sites	https://www.findcellsites.com
MapMuse: Cell Phone Towers	https://find.mapmuse.com/interest/cell-towers
OpenCellid: Open Database of Cell Towers	https://opencellid.org
OpenSignal	https://www.opensignal.com
Tower Maps	http://www.towermaps.com

E-mail Search

Tool	Link
AeroLeads	https://aeroleads.com
AnyMailFinder	https://anymailfinder.com
Aware Online: E-mail Search Tool	https://www.aware-online.com/osint-tools/e-mail-search-tool
Cyber Background Checks (US)	https://www.cyberbackgroundchecks.com
EmailDrop	https://chrome.google.com/webstore/detail/emaildrop-extract-emails/peilgijmhiocdmdeglhiljipigamfbjh
Email Extractor	https://chrome.google.com/webstore/detail/email-extractor/jdianbbpnakhcmfkcckaboohfgnngfcc?hl=en
Email Extractor	http://emailx.discoveryvip.com
Email Extractor Lite	http://eel.surf7.net.my
Email Format	http://email-format.com
Email Guesser	http://www.guesser.email
Email Harvester	https://github.com/maldevel/EmailHarvester
emailmatcher	https://emailmatcher.com
Email Permutator+	http://metricsparrow.com/toolkit/email-permutator
FindEmails	https://www.findemails.com
Finder	https://finder.app
FindThat.Email	https://findthat.email
FindThatLead	https://findthatlead.com
Github-osint	https://github.com/hackstep/github-osint
Hunter	https://hunter.io
Infoga	https://github.com/m4ll0k/infoga

B404

_intelligenceX: Email	https://intelx.io/tools?tab=email
LeadFuze	https://www.leadfuze.com
leakpeek	https://leakpeek.com
Mailswipe	https://www.mailswipe.io
Many Contacts Email Check	https://www.manycontacts.com/en/mail-check
Name2Email	https://name2email.com
Omail Leads	https://omail.io/leads
Peepmail	http://www.samy.pl/peepmail
People Looker (US)	https://www.peoplelooker.com
PeopleSmart (US)	https://www.peoplesmart.com
Phantom Buster	https://phantombuster.com/phantombuster
Pipl	https://pipl.com
Public E-mail Records	http://publicemailrecords.com
sellhack	https://sellhack.com
Snov.io	https://snov.io
Skymem	https://www.skymem.info
SPYDialer	https://www.spydialer.com
Spytox (US)	https://www.spytox.com
That'sThem	https://thatsthem.com/reverse-email-lookup
Toofr	https://www.toofr.com
USSEARCH (US)	https://www.ussearch.com
VoilaNorbert	https://www.voilanorbert.com
Zen	https://github.com/s0md3v/Zen

Validating E-mails

Tool	Link
B2B Sprouts Verify & Validate Emails Addresses	https://b2bsprouts.com/email-validation-tool
BriteVerify Email Verification	http://www.briteverify.co.uk
Clearout	https://clearout.io
DNSlytics Email Test	https://dnslytics.com/email-test
Email Address Validator	http://www.email-validator.net
Email Checker	https://email-checker.net
EmailHippo	https://tools.verifyemailaddress.io
Email List Verify	https://www.emaillistverify.com
email-osint-ripper	https://github.com/Quantika14/email-osint-ripper
Email Validator	https://www.email-validator.net
Free Email Verifier	http://verify-email.org
_IntelligenceX: Validate Email Addresses	https://intelx.io/tools?tab=emailvalidate
Mailbox Validator	https://www.mailboxvalidator.com
MailTester	https://mailtester.com/testmail.php
Melissa (US)	http://www.melissadata.com/lookups/emails.asp
MillionVerifier	https://www.millionverifier.com
My Email Verifier	https://myemailverifier.com
Sift.Email	https://sift.email
TheChecker	https://thechecker.co
TLS	https://www.checktls.com/TestReceiver
truemail	https://truemail.io
Uh0h365	https://github.com/Raikia/UhOh365

Validate Email Address	https://validateemailaddress.org
Verifalia	http://verifalia.com/validate-email
Verify Email	https://verify-email.org
Verify Email Account	https://es.infobyip.com/verifyemailaccount.php
Verify Email Address	https://tools.verifyemailaddress.io
XVerify	https://www.xverify.com
Zero Bounce	https://www.zerobounce.net

Analysing E-mails

Tool	Link
BotScout	https://botscout.com/search.htm
Buster	https://github.com/sham00n/buster
Central Ops Email Dossier	https://centralops.net/co/emaildossier.aspx
Danger Zone	https://github.com/woj-ciech/Danger-zone
DNSstuff	https://tools.dnsstuff.com
DomainBigData	https://domainbigdata.com
Email Blacklist Check	https://mxtoolbox.com/blacklists.aspx
email-osint-ripper	https://github.com/Quantika14/email-osint-ripper
Email Rep	https://emailrep.io
GoFindWho	https://gofindwho.com
Google Account Finder	https://tools.epieos.com/google-account.php
Gravatar Email Check	http://en.gravatar.com/site/check
Holehe	https://github.com/megadose/holehe
iKy	https://github.com/kennbroorg/iKy
ipTrackerOnline Email Header Analysis	https://www.iptrackeronline.com/email-header-analysis.php
Maltego	https://www.maltego.com
SimplyEmail	https://github.com/SimplySecurity/SimplyEmail
socialscan	https://pypi.org/project/socialscan
SynapsInt	https://synapsint.com
Web Wiz	https://network-tools.webwiz.net
You Get Signal: Reverse E-mail Lookup Tool	https://www.yougetsignal.com/tools/reverse-email-lookup

Analysing E-mail Headers

Tool	Link
Gaijin.at: E-mail Header Analyzer	https://www.gaijin.at/en/tools/e-mail-header-analyzer
Mail Header	https://mailheader.org
Mail Header Analyzer	https://mailheaderanalyzer.herokuapp.com
MXToolbox Email Header Analyzer	https://mxtoolbox.com/EmailHeaders.aspx
WhatIsMyIP: Email Header Analyzer	https://www.whatismyip.com/email-header-analyzer

Matching E-mails to Social Media Profiles

Tool	Link
holehe	https://github.com/megadose/holehe
Lullar	https://com.lullar.com
ManyContacts	https://www.manycontacts.com/en/mail-check
Orbirtly	https://www.orbitly.io
socialscan	https://pypi.org/project/socialscan
Social Recon	https://github.com/famavott/osint-scraper

IP Grabbers and E-mail Trackers

Tool	Link
Blasze IP Logger	http://blasze.tk
Email Header Analyzer	https://mxtoolbox.com/emailheaders.aspx
Email Header Tracer	https://www.ip2location.com/free/email-tracer
GetNotify	https://www.getnotify.com
Grabify	https://grabify.link
IP Logger	https://www.ps3cfw.com/iplog.php
IP Logger URL Shortener	https://iplogger.org
ReadNotify	http://www.readnotify.com
MailTrackerBlocker	https://apparition47.github.io/MailTrackerBlocker
Mail Tracking	http://www.mailtracking.com
MyIPTest	http://www.myiptest.com/staticpages/index.php/how-about-you

Username Check

Tool	Link
Aware Online: Username Search	https://www.aware-online.com/osint-tools/gebruikersnamen-search-tool
Check User Names	http://www.checkusernames.com
GoFindWho	https://gofindwho.com
Instant Username	https://instantusername.com
_IntelligenceX: Username Lookup	https://intelx.io/tools?tab=username
Investigo	https://github.com/tdh8316/Investigo
KnowEm	http://www.Knowem.com
leakpeek	https://leakpeek.com
Loginella	https://loginella.site
Lullar	http://com.lullar.com
Maigret	https://github.com/soxoj/maigret
Namecheck	https://namecheck.bloggingehow.com
Name Checkr	http://www.namecheckr.com
Name Checkup	https://namecheckup.com
Namechk	http://www.namechk.com
Namechk	https://github.com/HA71/Namechk
Namech_k.sh	https://github.com/HA71/Namechk
Name Vine	https://namevine.com
neuskool	http://neuskool.com
peekyou	https://www.peekyou.com/username
pipl	https://pipl.com
Scylla	https://github.com/josh0xA/Scylla
Search POF	https://searchpof.com

sherlock	https://github.com/sherlock-project/sherlock
Snitch.name	http://snitch.name
Snoop	https://github.com/snooppr/snoop
SocialPath	https://github.com/woj-ciech/SocialPath
Social Recon	https://github.com/famavott/osint-scraper
socialscan	https://pypi.org/project/socialscan
socid_extractor	https://github.com/soxoj/socid_extractor
Sou o Cara	http://souocara.com
Spokeo	https://www.spokeo.com
suIP.biz	https://suip.biz/ru/?act=sherlock
Username Checker API	https://app.swaggerhub.com/apis/checker/api/2.0.0
Userrecon	https://github.com/issamelferkh/userrecon
User Search	http://www.usersearch.org
WhatsMyName	https://whatsmyname.app
WhatsMyName	https://github.com/WebBreacher/WhatsMyName

CV and Resume Search

Tool	Link
Bayt	https://www.bayt.com
CareerBuilder	https://hiring.careerbuilder.com
CVGadget	http://www.cvgadget.com
Indeed	https://www.indeed.com
Job Vertise Search	http://www.jobvertise.com/resumes/search
LeadFerret	https://leadferret.com/search
Linkedin	https://www.linkedin.com
MarketVisual	http://www.marketvisual.com
Mighty Recruiter	https://www.mightyrecruiter.com
Monster	https://hiring.monster.com
Recruit'em	https://recruitin.net
Visualize.me	http://vizualize.me
XING	https://www.xing.com
ZipRecruiter	https://www.ziprecruiter.com

Expert Search

Tool	Link
Academia	http://academia.edu
almexperts	https://www.almexperts.com
CanLaw	http://www.canlaw.com
ExpertClick	https://www.expertclick.com
ExpertEngine	https://www.expertengine.com
expertfile	https://expertfile.com
Expert Finder	https://theexpertfinder.com
Expertise Engine	https://www.expertengine.com
Expertise Finder	https://expertisefinder.com
Find an expert online	http://findanexpertonline.com
ExpertiseFinder	http://www.expertisefinder.com
ExpertGuide	http://www.expertguide.com.au
Expert Institute	https://www.expertinstitute.com
ExpertPages	http://expertpages.com
Expert Republic	https://expertrepublic.com
Experts.com	http://www.experts.com
HARO: Help a Reporter Out	http://www.helpareporter.com
GlobalExperts	http://www.theglobalexperts.org
Idealist	http://www.idealist.org
Innocentive	http://www.innocentive.com
Internet Experts	http://www.internetexperts.info
LexisNexis: Search for an Expert	https://www.lexisnexis.com/experts-on-demand/order-searches/expert-witness-search
LunchClub	https://lunchclub.ai
Maven	http://www.maven.co

MuckRack	http://muckrack.com
National Speakers Association	http://www.nsaspeaker.org
Newswise	http://www.newswise.com
Newtonx	https://www.newtonx.com
Postbag.co	https://postbag.co
PRNewswire	https://prnmedia.prnewswire.com
ProfNet	https://profnet.prnewswire.com/ProfNetHome/What-is-Profnet.aspx
ReseacherID	http://www.researcherid.com
Round Table Group	https://www.roundtablegroup.com
SEAK	https://www.seakexperts.com
SheSource	http://www.womensmediacenter.com/shesource
Sources	http://www.sources.com
SpeakerHub	https://speakerhub.com/speakers
SpeakerMatch: Speaker Directory	https://www.speakermatch.com/directory/speakers
Speakezee	https://www.speakezee.org
SpeakInc	https://www.speakinc.com
Zintro	https://www.zintro.com

Business Research

Company Search Tools

Tool	Link
AIHIT	https://www.aihitdata.com
Aleph	https://aleph.occrp.org
Aleph	https://github.com/alephdata/aleph
AllStocksLinks	http://www.allstocks.com/links
Angel	https://angel.co
AngelList	https://angellist.com
Annual Reports	http://www.annualreports.com
Automata	https://miner.byautomata.io
Aware Online: Company Search	https://www.aware-online.com/osint-tools/bedrijven-search-tool
Big Red Directory	https://www.bigreddirectory.com
bikudo	https://www.bikudo.com
Bizeurope	http://www.bizeurope.com
Biznar	https://biznar.com
Bizstats	http://www.bizstats.co.uk
Bizstats	http://www.bizstats.com
Bloomberg	http://www.bloomberg.com/research/company/overview/overview.asp
BPortal	http://www.bportal.com
Business Source	https://www.ebscohost.com/academic/business-source-complete
Bureau Van Dijk	http://www.bvdinfo.com
Buzzfile	http://www.buzzfile.com

Canadian Business Research	https://www.canada.ca/en/services/business/research.html
Canadian Business Resource	http://www.cbr.ca
Cedar Rose	https://www.cedar-rose.com
Checktrade	https://www.checkatrade.com
Comparably	https://www.comparably.com
CompeteShark	http://competeshark.com
Corporate Information	http://www.corporateinformation.com
Corporation Wiki	https://www.corporationwiki.com
CorpWatch	http://www.corpwatch.org
Crunchbase	https://www.crunchbase.com
Dato Capital	https://en.datocapital.com
Dun & Bradstreet	https://www.dnb.com
EDGAR Online	https://www.dfinsolutions.com/products/edgar-online
Engineering 360	https://www.globalspec.com
Enigma	https://enigma.com
Euromonitor	http://www.euromonitor.com
Europages	http://www.europages.co.uk
Express Business Directory	http://www.expressbusinessdirectory.com
Ezilon	http://www.ezilon.com
Factiva	https://global.factiva.com
Forbes Global 2000	http://www.forbes.com/global2000/
Fortune Global 500	http://fortune.com/global500
Foursquare	https://foursquare.com
Glassdoor	https://www.glassdoor.com
globalEdge	http://globaledge.msu.edu
Google Finance	https://www.google.com
GuideStar	http://www.guidestar.org
Hoovers	https://www.dnb.com/products/marketing-sales/dnb-hoovers.html
HotFrog	https://www.hotfrog.com
Inc. 5000	http://www.inc.com/inc5000
infobel	https://www.infobel.com
Infocif (Spain)	http://www.infocif.es

Info clipper	http://www.info-clipper.com
iSpionage	https://www.ispionage.com
Investigative Dashboard Search	https://aleph.occrp.org
Kompass	https://www.kompass.com
Kyckr	https://portal.kyckr.co.uk
Linkedin	https://www.linkedin.com
List.org	https://www.list-org.com
LittleSis	https://littlesis.org
Mapped in Israel	https://mappedinisrael.com
Manta	https://www.manta.com
MarketLine	http://marketline.com
Market Screener	https://www.marketscreener.com
Mergent Intellect	http://www.mergentintellect.com
Mergent Online	http://www.mergentonline.com/login.php
Mint Global	https://mintglobal.bvdinfo.com
Morningstar Research	http://library.morningstar.com
National Company Registers	https://en.wikipedia.org/wiki/List_of_company_registers
National Corporation Directory	https://corporation.directory/secstates
Nexok	https://www.nexok.co.uk
North Data	https://www.northdata.de
orbis directory	https://orbisdirectory.bvdinfo.com
opencorporates	https://opencorporates.com
Open Corporates CLI	https://github.com/skickar/OpenCorporatesCLI
Owler	https://www.owler.com
Plunkett Research	http://www.plunkettresearchonline.com
The Public Register	http://www.annualreportservice.com
The Public Register	http://www.prars.com/search/alpha/A
Quandl	https://www.quandl.com
Relationship Science	https://relationshipscience.com
Report Linker	https://www.reportlinker.com
Ripoff Report	http://www.ripoffreport.com

SMWYG-Show-Me-What-You-Got	https://github.com/Viralmaniar/SMWYG-Show-Me-What-You-Got
Sqoop	https://sqoop.com
SpyFu	https://www.spyfu.com
Startupexplore	https://startupxplore.com/en/startups
ThomasNet	https://www.thomasnet.com
Vault	http://www.vault.com
Xing	http://www.xing.com
Yahoo Finance	https://finance.yahoo.com
Yelp	https://www.yelp.com
Zauba Corp	https://www.zaubacorp.com
Zoominfo	https://www.zoominfo.com/companies-search

Business Registers Lists and Directories

Tool	Link
Business Reference Services	http://www.loc.gov/rr/business/company/directories.html
Business Registers in EU Countries	https://beta.e-justice.europa.eu/106/EN/business_registers_in_eu_countries | https://e-justice.europa.eu/content_business_registers_in_member_states-106-en.do
Company Research Resources by Country	http://www.rba.co.uk/sources/registers.htm
Federation of International Trade Associations	http://www.fita.org/webindex/browse.cgi/Entering_International_Markets/Trade_Information_Business_Directories/international_Business_Directories/Europe_Trade_Directories/All_Europe_Directories
Global Edge	https://globaledge.msu.edu/global-resources/company-directories
Investigative Dashboard	https://investigativedashboard.org/databases
Knowledge guide to international company registration	http://www.icaew.com/en/library/subject-gateways/business-management/company-administration/knowledge-guide-international-company-registration
List of Company Registers	https://en.wikipedia.org/wiki/List_of_company_registers
Overseas Company Registers	https://www.gov.uk/government/publications/overseas-registries/overseas-registries
Recoupera	https://recoupera.com/countries-companies-registry
Santander Trade Portal	https://en.portal.santandertrade.com/reach-business-counterparts/business-directories?todo=valider&affichage=&pays_recherche=11&code_secteur=all&tri=#result

Job Search Resources

Tool	Link
Bayt	https://www.bayt.com
CampusCareerCenter	https://campuscareercenter.com
CareerBuilder	http://www.careerbuilder.com
College Recruiter	https://www.collegerecruiter.com
Craiglist	http://losangeles.craigslist.org
Dice	http://www.dice.com
Eluta (Canada)	http://www.eluta.ca
Eurojobs	https://www.eurojobs.com
Fish4Jobs	http://www.fish4.co.uk
Gigajob	https://www.gigajob.com
Glassdoor	https://www.glassdoor.com
Headhunter	http://www.headhunter.com
Indeed	http://www.indeed.com
JOBBÖRSE	https://jobboerse.arbeitsagentur.de
JobRobot	https://www.jobrobot.de
Jobs (GE)	https://www.jobs.de
Jobs (PL)	http://www.jobs.pl
Jobware (GE)	https://www.jobware.de
Jobsite (UK)	http://www.jobsite.co.uk
Linkedin	https://www.linkedin.com
Monster	http://www.monster.com
Naukri (IN)	http://www.naukri.com
Reed (UK)	http://www.reed.co.uk
Seek (AU	http://www.seek.com.au
SimplyHired	http://www.simplyhired.com

Stackoverflow Developer Jobs	https://stackoverflow.com
Stellenanzeigen.de	https://www.stellenanzeigen.de
StepStone	https://www.stepstone.de
whoishiring	https://whoishiring.me
Xing	http://www.xing.com
ZipRecruiter	https://www.ziprecruiter.com

Company Reviews

Tool	Link
CareerBliss Reviews	https://www.careerbliss.com/reviews
Comparably	https://www.comparably.com
Corporates Review	https://corporates.review
Fairygoodbooss	https://fairygodboss.com
Glassdoor	https://www.glassdoor.com
Indeed	https://www.indeed.com/companies
The JobCrowd	https://www.thejobcrowd.com
Jobvoting	https://www.jobvoting.de
Kununu	https://www.kununu.com
Meinchef	https://www.meinchef.de
RateMyEmployer	http://www.ratemyemployer.ca
Seek	https://www.seek.com.au/companies
TargetJobs	https://targetjobs.co.uk
Vault	http://www.vault.com

Salary Search

Tool	Link
Adecco USA	https://www.adeccousa.com/resources/salary-calculator
AFL-CIO Executive Paywatch	https://aflcio.org/paywatch
CareerBliss	https://www.careerbliss.com/salary
Career Boutique	https://www.careerboutique.com/salary
Career Builder	https://www.careerbuilder.com
Career One Stop	https://www.careeronestop.org/Toolkit/Wages/find-salary.aspx
Comparably	https://www.comparably.com
Glassdoor Salaries	https://www.glassdoor.com/Salaries/index.htm
Equilar	http://www.equilar.com
Indeed Salaries	https://www.indeed.com/salaries
Job Search Intelligence	https://www.jobsearchintelligence.com/etc/jobseekers/salary-calculator.php
Live Career	https://www.livecareer.com/salary
Monster Salary	https://www.monster.com/salary
Payscale	https://www.payscale.com/research/US/Country=United_States/Salary
Paysa	https://www.paysa.com/salaries-list/company
Pay Wizard	https://paywizard.org/main/salary/calculator#
RAPS.org	https://www.raps.org/careers/salary-calculator
Salary.com	https://www.salary.com
Salary Expert	https://www.salaryexpert.com
Simply Hired Salary Estimator	https://www.simplyhired.com/salaries

Salary List	http://www.salarylist.com
Transparent California	https://transparentcalifornia.com
United States Department of Labor	https://www.bls.gov/ooh
US Experteer	https://us.experteer.com/salary_calculator
Wall Street Oasis Salary Search	https://www.wallstreetoasis.com/wso-company-database/salary

Patent Research

Tool	Link
Advanced Google Patent Search	https://www.google.com/advanced_patent_search
AusPat IP Australia	http://pericles.ipaustralia.gov.au/ols/auspat/welcome.do;jsessionid=GhZjQ0fgjVF4sudf5kQ_8XW5haPebJTu6s55ZIWx6Kh8eh_HzFxk!199765566
Benelux Patent Platform (Belgium, The Netherlands and Luxemburg): eRegister	https://mijnoctrooi.rvo.nl/fo-eregister-view
Canada Intellectual Property Office: Patents	https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h_wr00001.html
CNIPA (Chinese National Intellectual Property Administration)	http://english.cnipa.gov.cn
Common Citation Document FiveIPoffices	http://ccd.fiveipoffices.org/CCD-2.1.6
Espacenet Patent Search (Europe)	https://worldwide.espacenet.com
European Patent Register	https://register.epo.org/regviewer
Finland Patent Search	https://patent.prh.fi/patinfo/default2.asp?Lng=
Free Patents Online Search	http://www.freepatentsonline.com/search.html
German Patent and Trade Mark Office Databases	https://www.dpma.de/english/search/index.html
Google Patents	https://patents.google.com https://www.google.com/?tbm=pts
GOV.UK Patent Search	https://www.gov.uk/search-for-patent
INNOVA – the Bibliography of Intellectual Property Rights	http://libris.kb.se/form_extended.jsp?f=imb&language=en
Israel Patent Authority Database	http://www.ilpatsearch.justice.gov.il/UI/mainpage.aspx

Japan Patent Office	https://www.jpo.go.jp
Japan Platform for Patent Information	https://www.j-platpat.inpit.go.jp
Korea Intellectual Property Rights Information Service	http://engpat.kipris.or.kr
Lens.org	https://www.lens.org
National Institute of Industrial Property (Brazil)	https://www.gov.br/inpi/pt-br
Norwegian Industrial Property Office	https://search.patentstyret.no
Patent Search (Spain)	http://consultas2.oepm.es/InvenesWeb/faces/busquedaInternet.jsp
PIZNET	http://www.piznet.de
Swedish Patent Database	https://tc.prv.se/spd/search?lang=en
Swedish Patent Office Application Search	https://tc.prv.se/aktinsyn/servlet/akt/?lang=en
Swissreg	https://www.swissreg.ch/srclient/faces/jsp/start.jsp
UK Intellectual Property Office (IPO): Online Patent Information and Document Inspection Service	https://www.ipo.gov.uk/p-ipsum.htm
United States Patent and Trademark Office (USPTO): Search for Patents	https://www.uspto.gov/patents-application-process/search-patents
World Intellectual Property Organization (WIPO)	https://www.wipo.int
WIPO Global Brand Database	https://www3.wipo.int/branddb/en
WIPO Patenscope	https://patentscope.wipo.int/search/en/search.jsf
WIPO Hague Express	http://www.wipo.int/designdb/hague/en

Trademark Search

Tool	Link
Australian Trademark Search	https://search.ipaustralia.gov.au/trademarks/search/quick
Canada Intellectual Property Office: Trademarks	https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h_wr00002.html
CorpNet: Free Federal Trademark Search	https://www.corpnet.com/trademarks/free-search
EUIPO TM Class	http://euipo.europa.eu/ec2
EUIPO Trademarks	https://euipo.europa.eu/eSearch/#advanced/trademarks
German Patent and Trade Mark Office Databases	https://www.dpma.de/english/search/index.html
GOV.UK: Search for Trademark	https://www.gov.uk/search-for-trademark
IGE | IPI Trademark Searches	https://www.ige.ch/en/ip-search/trade-mark-searches.html
JUSTIA Trademarks	https://trademarks.justia.com/search?q=
Korea Intellectual Property Rights Information Service	http://engpat.kipris.or.kr
Madrid Monitor	https://www3.wipo.int/madrid/monitor/en
Marcaria Trademark Search	https://trademark-search.marcaria.com
Markenchk	http://www.markenchk.de
Mscorporate Online Trademark Search	https://mspcorporate.com/trademarkSearch/trademark-search-online.html
National Institute of Industrial Property (Brazil)	https://www.gov.br/inpi/pt-br
Sellerapp: Trademark Search	https://www.sellerapp.com/trademark-search.html
TM go365™	https://clarivate.com/compumark/solutions/trademark-searching/diy-trademark-searching/tm-go365

TMView	https://www.tmdn.org/tmview/#/tmview
Trademark Engine	https://www.trademarkengine.com/free-trademark-search/trademark-search
Trademarkia	https://www.trademarkia.com
UK IPO Trademark Search	https://trademarks.ipo.gov.uk/ipo-tmtext
United States Patent and Trademark Office (USPTO)	https://www.uspto.gov
United States Patent and Trademark Office (USPTO) Trademark Electronic Search System (TESS)	http://tmsearch.uspto.gov/bin/gate.exe
WIPO Global Brand Database	https://www3.wipo.int/branddb/en

Tenders

Tool	Link
APEC Contracting: Tenders and Request for Proposals	https://www.apec.org/Projects/Tenders-and-RFPs
assortis	https://www.assortis.com
Bid Detail	https://www.biddetail.com
Department of Finance (UK)	https://www.finance-ni.gov.uk/topics/procurement
DG Market: Tenders Worldwide	https://www.dgmarket.com
Double Trade	https://www.doubletrade.com
Fedvendor	http://www.fedvendor.com
Global Tenders	http://www.globaltenders.com
Infrastructure Civil Works & Construction Tenders	http://www.cwctenders.com
Medical Pharma Healthcare Tenders	http://www.medicaltenders.com/medical_tenders_gcc_countries.htm
Medical Tenders	https://www.medicaltenders.com
Merx (Canada, US)	https://www.merx.com
Middle East Tenders Search	http://www.middleeasttenders.com/#20180326108
NSW eTendering	https://tenders.nsw.gov.au
PODS	https://www.pods.net
SIMAP Information About European Public Procurement	http://simap.ted.europa.eu
South Australian Tenders & Contracts Website	https://www.tenders.sa.gov.au
Tender	https://tender.co.tz
Tenderio	http://www.tenderio.com
Tender Detail	https://www.tenderdetail.com
Tender Direct	http://www.tenderdirect.com.my

Tender Link	https://www2.tenderlink.com
Tenderscope	http://www.tenderscope.com
Tenders Global	https://www.tendersglobal.com
Tenders Go	https://www.tendersgo.com
Tenders Info	http://www.tendersinfo.com
Tenders.net	http://www.tenders.net
Tenders On Time	https://www.tendersontime.com
Tenders Page	https://tenderspage.com
The Federation of International Trade Associations	http://www.fita.org/webindex/browse.cgi/Entering_International_Markets/Government_and_Multinational_Procurement/Worldwide_Government_Procurement_Tenders/Europe_Government_Procurement_(Tenders)
Queensland Government Building and Asset Services eTender	https://www.hpw.qld.gov.au/bas/etender
United Nations Development Programme	http://procurement-notices.undp.org/search.cfm
United Nations Global Marketplace	https://www.ungm.org/Public/Notice

Charity, NGO, and Nonprofit Research

Tool	Link
Benefacts (Ireland)	https://benefacts.ie
Benevity Causes Portal	https://causes.benevity.org/causes/search
CAF America	https://cafa.iphiview.com/cafa/givenow/charitydatabasesearch/tabid/464/default.aspx
Charity Check 101	https://charitycheck101.org
Charity Choice	https://www.charitychoice.co.uk
Charity Commission for England and Wales	https://www.gov.uk/government/organisations/charity-commission
Charity Navigator	https://www.charitynavigator.org
Charity Watch	https://www.charitywatch.org
Citizen Audit	https://www.citizenaudit.org
Government of Canada List of Charities	https://www.canada.ca/en/revenue-agency/services/charities-giving/charities-listings.html
Great Nonprofits	https://greatnonprofits.org
Guide Star	https://www.guidestar.org/NonprofitDirectory.aspx
Illinois Attorney General Charitable Trust Database	http://charitableviewer.ilattorneygeneral.net
IRS Charities & Non-Profits A-Z Site Index	https://www.irs.gov/charities-non-profits/charities-non-profits-a-z-site-index
National Center for Charitable Statistics	http://nccs.urban.org
NOZA Search	https://www.nozasearch.com
NYU Libraries NGO, Charity, and Non-Profit Resources	https://guides.nyu.edu/c.php?g=276965&p=1846647
Office of Massachusetts Attorney General Non-	http://www.charities.ago.state.ma.us/charities

B433

Profits & Charities Document Search	
Open Charities	http://opencharities.org
UK Charity Commission	http://apps.charitycommission.gov.uk/Showcharity/RegisterOfCharities/registerhomepage.aspx
The Chronicle of Philanthropy	https://www.philanthropy.com/data
WANGO Worldwide NGO Directory	http://www.wango.org/resources.aspx?section=ngodir

Researching Leaks

Tool	Link
BalkanLeaks	https://balkanleaks.eu
Cryptome	https://cryptome.org
DataBreaches	https://www.databreaches.net
DDOSECRETS	https://ddosecrets.com
GLOBALLEAKS	https://www.globaleaks.org
OCCRP	https://www.occrp.org
OCCRP Data	https://aleph.occrp.org
Offshore Alert	https://www.offshorealert.com
Offshore Leak Database	https://offshoreleaks.icij.org
Offshore Leaks	https://offshoreleaks.icij.org
Public Library of US Diplomacy	https://search.wikileaks.org/plusd
Wikileaks	https://wikileaks.org
Wikileaks Advanced Search	https://search.wikileaks.org/advanced
WikiSpooks	https://wikispooks.com

Real Estate Research

Real Estate Research

Tool	Link
411.com (US)	https://www.411.com/reverse-address
Airbnb	https://www.airbnb.co.uk
Arivify (US)	https://www.arivify.com
Ananz	http://www.ananzi.co.za
Bigger Pockets	https://www.biggerpockets.com/rei
Black Book Online: USA Property	https://www.blackbookonline.info/USA-Property.aspx
BlueBook International	http://www.bluebook.net
Bret Whissel Amortization Calculator	http://bretwhissel.net/amortization
Carmel Realty Company (CN)	http://www.carmelrealtycompany.cn/real-estate-listings-Carmel.htm
CBRE (Global)	https://www.cbre.us
Central 21 (Global)	https://www.century21.com
Colliers International	https://www2.colliers.com
CouchSurfing	https://www.couchsurfing.com
Courthouse Direct (US)	https://www.courthousedirect.com
Digmap Real Estate Tools & Analysis	https://www.digmap.com/solutions/real-estate-analysis
Domain AU Home Price Guide	https://www.domain.com.au/property-profile
Emporis	https://www.emporis.com
EuroResales	http://www.euroresales.com
FixMyStreet (UK)	https://www.fixmystreet.com

Freddie Mac	http://www.freddiemac.com/research
Funda (NL)	https://www.funda.nl
HomeFacts (US)	https://www.homefacts.com
HomeMetry (US)	https://homemetry.com
HouseShop (UK)	https://www.thehouseshop.com
iLocate (NL)	https://www.ilocate.nl
Institute for Real Estate Management	http://www.irem.org
Jaap (NL)	https://www.jaap.nl
Land.net (US)	http://www.land.net
LondonRentMyHouse	http://www.londonrentmyhouse.com
Loopnet (US)	http://www.loopnet.com
Melissa Address Lookups	https://www.melissa.com/v2/lookups/addresssearch/?number=4805&zip=50510&c=1&l=U
National Association of Realtors Directory of Real Estate Research Centers	https://www.nar.realtor/directories/directory-of-real-estate-research-centers
National Association of Realtors Research Reports	https://www.nar.realtor/research-and-statistics/research-reports
Placester Multiple Listing Service (MLS) Directory (US)	https://placester.com/mls-directory
PadMapper (US)	https://www.padmapper.com
People Looker (US)	https://www.peoplelooker.com
Radaris: Property Check	https://radaris.com/#findAddrH
Realestate.com.au (AU)	https://www.realestate.com.au
Realtor	https://www.realtor.com
Redfin (US)	https://www.redfin.com
Rehold (US)	https://rehold.com
Remax Global	https://global.remax.com
RightMove	http://www.rightmove.co.uk
Search Systems Property Records (US)	https://publicrecords.searchsystems.net/Free_Public_Records_by_Type_of_Record/Property_Records
SoldPrice	http://house.speakingsame.com

Sotherby's International Realty	http://www.sothebysrealty.com
SkyscraperPage	http://skyscraperpage.com
Spanish Country Homes (Spain)	http://spanishcountryhomes.com
Street Check (UK)	https://www.streetcheck.co.uk
Street Easy (US)	https://streeteasy.com
Total View Real Estate	http://www.totalviewrealestate.com/userguide.php
United Country Real Estate (US)	http://www.unitedcountry.com
US Department of Housing and Urban Development	https://www.hud.gov
US Realty Records	https://usrealtyrecords.com
US Title Records: Search Property Records	https://www.ustitlerecords.com/search-property-records
World Properties	https://www.worldproperties.com
Zillow (US)	https://www.zillow.com
Zoopla (UK)	https://www.zoopla.co.uk

Online Marketplaces

Classifieds and Online Marketplaces

Tool	Link
2dehands (BE)	https://www.2dehands.be
Alibaba	https://www.alibaba.com
AliExpress	https://www.aliexpress.com
Allegro	https://allegro.pl
Amazon	https://www.amazon.com
Americanas (BR)	https://www.americanas.com.br/hotsite/marketplace-americanas
bedpage	https://www.bedpage.com
Bonanza	https://www.bonanza.com
Claz	http://claz.org
Craigslist	https://www.craigslist.org
Depop	https://www.depop.com
ebay	https://www.ebay.com
eBid (Global)	https://www.ebid.net
eCrater	https://www.ecrater.com
Etsy	https://www.etsy.com
Extra (BR, MX)	https://www.extra.com.br/marketplace/venda-no-extra.aspx?origin=ex
Facebook Marketplace	https://www.facebook.com/marketplace
FatFingers	http://fatfingers.com
Federal Association of Online Trade Marketplaces Across Europe (DK)	http://bvoh.de/overview-of-online-marketplaces-across-europe

Flipkart (IN)	https://www.flipkart.com
flippity	http://www.flippity.com
Folksy	https://folksy.com
GAME Marketplace (UK)	https://www.help.game.co.uk/hc/en-gb
Goofbay	https://www.hotukdeals.com/deals/goofbay-free-ebay-tools-misspellings-typos-sniper-bargains-1006930
Goofbid	https://www.goofbid.com
Gumtree	https://www.gumtree.com
hotukdeals	https://www.hotukdeals.com
JD (CH)	https://www.jd.com
Jet	https://jet.com
Jingdong Mall (CH)	https://www.jd.com
Jumia (NG)	https://www.jumia.com.ng
Kijiji (Canada)	https://www.kijiji.ca
Lazada (Asia)	https://www.lazada.com
LeoList	https://www.leolist.cc
MarkaVIP (Middle East)	http://markavip.com
Markt.de	https://www.markt.de
Marktplaats	https://www.marktplaats.nl
Mercado Livre (BR, MX)	https://www.mercadolivre.com.br
oodle	https://www.oodle.com
Otto (DE)	https://www.otto.de
OzBargain (AU)	https://www.Ozbargain.com.au
PicClick	https://picclick.com
Privalia (ES, IT, MX, BR)	http://www.privalia.com
Quikr	https://www.quikr.com
Quoka	https://www.quoka.de
Rakuten (JP, DE)	https://www.rakuten.com
Search All Junk	http://www.searchalljunk.com
SearchTempest	https://www.searchtempest.com
Snapdeal (IN)	https://www.snapdeal.com
Speurders	https://www.speurders.nl
Submarino (BR, MX)	https://www.submarino.com.br

Taobao (CN)	https://www.taobao.com
TMall (CH)	https://www.tmall.com
Used (Canada)	https://www.used.ca
Willhaben (AT)	http://www.willhaben.at
Zalora (Asia)	https://worldwide.zalora.com

Cryptocurrency and Banking Research

Cryptocurrency Research

Tool	Link
Address Checker	http://addresschecker.eu
Aware Online: Cryptocurrency Search Tool	https://www.aware-online.com/osint-tools/cryptocurrency-search-tool
Bitcoin Abuse	https://www.bitcoinabuse.com
Bitcoin Block Resources	http://explorer.b.tc
Bitcoin.org	https://bitcoin.org
Bitcoin WhosWho	http://bitcoinwhoswho.com
BitInfoCharts	https://bitinfocharts.com
Bitnodes	https://bitnodes.io
bitonic	https://bitonic.nl
BitRef	https://bitref.com
Blockchain.com	https://www.blockchain.com
Blockchain	https://blockchain.info
Blockchain Engine	https://blocksearchengine.com
Blockchain Explorers	https://btc.cryptoid.info
Blockchair	https://blockchair.com
BlockCypher	https://live.blockcypher.com
Blockonomics	https://www.blockonomics.co
Blocks.Press	https://blocks.press
BTC.com	https://btc.com
BTCsniffer	https://btcsniffer.com
Bytc.io	https://bytc.io

ChipMIxer	https://chipmixer.com
Coin ATM Radar	https://coinatmradar.com
coinbase	https://www.coinbase.com
Coin Choose	https://www.coinchoose.com
CoinMap	https://coinmap.org
CoinMarketCap	https://coinmarketcap.com
Coinmio	http://coinmio.com
Crypto Compare	https://www.cryptocompare.com
CryptoCurrency Facts	https://cryptocurrencyfacts.com
Crypto Scam Checker	https://fried.com/crypto-scam-checker
Crystal	https://crystalblockchain.com
Dead Coins	https://deadcoins.com
Elliptic	https://www.elliptic.co
EtherChain	https://www.etherchain.org
EtherScan	https://etherscan.io
Explorer.Bitcoin	https://explorer.bitcoin.com
Hive Block Explorer	https://hiveblockexplorer.com
_IntelligenceX: Bitcoin	https://intelx.io/tools?tab=bitcoin
Live Coin Watch	https://www.livecoinwatch.com
LocalBitcoins	https://localbitcoins.com
LocalMonero	https://localmonero.co/blocks
Monero Blocks	https://moneroblocks.info
Monero Wallet Hunter	https://www.xmrhunter.com
Orbit	https://github.com/s0md3v/Orbit
OXT	https://oxt.me
Search Bitcoin SV	https://oyo.cash
SeeKoin	https://www.seekoin.com
SICP	https://sicp.ueba.su
Sochain	https://sochain.com
spendabit	https://spendabit.co
Tokenview	https://tokenview.com

WalletExplorer	https://www.walletexplorer.com
xmrchain	https://xmrchain.net

Banking and Credit Card Information

Tool	Link
AFD Software Validate a Bank Account	http://www.afd.co.uk/try-it/validate-bank-account
Banking & Payments Federation Ireland Account Validation	https://www.bpfi.ie/customer-assist/user-tools/account-validation
Bin Base	http://www.binbase.com/search.html
Bin Codes	https://www.bincodes.com
Bindb Tools	https://www.bindb.com/iban-generator.html
Binlist	https://binlist.net
Braemoor Software	https://www.braemoor.co.uk/software/index.shtml
cuitonline	https://www.cuitonline.com
Find Sort Codes	http://findsortcodes.co.uk
Free Formatter Credit Card Number Generator and Validator	https://www.freeformatter.com/credit-card-number-generator-validator.html#howToValidate
IBAN Calculator	https://www.ibancalculator.com
IBAN Check	http://www.tbg5-finance.org/?ibancheck.shtml
IBAN Checker	https://www.iban.com
List of Banks	https://en.wikipedia.org/wiki/Lists_of_banks
Loqate Bank Veirification	https://www.loqate.com/en-gb/bank-verification
My Lost Account	https://www.mylostaccount.org.uk
Online BIC Search	https://www2.swift.com/bsl/facelets/bicsearch.faces
Sort Codes	https://www.sortcodes.co.uk
Swift Codes Info	http://www.swiftcodesinfo.com
TVA Recherche.lu	https://tva-recherche.lu/adresse

Validate Credit Card	http://validate.creditcard
Validate Credit Card Numbers	https://www.validcreditcardnumber.com
VAT Lookup	http://www.vat-lookup.co.uk
VAT Search	http://vat-search.co.uk

Currency Conversion

Tool	Link
List of Circulating Currencies	https://en.wikipedia.org/wiki/List_of_circulating_currencies
MSN Currency Converter	https://www.msn.com/en-us/money/tools/currencyconverter
OANDA	https://www1.oanda.com/currency/converter
Travelex Currency Converter	https://www.travelex.com/currency-converters
Xe Currency Converter	https://www.xe.com/currencyconverter
X-Rates	https://www.x-rates.com
Yahoo Currency Converter	https://finance.yahoo.com/currency-converter

Legal Research

Legal Research Tools and Resources

Tool	Link
Arrests.org (US)	https://arrests.org
Asian Legal Information Institute	http://www.asianlii.org
Australian Capital Territory Civil & Administrative Tribunal	http://acat.act.gov.au
Australian Legal Information Institute	http://www.austlii.edu.au
Black Book Online (US)	https://www.blackbookonline.info
Bloomberg Law	https://news.bloomberglaw.com
British and Irish Legal Information Institute	http://www.bailii.org
Bundesverfassungsgericht	https://www.bundesverfassungsgericht.de/SiteGlobals/Forms/Suche/Entscheidungensuche_Formular.html
CanLaw (Canada)	https://canlaw.com
CanLII (Canada)	https://www.canlii.org
Cardiff Index to Legal Abbreviations	http://www.legalabbrevs.cardiff.ac.uk
CASECHECK	https://www.casecheck.co.uk
Case Law Database	http://cld.unmict.org
CaseText	https://casetext.com
Case Tracker (UK)	http://casetracker.justice.gov.uk
Causelist	http://causelist.org
Chambers and Partners	https://www.chambersandpartners.com
Commonwealth Legal Information Institute	http://www.commonlii.org
Court Listener	https://www.courtlistener.com
Court News (UK)	http://courtnewsuk.co.uk

CourtServe	https://www.courtserve.net
Crown Court List (UK)	http://xhibit.justice.gov.uk
Cylaw (Cyprus)	http://www.cylaw.org
De Rechtspraak	https://uitspraken.rechtspraak.nl
Droit	http://www.droit.org
DRSP	http://www.drsp.net
Federal Bureau of Prisons: Inmate Loc (US)	https://www.bop.gov/inmateloc
FindLaw	https://www.findlaw.com
Free County Court Records	https://www.blackbookonline.info/USA-County-Court-Records.aspx
Global Reputation	https://www.global-regulation.com
Hein Online	https://home.heinonline.org
Hong Kong Legal Information Institute	http://www.hklii.org
IIJusticia	http://www.iijusticia.edu.ar
Irish Legal Information Initiaitive	https://www.ucc.ie/academic/law/irlii/index.php
ittig	http://www.ittig.cnr.it
Jail Base	https://www.jailbase.com
Jersey Legal Information Board	https://www.jerseylaw.je
Judyrecords (US)	https://www.judyrecords.com
JuraForum	https://www.juraforum.de
Kenya Law	http://kenyalaw.org
Korea Legislation Research Institute	http://www.klri.re.kr
Law.com	https://www.law.com
The Law Engine	https://thelawengine.com
Law Explorer	https://lawexplores.com
Law Guru	https://www.lawguru.com
Law Pages	http://www.thelawpages.com
The LAWPHiL Project	https://www.lawphil.net
Law Society (UK)	http://www.lawsociety.org.uk
Law Society of Northern Ireland	https://www.lawsoc-ni.org
Law Society of Scotland	https://www.lawscot.org.uk
Legal Information Institute of India	http://www.liiofindia.org

B449

Legislation.gov.uk	http://www.legislation.gov.uk
Leaxdin	https://www.lexadin.nl/wlg
Lexis Nexis	https://www.lexisnexis.com
Lexetius.com	https://lexetius.com
Lexxion	http://www.lexxion.de
Lexum	https://lexum.com
LLRX	https://www.llrx.com
Malawi LII	https://www.malawilii.org
New Zeland Legal Information Institute	http://www.nzlii.org
Nolo	https://www.nolo.com
NYU LIbGuide International Law	http://nyulaw.libguides.com/international-law
OpenJur (Germany)	https://openjur.de
Oyez	https://www.oyez.org
PACER	https://www.pacer.gov
PacerMonitor	https://www.pacermonitor.com
Pacer Case Locator	https://pcl.uscourts.gov/pcl/index.jsf
Pacific Islands Legal Information Institute	http://www.paclii.org
Pinnington Law	https://pinningtonlaw.co.uk
Public Arrest Records (US)	https://www.publicarrestrecords.org
Public Register of Convictions	https://resources.hse.gov.uk/convictions
Southern African Legal Information Institute	http://www.saflii.org
Trial International	https://trialinternational.org
Trust Online (UK)	https://www.trustonline.org.uk
Uganda Legal Information Institute	https://www.ulii.org
UNODC Sherloc	https://www.unodc.org/cld/v3/sherloc
Urteilfinden	http://www.urteilfinden.de
US Legal	https://search.uslegal.com
World Legal Information Institute	http://worldlii.org

Researching Countries

Country Profiles

Tool	Link
BBC News Country Profile	http://news.bbc.co.uk/2/hi/country_profiles/default.stm
CIA World Factbook	https://www.cia.gov/library/publications/resources/the-world-factbook/index.html
Country Studies	http://countrystudies.us
Global Edge	https://globaledge.msu.edu
IMUNA Country Profiles	http://www.imuna.org/resources/country-profiles
Library of Congress Country Studies	https://www.loc.gov/collections/country-studies/about-this-collection
Library of Congress Nations	http://www.loc.gov/law/help/guide/nations.php
Nations Online	https://www.nationsonline.org
UN Country Profiles	https://unstats.un.org/unsd/dnss/cp/searchcp.aspx
UNCTAD Country Profile	http://unctadstat.unctad.org/CountryProfile/en-GB/index.html

Researching Terrorism, Crime, and Cybersecurity

Researching Terrorism

Tool	Link
ALIC Terrorism	https://www.archives.gov/research/alic/reference/terrorism-links.html
The American Foreign Policy Council's World Almanac of Islamism	http://almanac.afpc.org
CAT	http://cat-int.org
COE-DAT	http://www.coedat.nato.int
Counter Extremism Project	https://www.counterextremism.com
Combating Terrorism Center	https://ctc.usma.edu
Congressional Research Service Reports on Terrorism	https://fas.org/sgp/crs/terror/index.html
Counter Terrorist Trends and Analyses (CTTA)	http://www.rsis.edu.sg/rsis-publication/icpvtr/counter-terrorist-trends-and-analyses-ctta-volume-10-issue-06/#.WyDPZBIzZTZ
European Eye on Radicalization	https://eeradicalization.com
Eye on ISIS in Libya	https://eyeonisisinlibya.com
German Institute on Radicalization and De-radicalization Studies	http://girds.org
German Jihad	https://germanjihad.wordpress.com
Global Counterterrorism Forum	https://www.thegctf.org
The Global Muslin Brotherhood Daily Watch	https://www.globalmbwatch.com

Global Terrorism Database	https://www.start.umd.edu/gtd
Global Terrorism Research Project	http://gtrp.haverford.edu
GW Program on Extremism	https://extremism.gwu.edu
The Handa Centre for the Study of Terrorism and Political Violence	https://cstpv.wp.st-andrews.ac.uk
IDC HERZLIYA	http://www.ict.org.il
International Center for Counter-terrorism	https://icct.nl
The International Centre for the Study of Radicalisation	https://icsr.info
The International Center for the Study of Violent Extremism	https://www.icsve.org
The Investigative Project on Terrorism	http://www.investigativeproject.org
ISIS Liveumap	https://isis.liveuamap.com
Jih@d	https://ojihad.wordpress.com
Jihadica	http://www.jihadica.com
Jihadi Document Repository	https://www.hf.uio.no/ikos/english/research/jihadi-document-repository/index.html
Jihad Intel	https://jihadintel.meforum.org
Jihadist Foreign Fighters Monitor	https://dwh.hcss.nl/apps/ftf_monitor
Jihadology	https://jihadology.net
Mapping Militants	https://cisac.fsi.stanford.edu/mappingmilitants
MEMRI	https://www.memri.org
National Consortium for the Study of Terrorism and Responses to Terrorism	https://start.umd.edu
Online Jihad	https://onlinejihad.net
Profiles of Individual Radicalization in the United States	http://www.start.umd.edu/data-tools/profiles-individual-radicalization-united-states-pirus
Radical Hypotheses	https://radical.hypotheses.org
Radicalization Research	https://www.radicalisationresearch.org

B453

RAND National Security and Terrorism	https://www.rand.org/topics/national-security-and-terrorism.html
RAND Counterterrorism	https://www.rand.org/topics/counterterrorism.html
Society for Terrorism Research	https://www.societyforterrorismresearch.org
South Asia Terrorism Portal	http://www.satp.org
Southeast Asia Regional Centre for Counter-Terrorism	https://www.searcct.gov.my
SPLC Hate Map	https://www.splcenter.org/hate-map
START Terrorism Databases and Resources	http://www.start.umd.edu/topics/terrorism-databases-and-resources
Teaching about Terrorism	http://www.teachingterror.com
Terrorism Analysts	http://www.terrorismanalysts.com
Terrorism and Political Violence Association	http://tapva.leeds.ac.uk
Terrorism & Political Violence Risk Map	https://www.riskadvisory.com/campaigns/terrorism-political-violence-risk-map-2018
Terrorist Attacks Map	https://storymaps.arcgis.com/stories/dcbb5c9e009442b99944bd1ef6158bda
Terror_Monitor	https://twitter.com/Terror_Monitor
Tracking Terrorism	https://www.trackingterrorism.org
Triangle Center on Terrorism and Homeland Security	https://sites.duke.edu/tcths
UN Office of Counter-Terrorism	https://www.un.org/counterterrorism
UN Research Counter-terrorism	http://research.un.org/en/counter-terrorism
UN Security Council Counter-Terrorism Committee	https://www.un.org/sc/ctc

Researching Crime

Tool	Link
Australian Institute of Criminology	https://www.aic.gov.au
City Protect	https://cityprotect.com
Crime Data Explorer	https://crime-data-explorer.fr.cloud.gov
Data.Police.UK	https://data.police.uk
The European Institute for Crime Prevention and Control	https://www.heuni.fi
Europol	https://www.europol.europa.eu
Europol Most Wanted	https://eumostwanted.eu
Eurostat Crime Statistics	https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Crime_statistics
FBI Most Wanted	https://www.fbi.gov/wanted
Hate Crime	https://hatecrime.osce.org
Havoscope Black Market	https://havocscope.com
ICC Commercial Crime Services	https://www.icc-ccs.org
Insight Crime	https://www.insightcrime.org
Institute for International Research on Criminal Policy	https://ircp.ugent.be
International Anticounterfeiting Coalition	https://www.iacc.org
International Crimes Database	http://www.internationalcrimesdatabase.org
Interpol	https://www.interpol.int
Interpol Red Notices	https://www.interpol.int/en/How-we-work/Notices/View-Red-Notices

Law Enforcement Most Wanted	https://mrwatchlist.com/watchlists/law-enforcements-most-wanted
Numbeo: Crime	https://www.numbeo.com/crime
Office for National Statistics Guide to Finding Crime Statistics	https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/methodologies/guidetofindingcrimestatisticsoct2016
Organised Crime and Corruption Reporting Project	https://www.occrp.org
RUSI: Organised Crime and Policing	https://rusi.org/expertise/research/organised-crime-and-policing
SPLC Hate Map	https://www.splcenter.org/hate-map
The Terrorism, Transnational Crime and Corruption Center	http://tracccarchive.gmu.edu
The United States Department of Justice	https://www.justice.gov
United Nations Interregional Crime and Justice Research Institute	http://www.unicri.it
UNODC	http://www.unodc.org
UNODC Data	https://dataunodc.un.org

B456

Researching Drug Trade

Tool	Link
Commonly Used Drugs Charts	https://www.drugabuse.gov/drug-topics/commonly-used-drugs-charts
Drug Policy	https://www.drugpolicy.org
International Narcotics Control Board	http://www.incb.org
RAND: Illegal Drug Trade	https://www.rand.org/topics/illegal-drug-trade.html
Street Drugs	https://streetdrugs.org
UNODC Data	https://dataunodc.un.org

B457

Researching Money Laundering and Corruption

Tool	Link
Anti-Money Laundering Forum	https://www.anti-moneylaundering.org
Association of Certified Financial Crime Specialists	https://www.acfcs.org
The European Anti-Fraud Office	https://ec.europa.eu/anti-fraud
FATF	http://www.fatf-gafi.org
Fincen	https://www.fincen.gov
Fraud Magazine	https://www.fraud-magazine.com
International Money Laundering Information Network	http://www.imolin.org
Money Laundering Bulletin	https://www.moneylaunderingbulletin.com
MoneyLaundering.com	https://www.moneylaundering.com
Money Laundering Watch	https://www.moneylaunderingnews.com
Money Task Force	https://www.moneytaskforce.com
Organised Crime and Corruption Reporting Project	https://www.occrp.org
Transparency International	https://www.transparency.org
UNODC's Action against Corruption and Economic Crime	https://www.unodc.org/unodc/en/corruption/index.html

Researching Human Trafficking

Tool	Link
Allies Against Slavery	http://www.alliesagainstslavery.org
ASTRA Anti-Trafficking Action	https://www.astra.rs
Arc of Hope for Children	https://arkofhopeforchildren.org/child-trafficking/child-trafficking-statistics
Caritas	https://www.caritas.org/what-we-do/migration/human-trafficking
Commission on Security and Cooperation in Europe	https://www.csce.gov/issue/human-trafficking
Counter-Trafficking Data Collaborative (CTDC)	https://www.ctdatacollaborative.org
Department of Homeland Security Blue Campaign	https://www.dhs.gov/blue-campaign/share-resources
ECPAT	http://www.ecpat.org
Eastern Shore Human Trafficking Task Force	http://eshttf.org
End Slavery Now	http://www.endslaverynow.org
Erase Child Trafficking	https://www.erasechildtrafficking.org
Ethics & religious Liberty Commission Human Trafficking Index	https://erlc.com/resource-library/topic-index/human-trafficking
European Commission	http://ec.europa.eu/anti-trafficking
European Court of Auditors Special Report	http://publications.europa.eu/webpub/eca/special-reports/human-trafficking-09-2017/en
European Freedom Network	http://www.europeanfreedomnetwork.org/resources
Europol Trafficking in Human Beings	https://www.europol.europa.eu/crime-areas-and-trends/crime-areas/trafficking-in-human-beings
Force 4 Compassion	http://www.f-4-c.org
Free the Slaves	https://www.freetheslaves.net

B459

Global Centurion	https://www.globalcenturion.org
Global Incident Map	http://human.globalincidentmap.com
Global Modern Slavery Directory	http://www.globalmodernslavery.org
Global Slavery Index	https://www.globalslaveryindex.org
Human Trafficking Center	http://humantraffickingcenter.org
Human Trafficking Flow Map	http://dataviz.du.edu/projects/htc/flow
Human Trafficking Search	http://humantraffickingsearch.org
Human Rights First	https://www.humanrightsfirst.org
International Human Trafficking Task Force	http://www.ihttf.com
International Labour Organization	http://www.ilo.org/global/topics/forced-labour/lang--en/index.htm
International Labor Rights Forum	https://www.laborrights.org
Interpol Human Trafficking	https://www.interpol.int/en/Crimes/Human-trafficking
Kalamazoo Anti-Human Trafficking Coalition	http://www.kahtc.org
Laboratory to Combat Human Trafficking	https://combathumantrafficking.org/category/research-resources
La Strada International	http://lastradainternational.org
Ludwig Boltzmann Institute: Human Rights	http://bim.lbg.ac.at/en/trafficking-human-beings
Maryland Human Trafficking Task Force	http://www.mdhumantrafficking.org
MTV Staying Alive	http://www.mtvstayingalive.org
National Human Trafficking Hotline	https://humantraffickinghotline.org
National Runaway Safeline	https://www.1800runaway.org
Nordic Council of Ministers' Office in Estonia	https://www.norden.ee/en/welfare-society/fight-against-human-trafficking
Not for Sale Campaign	https://www.notforsalecampaign.org
Office on Trafficking in Persons	https://www.acf.hhs.gov/otip
Ohio Human Trafficking Task Force	http://humantrafficking.ohio.gov
Polaris Project	https://polarisproject.org/human-trafficking
Ref World	http://www.refworld.org/cgi-bin/texis/vtx/rwmain

Shared Hope International	https://sharedhope.org/the-problem
Statista	https://www.statista.com/topics/4238/human-trafficking
Stop the Traffik	https://www.stopthetraffik.org/about-human-trafficking/the-scale-of-human-trafficking
South Carolina Human Trafficking Task Force	http://humantrafficking.scag.gov/data-reports
Thorn Child Trafficking Statistics	https://www.thorn.org/child-trafficking-statistics
USAID	https://www.usaid.gov/trafficking
US Department of Defense Combating Trafficking in Persons	http://ctip.defense.gov
US Department of Justice Child Exploitation and Obscenity Section	https://www.justice.gov/criminal-ceos
US Department of State Office to Monitor and Combat Trafficking in Persons	https://www.state.gov/bureaus-offices/under-secretary-for-civilian-security-democracy-and-human-rights/office-to-monitor-and-combat-trafficking-in-persons
VAW net	https://vawnet.org/sc/human-trafficking

Requests for User Information: Information for Law Enforcement

Tool	Link
Facebook	https://www.facebook.com/safety/groups/law/guidelines
Google	https://support.google.com/transparencyreport/answer/9713961?visit_id=637339610252039057-2457678033&rd=1
Instagram	https://help.instagram.com/494561080557017
Microsoft	https://info.publicintelligence.net/MSN-Compliance.pdf
Pinterest	https://help.pinterest.com/en/article/law-enforcement-guidelines
Search.org ISP List	https://www.search.org/resources/isp-list
Snapchat	https://storage.googleapis.com/snap-inc/privacy/lawenforcement.pdf
Twitter	https://help.twitter.com/en/rules-and-policies/twitter-law-enforcement-support#
WeChat	https://www.wechat.com/en/law_enforcement_data_request.html

Researching Cybersecurity

Tool	Link
BlackHat	http://www.blackhat.com
Center for Internet Security	https://www.cisecurity.org
CNET Security	https://www.cnet.com/topics/security
Common Weakness Enumeration	http://cwe.mitre.org
CSO Online	https://www.csoonline.com
CVE Details	https://www.cvedetails.com
CVE MITRE	http://cve.mitre.org
Dark Reading	https://www.darkreading.com
DShield	https://dshield.org
Exploit Database	https://www.exploit-db.com
HelpNetSecurity	https://www.helpnetsecurity.com
Information Systems Security Association International	https://issa.site-ym.com
Infosec Island	http://www.infosecisland.com
Infosecurity Magazine	https://www.infosecurity-magazine.com
Krebs On Security	https://krebsonsecurity.com
Linux Security	http://www.linuxsecurity.com
McAfee Labs	https://www.mcafee.com/enterprise/en-us/threat-center/mcafee-labs.html
Microsoft Secure	https://www.microsoft.com/en-us/security/default.aspx
Mozilla Security Blogs	https://blog.mozilla.org/security
Naked Security	https://nakedsecurity.sophos.com
Network World Security	https://www.networkworld.com/category/security
NIST	https://csrc.nist.gov

Packet Storm Security	https://packetstormsecurity.com
SANS	https://www.sans.org
SCMagazine	https://www.scmagazine.com
SecuriTeam	http://www.securiteam.com
Security Focus	https://www.securityfocus.com
Security Intelligence	https://securityintelligence.com
Security Mailing List Archive	http://seclists.org
Security Tube	http://www.securitytube.net
Security Week	https://www.securityweek.com
Security Wizardry Radar	http://www.securitywizardry.com/radar.htm
Stay Safe Online	https://staysafeonline.org/resources
Stop Think Connect	https://stopthinkconnect.org
Talos Intelligence	https://www.talosintelligence.com
Threatpost	https://threatpost.com
Tripwire State of Security	https://www.tripwire.com/state-of-security
US-CERT	https://www.us-cert.gov

Military Research

Tool	Link
Air Force Technology	https://www.airforce-technology.com
All Badges	https://allbadges.net
Arms Control Wonk	https://www.armscontrolwonk.com
Army Recognition	https://armyrecognition.com
Army Technology	https://www.army-technology.com
Asia-Pacific Defence Reporter	https://asiapacificdefencereporter.com
Breaking Defense	https://breakingdefense.com
Calibre Obscura	https://www.calibreobscura.com
Camopedia	http://camopedia.org
Deagel	https://www.deagel.com
Defence Aviation Post	https://www.defenceaviationpost.com
Defence Connect	https://www.defenceconnect.com.au
Defence Online	https://www.defenceonline.co.uk
Defence Review Asia	https://defencereviewasia.com
Defence Talk	https://www.defencetalk.com
Defense Aerospace	https://www.defense-aerospace.com
Defense Daily	https://www.defensedaily.com
Defense Industry Daily	https://www.defenseindustrydaily.com
Defense News	https://www.defensenews.com
Defense News India	https://www.defencenews.in
Defense One	https://www.defenseone.com
The Defense Post	https://www.thedefensepost.com
Defense Update	https://defense-update.com
Defense World	https://www.defenseworld.net

Federation of American Scientists	https://fas.org
Free Military Public Records	https://www.blackbookonline.info/Military.aspx
Global Firepower	https://www.globalfirepower.com
GlobalSecurity	http://www.globalsecurity.org
Indian Defense News	http://www.indiandefensenews.in
Inside Defence	https://insidedefense.com
Janes	https://www.janes.com
Military.com	https://www.military.com
Military Factory	https://www.militaryfactory.com
Military Sites	https://www.brbpublications.com/freeresources/pubrecsitesSearch.aspx?Type=9
Naval Technology	https://www.naval-technology.com
Real Clear Defense News	https://www.realcleardefense.com
RUSI	https://rusi.org
SIPRI Arms Embargoes	https://www.sipri.org/databases/embargoes
SIPRI Trade Registers	http://armstrade.sipri.org/armstrade/page/trade_register.php
Small Arms Survey Weapons ID Database	http://www.smallarmssurvey.org/weapons-and-markets/tools/weapons-id-database.html
Tank Encyclopedia	https://tanks-encyclopedia.com

B466

Crisis Alerts and Travel Advisory

Tool	Link
ACLED Conflict Data	https://acleddata.com/#/dashboard
ACT: Incident Map (Australia)	https://esa.act.gov.au/?fullmap=true
Emergency and Disaster Information Service	http://hisz.rsoe.hu
Federal Foreign Office: Current Travel Warnings	https://www.auswaertiges-amt.de/de/ReiseUndSicherheit/10.2.8Reisewarnungen
Global Incident Map: Threat Matrix	http://www.globalincidentmap.com/threatmatrix.php
GOV.UK: Foreign Travel Advice	https://www.gov.uk/foreign-travel-advice
Liveuamap	https://liveuamap.com
Numbeo: Crime	https://www.numbeo.com/crime
SamDesk: Real-Time Crisis Alerts	https://www.samdesk.io
US State Department: Countries & Areas	https://www.state.gov/countries-areas
US State Department: Travel Advisory Map	https://travelmaps.state.gov/TSGMap
Water, Peace, Security Warning Map	https://waterpeacesecurity.org/map
World of Map of Encryption Laws and Policies	https://www.gp-digital.org/world-map-of-encryption

B467

Researching Stolen Items

Researching Stolen Items

Tool	Link
Art Loss	http://www.artloss.com
BBB Scam Tracker	https://www.bbb.org/scamtracker/us/
Canadian Police Stolen Property Search	http://www.cpic-cipc.ca/index-eng.htm
Comerica Fraud Center	https://www.comerica.com/fraud-center/report-fraud/lost-stolen-cards-checks.html
Culture Crime News	http://news.culturecrime.org
Find Stolen Art	http://www.findstolenart.com/Search.asp?sr=0
Gumtree Lost & Found	https://www.gumtree.com/lost-found-stuff/uk/stolen
HotGunz	http://www.hotgunz.com
I Am Stolen	http://www.iamstolen.com
Immobilise: The UK National Property Register	https://www.immobilise.com
International Council of Museums: Red Lists	http://icom.museum/en/resources/red-lists
Interpol Works of Art Database	https://www.interpol.int/en/How-we-work/Databases/Stolen-Works-of-Art-Database
It's BEEN NICKED	http://www.itsbeennicked.co.uk
Prey Project	https://www.preyproject.com
Recipero	https://www.recipero.com
Scrap Theft Alert	https://www.scraptheftalert.com/Home/Home.aspx
Securius	https://www.securius.eu/de/datenbank
Stolen Boats (UK)	http://www.stolenboats.org.uk

B468

Stolen Caravan, Motorhome and Trailer Tent Database	http://www.ukcampsite.co.uk/articles/view.asp?id=108
Stolen Property	http://www.stolen-property.com
Stolen Register	http://www.stolenregister.com/search
Stolen 911 (US)	https://stolen911.com
The Watch Register	http://www.thewatchregister.com
World Museum Community Red Lists Database	https://icom.museum/en/resources/red-lists

Transportation

Airplanes, Airports and Flight Trackers

Tool	Link
ADS-B Exchange	https://www.adsbexchange.com
Airfleets.net	https://www.airfleets.net
Airframes	http://www.airframes.org
Air LIVE	https://www.airlive.net
Airmap	https://developers.airmap.com l
	https://app.airmap.io
Airnav	http://www.airnav.com/airports
Airline Codes	http://www.airlinecodes.co.uk
Airliners	http://www.airliners.net
Airlines Codes	http://www.airlinecodes.co.uk/aptcodesearch.asp
Airport Data	https://www.airport-data.com
Airport Webcams	http://airportwebcams.net
Australian Civil Aviation Safety Authority	https://www.casa.gov.au
Aviation Edge	https://aviation-edge.com/airport-database-api
Avaiation Herald	https://www.avherald.com
Aviation Safety	https://aviation-safety.net
Black Book Online: Free Aviation Public Records	https://www.blackbookonline.info/Aviation-Public-Records.aspx
Bridgenet Volans Live Display	http://volans.airportnetwork.com/js3d/volanspublicsfo.html
CAA (UK)	http://www.caa.co.uk

Canadian Civil Aircraft Register	http://wwwapps.tc.gc.ca/saf-sec-sur/2/ccarcs-riacc/RchSimp.aspx
Casper Flights	http://casperflights.com
Donner Radar	http://www.donnyradar.co.uk
The EU Air Safety List	https://ec.europa.eu/transport/modes/air/safety/air-ban_en
FlyAriana (Afghanistan)	http://www.flyariana.com
Flight Arrivals	http://www.flightarrivals.com
FlightAware (UK)	https://uk.flightaware.com
FlightAware (US)	https://flightaware.com
FlightConnections	https://www.flightconnections.com
Flying in Ireland	https://www.flyinginireland.com
Flightradar24	https://www.flightradar24.com
Flight Radar (EU)	https://www.flight-radar.eu
Flight Radar Live	https://flightradar.live/en/flight-tracker
Flight Stats	https://www.flightstats.com
Flightwise	http://flightwise.com
FlightView	https://www.flightview.com
Freedar	https://radar.freedar.uk/VirtualRadar/desktop.html
G-INFO	https://siteapps.caa.co.uk/g-info
GVA Dictator Alert	https://github.com/lefranz/geneva-dictators
Havocscope	https://www.havocscope.com/tag/counterfeit-aircraft-parts
Helicopter Database	https://www.helis.com/database
Humberside Airport	https://www.humbersideairport.com/live-flight-information
JetPhotos	https://www.jetphotos.com
Landings.com	http://www.landings.com
List of Aircraft Registration Prefixes	https://en.wikipedia.org/wiki/List_of_aircraft_registration_prefixes
List of Passenger Airlines	https://en.wikipedia.org/wiki/List_of_passenger_airlines#List_of_passenger_airlines
LiveATC	https://www.liveatc.net
Open Flights	https://openflights.org/data.html
OpenSky Network	https://opensky-network.org
Open Street Cam	https://www.openstreetcam.org/map

Over the North East	http://www.otne.co.uk/eta
PlaneFinder	https://planefinder.net
Plane Logger	https://www.planelogger.com
Plane Spotters	https://www.planespotters.net
Plan Talking	https://www.nats.aero/discover/plane-talking
Programmable Web Transportation APIs	https://www.programmableweb.com/category/transportation/api
RadarBox	https://www.radarbox.com
Radar Virtuel	http://www.radarvirtuel.com
Scramble	https://www.scramble.nl
Search Airfields	http://www.pilotweb.aero/airfields/search-airfields
Seatguru	https://www.seatguru.com
Stack Exchange Aviation Forum	https://aviation.stackexchange.com
Tracked Aircraft	http://www.planelogger.com/Aircraft
360 Radar	https://360radar.co.uk

Drones

Tool	Link
Airdata UAV	https://airdata.com
Australian Government Civil Aviation Safety Authority	https://www.casa.gov.au/aircraft/landing-page/flying-drones-australia
Aviation Safety Network	https://aviation-safety.net/database/issue/drones.php
Bard College Center for the Study of the Drone	http://dronecenter.bard.edu/the-drone-database
dronestagram	http://www.dronestagr.am
Drone Regulations	https://www.droneregulations.info
Drone Research Lab	http://droneresearchlab.com
Drone Wars UK	https://dronewars.net/drone-crash-database
DroneZon	https://www.dronezon.com
Event38	https://event38.com
FAA Airmen Inquiry	https://amsrvs.registry.faa.gov/airmeninquiry/main.aspx
FAA Drone Registration Location Data	https://www.faa.gov/news/updates/?newsId=85548
FAA UAS Data on a Map	https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad
Glide Tracker	https://glidertracker.org
Global Drone Regulations Database	https://droneregulations.info
Pilot Web	https://www.pilotweb.aero
RAND Unmanned Aerial Vehicles	https://www.rand.org/topics/unmanned-aerial-vehicles.html
Skyward	https://community.skyward.io
The Conversation: Drones	http://theconversation.com/us/topics/drones-2513
The Drone Database	http://drones.cnas.org/drones

B473

Travel by Drone	http://travelbydrone.com
Travel with Drone	https://travelwithdrone.com
UAS Vision	https://www.uasvision.com/about
UAViators Humanitarian UAV Network	http://uaviators.org
United States Association Unmanned Aerial Videography	https://uavus.org
Unmanned Aerial Online	https://unmanned-aerial.com

B474

Cars

Tool	Link
askMID (UK)	https://ownvehicle.askmid.com
AutoCheck (US)	https://www.autocheck.com/vehiclehistory/?siteID=0
AutoDNA	https://www.autodna.com
AutoTrader (RU) Vehicle Registration Codes	https://autotraveler.ru/en/spravka/vehicle-registration-codes-in-the-world.html#.Wsz3O4jwY2w
Autowini	https://www.autowini.com
Big Rig VIN	http://bigrigvin.com
Car Detective	https://www.cardetective.com/vin-decoder
CarFax (US)	https://www.carfax.com
Car Tax Check (UK)	https://cartaxcheck.co.uk
Check That VIN	https://checkthatvin.com
FaxVIN	https://www.faxvin.com/vin-check
Federal-Mogul Motorparts Finder	https://store.drivparts.com/fmstorefront
GOV.UK Check MOT History	https://www.gov.uk/check-mot-history
GOV.UK Vehicle Inquiry	https://vehicleenquiry.service.gov.uk
Honda Recall Lookup	https://owners.honda.com/service-maintenance/recalls
How Many Left (UK)	https://www.howmanyleft.co.uk
_IntelligenceX: VIN	https://intelx.io/tools?tab=vin
Kelley Blue Book	https://www.kbb.com/vehicle-history-report
License Plate Mania	http://www.licenseplatemania.com
MOT Checker (UK)	https://www.ismycar.co.uk/mot-checker
Motor Insurance Database (UK)	https://ownvehicle.askmid.com

National Highway Traffic Safety Administration (US)	https://vinrcl.safercar.gov/vin
National Motor Vehicle Title Information System (US)	https://www.vehiclehistory.gov
Nomerogram (RU)	https://www.nomerogram.ru
Poctra (UK / EU)	https://poctra.com
Saskatchewan VIN search (CA)	https://www.sgi.sk.ca/vin
Vehicle Documents	http://www.vehicle-documents.it
Vehicle History (US)	https://www.vehiclehistory.com
Vehicle Identification Number	https://vehicleidentificationnumber.com
VINCheck	https://www.nicb.org/vincheck
VINCheck.info	http://vincheck.info
VIN decoder	https://www.vindecoderz.com
VINFree Check	https://www.vinfreecheck.com
Vin-info	https://uk.vin-info.com
World License Plates	http://worldlicenseplates.com

Railways

Tool	Link
ACW Railway (US)	http://www.acwr.com/economic-development/rail-maps
Association of American Railroads	https://www.aar.org
Association for Open Data of Public Transportation Secretariat Office (Japan)	http://airport.odpt.org/index-e.html
British Columbia Data Catalogue	https://catalogue.data.gov.bc.ca/dataset/railway-track-line
Data.gov (India)	https://data.gov.in/sector/railways
Data.gov (US)	https://catalog.data.gov/dataset?tags=railroad
Data.deutschebahn	http://data.deutschebahn.com/dataset
DB Timetable (Germany)	https://www.bahn.com/en/view/index.shtml
DB Open Data Portal	http://data.deutschebahn.com
DSB (Denmark)	https://www.dsb.dk
Eurail (EU) Participating Railway Companies	https://www.eurail.com/en/get-inspired/trains-europe/useful-train-information/participating-railway-companies
Federal Railroad Administration (US)	https://www.fra.dot.gov/Page/P0001
International Association of Railway Operations	http://www.iaror.org
International Journal of Railway Research	http://ijrare.iust.ac.ir
Interrail Trains Per Country	https://www.interrail.eu/en/plan-your-trip/trains-europe/trains-country

B477

Intermodal Map (EU)	http://www.intermodal-map.com/freie-karte
Keisei Electric Railway Company (Japan)	http://www.keisei.co.jp
Liik Enne Vira Sto (Finland)	https://vayla.fi/web/en/data
Nederlanse Spoorwegen (Netherlands)	https://www.ns.nl
Network Rail (UK)	https://www.networkrail.co.uk/who-we-are/transparency-and-ethics/transparency/open-data-feeds
Odakyu Electric Railway Company (Japan)	https://www.odakyu.jp
Office of Rail and Road (UK)	http://orr.gov.uk/about-orr/corporate-data
Open.Canada	https://open.canada.ca/data/dataset?keywords=railway+networks
Open Data NI	https://www.opendatani.gov.uk/group/transport
Open Data Regina (Canada)	http://open.regina.ca/dataset/railways
Open Data Swiss	https://opendata.swiss/en/organization/schweizerische-bundesbahnen-sbb
Open Data Transport NSW (Australia)	https://opendata.transport.nsw.gov.au/search/type/dataset
Open Railway Map	https://www.openrailwaymap.org
PennDOT Open Data	https://data-pennshare.opendata.arcgis.com
Queensland Government Data	https://data.qld.gov.au/dataset/steam-locomotive-drawings-and-railway-plans
Rail Cam UK	https://railcam.uk
Raildar FR	http://raildar.fr
Rail Delivery Group	https://www.raildeliverygroup.com/our-services/rail-data.html
Rail Net Europe	http://www.rne.eu/downloads
Railway Gazette	http://www.railwaygazette.com
Railway Research	http://www.railway-research.org
Railway Technical Research Institute	http://www.rtri.or.jp/eng

Railway Technology	https://www.railway-technology.com/company-a-z
Rail Webcams	http://railwebcams.net
RealTimeTrains (UK)	https://www.realtimetrains.co.uk
Spoorkaart	http://spoorkaart.mwnn.nl
Tobu Railway Company (Japan)	http://www.tobu.co.jp/corporation
Track Trace Train Radar	https://track-trace.live/trainradar
Trafa Transport Analysis	https://www.trafa.se/en/rail-traffic
Trainline	https://www.thetrainline.com
Train Times	https://traintimes.org.uk
Transport Focus (UK)	https://www.transportfocus.org.uk/research-publications/rail-research/#?modes=4
TRAVIC	https://tracker.geops.ch
UIC (Union Internationale Des Chemins De Fer)	https://uic.org/research
UK Rail Research and Innovation Network	http://www.ukrrin.org.uk
Union Pacific (US)	https://www.up.com/index.htm
US Department of Transportation Railroads	https://www.transportation.gov/railroads
Veridict	https://traze.veridict.com
Welsh Railways Research Circle	http://wrrc.org.uk/research.php
World By Map Railways	https://www.citypopulation.de/en/world/bymap/Railways.html

Public Transport

Tool	Link
Bay Area Rapid Transit	http://www.bart.gov
Bureau of Transportation Statistics	https://www.bts.gov
Department for Transport NaPTAN (UK)	http://naptan.dft.gov.uk/naptan/process.htm
DIVA-GIS	http://www.diva-gis.org/gdata
Geofabrik Open Street Map	http://download.geofabrik.de
Global BRT Data	https://brtdata.org
Global Roads Data	http://www.ciesin.columbia.edu/confluence/display/roads/Global+Roads+Data
Global Mass Transit Report	http://www.globalmasstransit.net/archive.php?id=2181
Google Maps - Transit	https://maps.google.com/landing/transit/index.html
Koordinates	https://koordinates.com
Mapnificent	https://www.mapnificent.net
Mobility Explorer	https://mobility-explorer.interline.io
New York City Department of Transportation	http://www.nyc.gov/html/dot/html/about/datafeeds.shtml
Open Cycle Map	https://www.opencyclemap.org
Open Data City of New York	https://opendata.cityofnewyork.us/data
Open Data Platform Swiss Public Transport	https://opentransportdata.swiss/en/dataset
Open Data Showroom	http://opendata-showroom.org/en/traffic
Open Data Soft - Navitia	https://navitia.opendatasoft.com/explore/?sort=modified
Open Data Soft - Navitia	https://navitia.opendatasoft.com/page/start
Open Data Swiss	https://opendata.swiss/en

Open Data Transport (Australia)	https://opendata.transport.nsw.gov.au/dataset/public-transport-realtime-vehicle-positions
Open Street Map	https://www.openstreetmap.org
Open Street Map Belgium	http://www.osm.be
Open Street Map Lithuania	https://openmap.lt
Open Street Map Public Transport Wiki	https://wiki.openstreetmap.org/wiki/Public_transport
ÖPNVKarte (OpenBusMap)	http://www.openbusmap.org
Organisation for Economic Co-operation and Development	https://data.oecd.org/transport/passenger-transport.htm
PT Map	https://ptmap.plepe.at
Public Transport Information (UK)	http://www.carlberry.co.uk/rfnsearch.asp
Thunderforest Maps	https://www.thunderforest.com/maps
Transitfeeds	http://transitfeeds.com
TransitWiki	https://www.transitwiki.org/TransitWiki/index.php/Publicly-accessible_public_transportation_data
Transport for London Open Data	https://tfl.gov.uk/info-for/open-data-users
Transports Metropolitans de Barcelona	https://www.tmb.cat/es/home
Transport Scotland	https://www.transport.gov.scot/public-transport
Traveline	http://www.traveline.info
TRAVIC	http://tracker.geops.ch
Queensland Government Data General Transit	https://data.qld.gov.au/dataset/general-transit-feed-specification-gtfs-qconnect
UITP	http://www.uitp.org/data-statistics
Vision Zero View NYC	http://www.vzv.nyc/#
WikiRoutes	https://wikiroutes.info
World Bank	http://www.worldbank.org/en/topic/transport

Ships

Tool	Link
AIS Data Exchange Dispatcher	http://www.aishub.net/ais-dispatcher
AIS Tracker (Russia)	http://en.aistracker.ru/map7.asp
Black Book Online: Free Maritime Public Records	https://www.blackbookonline.info/Maritime-Public-Records.aspx
Boat Fax	https://www.boatfax.com
BoatInfoWorld	https://www.boatinfoworld.com
Boat Nerd	http://ais.boatnerd.com
Bottenviken Live AIS	http://ais.sk2hg.se
Coast Guard Vessel Search	https://www.st.nmfs.noaa.gov/coast-guard-vessel-search/index
Cruise Mapper	http://www.cruisemapper.com
Cruise Ship Tracker	http://www.cruisin.me/cruise-ship-tracker
Cruise Ships and Open Liners	https://www.sailwx.info/shiptrack/cruiseships.phtml
Digimap Guernsey	http://www.digimap.gg/marine/ais
Equasis	http://www.equasis.org
FleetMon	https://www.fleetmon.com
Freight Metrics	http://www.freightmetrics.com.au
Gibraltar Ship Registry	http://www.gibraltarship.com
Global Fishing Watch	http://globalfishingwatch.org
Gloucester Harbour Trustees	http://gloucesterharbourtrustees.org.uk/ship-positions-marine-traffic
Helcom AIS	http://maps.helcom.fi/website/AISexplorer
ICC Piracy Map	http://www.icc-ccs.org/piracy-reporting-centre/live-piracy-map
HIS Markit AIS Live	https://maritime.ihs.com/Account2/Index
Infomarine	http://www.infomarine24.com

B482

International Registries Inc.	https://www.register-iri.com
Krooz Cams	http://www.kroooz-cams.com
Landsort AIS	http://www.landsort-ais.se/aism.html
Live Cruise Ship Tracker	https://www.livecruiseshiptracker.com
Live Cruise Ship Tracker	http://www.thecruisevillage.com/live-cruise-ship-tracker.phtml
Lloyd's List Intelligence	https://www.lloydslistintelligence.com
Maritime Connector	http://maritime-connector.com
Marine Cadastre	https://marinecadastre.gov/ais
Maritime Database	https://www.maritime-database.com
Marine Scotland	http://marine.gov.scot/information/ais-shipping-traffic-selected-ports
MarineTraffic	https://www.marinetraffic.com
MarineTraffic	http://www.marinetraffic.org
My Ship Tracking	https://www.myshiptracking.com
NOAA Fisheries	https://foss.nmfs.noaa.gov
Naxos Island	http://www.naxosisland.eu/live_ship_data.html
Open Sea Map	http://map.openseamap.org
Open Sea Map	http://www.openseamap.org
Pocket Mariner	http://pocketmariner.com
Ports	http://ports.com
Rathlin Weather AIS (United Kingdom)	http://www.rathlinweather.co.uk/AIS
Sandkilen-Helmi AIS	http://www.helmi.se/en/tours-events/ais-live-trace-7227149
Sandy Bay Yacht Club	http://www.sandybay.org/AIS.shtml
SCCOOS (United States)	http://sccoos.org
ShipAIS	http://www.shipais.com
Ship Finder	http://shipfinder.co
Ship Finder	http://www.shipfinder.com
Shipping Explorer	http://www.shippingexplorer.net
ShipSpotting	http://www.shipspotting.com
Skunk Tracker	https://www.mobilegeographics.com/skunktracker
SuperYachts	https://www.superyachts.com

TankerTrackers	https://tankertrackers.com
Trewillis.co.uk	http://www.trewillis.co.uk
Vessel Finder	https://www.vesselfinder.com
Vessel Tracker	https://www.vesseltracker.com
World Map	https://worldmap.harvard.edu/maps/2892
World Port Index	https://msi.nga.mil/NGAPortal/MSI.portal?_nfpb=true&_pageLabel=msi_portal_page_62&pubCode=0015
World Shipping Register	http://eships.net

Container and Cargo Tracking

Tool	Link
Air Cargo Tracking	http://cargotracking.utopiax.org
BIC Code	https://www.bic-code.org
Cargo Loop	http://www.cargoloop.com
Cargo Tracking Utopiax	http://cargotracking.utopiax.org/containertracking.html
Container Check Digit Calculator	https://container.checkdigit.info
Container Tracking	http://container-tracking.org
ESA Package and Container Tracking	https://gssc.esa.int/navipedia//index.php/Package_and_Container_Tracking
FleetMon	https://www.fleetmon.com/services/container-tracker/search
ImportGenius	https://www.importgenius.com
Locus Traxx Worldwide	http://www.locustraxx.com
Maersk Tracking	https://www.maersk.com/tracking/#tracking
Panjiva Search	https://panjiva.com/search
PIERS	https://ihsmarkit.com/products/piers.html
Prefix List Codes	https://www.prefixlist.com/codes.html
Searates	https://www.searates.com/container/tracking
Shipit Container Tracking	https://www.shipit.co.uk/container-tracking.htm
ShipmentLink Cargo Tracking	https://www.shipmentlink.com/servlet/TDB1_CargoTracking.do
Track-trace	http://www.track-trace.com

Web Intelligence

Researching Domains

Tool	Link
Access Check	https://accesscheck.thenetmonitor.org
AFRINIC	https://www.afrinic.net
APNIC	https://www.apnic.net
ARIN	https://www.arin.net
Aware Online: Website Search Tool	https://www.aware-online.com/osint-tools/website-search-tool
Better Whois	http://www.betterwhois.com
Central Ops	http://centralops.net
Complete DNS	https://completedns.com
Daily Changes	http://dailychanges.domaintools.com
Danger Zone	https://github.com/woj-ciech/Danger-zone
Da.whois	https://dawhois.com
Dedicated or Not	http://dedicatedornot.com
Denic web whois	https://www.denic.de/webwhois
DNSDumpster	https://dnsdumpster.com
DNS History	http://dnshistory.org
DNS Lookup	https://dnslookup.online
DNSlytics	https://dnslytics.com
dnspop	https://github.com/bitquark/dnspop
DNS Queries	https://www.dnsqueries.com
dnsrecon	https://github.com/darkoperator/dnsrecon
DNS Root Instances	https://atlas.ripe.net/results/maps/root-instances
DNSSec Analyzer	https://dnssec-analyzer.verisignlabs.com
DNS Spy	https://dnsspy.io

DNSStuff	http://www.dnsstuff.com
DNSTools	http://www.dnstools.ch
DNS Trails	http://dnstrails.com
DNS Trails	https://securitytrails.com/dns-trails
dnstwist	https://github.com/elceef/dnstwist
dnstwist	https://dnstwist.it
dnstwister	https://dnstwister.report
DNSViz	http://dnsviz.net
Domain Big Data	http://domainbigdata.com
Domain Crawler	http://www.domaincrawler.com
Domain Dossier	http://centralops.net/co/DomainDossier.aspx
Domain Eye	https://domaineye.com
DomainIQ	https://www.domainiq.com
Domain SDB	https://domainsdb.info
Domain To IP Converter	http://domaintoipconverter.com
Domain Tools	https://www.domaintools.com
Domain Tools	http://whois.domaintools.com
DomEye	https://xaviesteve.com/domeye
downdetector	http://downdetector.com
downforeveryoneorjustme	http://downforeveryoneorjustme.com
DNS Checker	https://dnschecker.org
DShield API	https://isc.sans.edu/api
EasyCounter WHois	https://whois.easycounter.com
Easy whois	https://www.easywhois.com
Educause Whois Lookup	https://net.educause.edu/whois.htm
EURid	https://eurid.eu
Fierce-domain-scanner	https://github.com/davidpepper/fierce-domain-scanner
Gaijin.at	https://www.gaijin.at/en/tools
gdns	https://github.com/hrbrmstr/gdns
Geektools	http://www.geektools.com/whois.php
GeoPeeker	https://geopeeker.com
GoDaddy WHois	https://ca.godaddy.com/whois

GooHak	https://github.com/1N3/Goohak
GraphyStories	http://app.graphystories.com
GSuite Toolbox Check MX	https://toolbox.googleapps.com/apps/checkmx
GSuite Toolbox Dig (DNSS Lookup)	https://toolbox.googleapps.com/apps/dig
HackerTarget	https://hackertarget.com/ip-tools
Hexillion	http://hexillion.com
Hold Integrity IDN Checker	https://holdintegrity.com/checker
IANA	https://www.iana.org
Icann Lookup	https://lookup.icann.org
InfoBylp (Bulk Domain & IP Lookup	https://www.infobyip.com/ipbulklookup.php
_IntelligenceX: Domain	https://intelx.io/tools?tab=domain
intoDNS	http://www.intodns.com
InterNIC Whois	http://www.internic.net/whois.html
iwantmyname	https://iwantmyname.com
knockknock	https://github.com/harleo/knockknock
Kloth	http://www.kloth.net/services
LACNIC	http://www.lacnic.net
Lookup ICANN	https://lookup.icann.org
Maltego	https://www.paterva.com/web7
mnemonic	https://passivedns.mnemonic.no
MXToolbox	https://mxtoolbox.com
Netbootcamp Website Investigator	http://netbootcamp.org/websitetool.html
Network Solutions Whois	https://www.networksolutions.com/whois
Network Tools	http://network-tools.com
NS.Tools	https://ns.tools
Onyphe	https://www.onyphe.io
OpenData Rapid7	https://opendata.rapid7.com
The Prefix Whois Project	https://pwhois.org
PTRArchive	http://ptrarchive.com
Purplepee.com	https://purplepee.co
RedirectDetective	http://redirectdetective.com
Reverse IP to Domain Lookup	http://www.ipfingerprints.com/reverseip.php

RIPE NCC	https://www.ripe.net
Robtex	https://www.robtex.com
SecurityTrails	https://securitytrails.com
Shodan	https://www.shodan.io
SIDN	https://www.sidn.nl
SpyOnWeb	http://spyonweb.com
Spyse_	https://spyse.com
Sucuri Free Website and Malware Scanner	https://sitecheck.sucuri.net
Symantec WebPulse Site Review Request	https://sitereview.bluecoat.com
SynapsInt	https://synapsint.com
Tucows Domains	https://www.tucowsdomains.com
urlscan	https://urlscan.io
Utrace	http://en.utrace.de
Verisign	http://dnssec-debugger.verisignlabs.com
ViewDNS	http://viewdns.info
W3bin.com	https://w3bin.com
W3dt	https://w3dt.net
w3snoop	http://webboar.com.w3snoop.com
Whatsmydns.net	https://www.whatsmydns.net
Who.is	https://who.is
Whois	https://www.whois.com
Whois Amped	https://whoisamped.com
Whois Arin Online	https://whois.arin.net
WhoIsHostingThis	http://www.whoishostingthis.com
WHOis.net	https://whois.net
Whoisology	https://whoisology.com
WhoIsRequest	http://whoisrequest.com
Whois.Search	https://whois-search.com
WhoisXMLAPI	https://www.whoisxmlapi.com

Whoxy	https://www.whoxy.com
You Get Signal	http://www.yougetsignal.com

IP / IPv6

Tool	Link
Angry IP Scanner	http://angryip.org
At Same IP	http://atsameip.intercode.ca
BGP HE	https://bgp.he.net
BGP view	https://bgpview.io
BotScout	https://botscout.com/search.htm
Check-Host	https://check-host.net
CloudFail	https://github.com/m0rtem/CloudFail
Country Flags & IP Whois	https://addons.mozilla.org/en-US/firefox/addon/country-flags-ip-whois/?src=search
CQCounter	http://cqcounter.com/whois
Cymru IP to ASN Lookup	https://asn.cymru.com
Danger Zone	https://github.com/woj-ciech/Danger-zone
DB-IP	https://db-ip.com
DShield API	https://isc.sans.edu/api
Exfiltrated	http://www.exfiltrated.com/querystart.php
Exonera Tor	https://exonerator.torproject.org
Fav-up	https://github.com/pielco11/fav-up
Free IP Geolocation API	https://freegeoip.app
Geo IP Tool	https://geoiptool.com
GeoLite2	https://dev.maxmind.com/geoip/geoip2/geolite2
gobuster	https://github.com/OJ/gobuster
HackerTarget	https://hackertarget.com/ip-tools
HostHunter	https://github.com/SpiderLabs/HostHunter
ifconfig	https://ifconfig.me

B491

IKnowWhatYouDownload	https://iknowwhatyoudownload.com/en/peer/?ip=198.8.80.192
InfoBylp (Bulk Domain & IP Lookup)	https://www.infobyip.com/ipbulklookup.php
Infosniper	http://www.infosniper.net
_IntelligenceX: GeoIP	https://intelx.io/tools?tab=geoip
_IntelligenceX: IP Lookup	https://intelx.io/tools?tab=ip
IP 2 Geolocation	http://ip2geolocation.com
IP 2 Location	https://www.ip2location.com
Ip Address	https://www.ip-adress.com
IP Address	https://www.ip-address.org
IP Address Guide	https://www.ipaddressguide.com
IP Address Location	http://www.ipaddresslocation.org
IP Analyzer	https://ipalyzer.com
Ipapi	https://ipapi.co
Ipapi Bulk IP Address Lookup	https://app.ipapi.co/bulk
IP Checking	http://www.ipchecking.com
IP Chicken	http://www.ipchicken.com
IP Data	https://ipdata.co
IPdeny	https://www.ipdeny.com
IPFingerprints	http://www.ipfingerprints.com
IPFuscator	https://github.com/vysecurity/IPFuscator
iphostinfo	https://iphostinfo.com
IP Info	http://ipinfo.info
Ipinfo.io	https://ipinfo.io
IPIP	https://en.ipip.net/ip.html
IP Lists by FireHOL	http://iplists.firehol.org
IP Location	https://www.iplocation.net
IP to ASN	https://iptoasn.com
IP Tracker Online	https://www.iptrackeronline.com
IPv6 Locator	http://ipv6locator.net
ipverse	http://ipverse.net
IPVoid	http://www.ipvoid.com
iTools	http://itools.com

Kloth	http://www.kloth.net/services
lacnic	http://www.lacnic.net
Maltego	https://www.paterva.com/web7
MaxMind	https://www.maxmind.com
My IP	https://www.myip.com
My IP	https://www.myip.ms
Nerd	https://nerd.cesnet.cz/nerd/ips
Netperf Tools	https://netperf.tools
Network Tools	http://network-tools.com
NirSoft	http://www.nirsoft.net
NS.Tools	https://ns.tools
Onyphe	https://www.onyphe.io
PyGeoIPMap	https://github.com/pieqq/PyGeoIpMap
RedirectDetective	http://redirectdetective.com
Reverse IP to Domain Lookup	http://www.ipfingerprints.com/reverseip.php
RiskIQ	https://community.riskiq.com
Risk Neustar	https://www.risk.neustar/resources/tools/ip-geolocation-lookup-tool
Robtex	https://www.robtex.com
scanless	https://github.com/vesche/scanless
SecurityTrails	https://securitytrails.com
Server IP	https://chrome.google.com/webstore/detail/server-ip/adcbaggcjppnkmhfmjcdgagmggnfeikh | https://addons.mozilla.org/en-GB/firefox/addon/server-ip
Shodan	https://www.shodan.io
Shodan Recon	https://github.com/richard-clifford/Shodan_Recon
Software77 Multi-Lookup	http://software77.net/geo-ip/multi-lookup
Sonar Omnisint	https://sonar.omnisint.io/reverse/192.168.100.1/32
SpyOnWeb	http://spyonweb.com
Spyse_	https://spyse.com
SubnetOnline	https://www.subnetonline.com
SuIP.biz	https://suip.biz
SynapsInt	https://synapsint.com

Tor Nodes	https://www.dan.me.uk/tornodes
urlscan	https://urlscan.io
Utrace	http://en.utrace.de
UltraTools	https://www.ultratools.com/tools/traceRoute6
ViewDNS	http://viewdns.info
Wappalyzer	https://www.wappalyzer.com
Website IP	https://chrome.google.com/webstore/detail/website-ip/ ghbmhlgniedlklkpimlibbaoomlpacmk
WhatIsMyIP	https://www.whatismyip.com
WhatIsMyIPAddress	http://whatismyipaddress.com
WhatMyIP.co	http://whatmyip.co
You Get Signal	http://www.yougetsignal.com

SEO Tools

Tool	Link
ahrefs	https://ahrefs.com
Alexa	http://www.alexa.com
Bing Webmaster Tools	http://www.bing.com/toolbox/webmaster
clearwebstats	https://www.clearwebstats.com
CuteStats	https://www.cutestat.com
Digital Point	https://tools.digitalpoint.com
HypeStat	https://www.hypestat.com
iSpionage	https://www.ispionage.com
Nibbler	http://nibbler.silktide.com
Mangools	https://mangools.com
MOZ Tools	https://moz.com/free-seo-tools
PageGlimpse	http://www.pageglimpse.com
Quick Sprout	https://www.quicksprout.com
SEMrush	https://www.semrush.com
SEO SiteCheckup Tools	https://seositecheckup.com/tools
SEOTools for Excel	http://seotoolsforexcel.com
Serpstat	https://serpstat.com
Shodan	https://www.shodan.io
SIDN	https://www.sidn.nl
Similar Web	https://www.similarweb.com
Site Dossier	http://www.sitedossier.com
Siteliner	http://www.siteliner.com
SiteSleuth	https://www.sitesleuth.io
SmallSEOTools	http://smallseotools.com

SpyFu	https://www.spyfu.com
StatsCrop	http://www.statscrop.com
Statvoo	https://statvoo.com
WebPageTest	https://www.webpagetest.org
Website Informer	http://website.informer.com
Website Outlook	http://websiteoutlook.com
Woorank	https://www.woorank.com

Analysing Unique IDs

Tool	Link
Analyze ID	http://analyzeid.com
Moonsearch: Analytics	https://moonsearch.com/analytics
Reverse Analytics	https://dnslytics.com/reverse-analytics
SiteSleuth	https://www.sitesleuth.io
SpyOnWeb	https://spyonweb.com

Subdomain Enumeration

Tool	Link
altdns	https://github.com/infosec-au/altdns
Amass	https://github.com/OWASP/Amass
censys-subdomain-finder	https://github.com/christophetd/censys-subdomain-finder
dr_robot	https://github.com/sandialabs/dr_robot
Fierce	https://www.aldeid.com/wiki/Fierce
Gobuster	https://github.com/OJ/gobuster
Knock	https://github.com/guelfoweb/knock
Knock.py	https://github.com/santiko/KnockPy/blob/master/knock.py
Pentest Tools Find Subdomains	https://pentest-tools.com/information-gathering/find-subdomains-of-domain
Security Trails	https://securitytrails.com
spyse_ Subdomain Finder	https://spyse.com/tools/subdomain-finder
subbrute	https://github.com/TheRook/subbrute
subfinder	https://github.com/projectdiscovery/subfinder
Sublist3r	https://github.com/aboul3la/Sublist3r
subscraper	https://github.com/m8r0wn/subscraper
urlscan	https://urlscan.io

Identifying Backlinks

Tool	Link
Ahrefs Site Explorer	https://ahrefs.com/site-explorer
Alexa	http://www.alexa.com
Backlink Checker	http://smallseotools.com/backlink-checker
Backlink Watch	http://www.backlinkwatch.com
Blue Backlinks	http://bluebacklinks.com
Link Miner	https://linkminer.com
Linkody Backlink Checker	https://www.linkody.com/en/seo-tools/free-backlink-checker
Majestic	https://majestic.com
moonsearch	http://moonsearch.com
MOZ Link Explorer	https://moz.com/link-explorer
OpenLinkProfiler	https://www.openlinkprofiler.org
SEO Tools: Free Backlink Checker	https://www.seoreviewtools.com/valuable-backlinks-checker
Small SEO Tools: Backlink Checker	https://smallseotools.com/backlink-checker
WebMeUp	http://webmeup.com
WhoLinks2Me	http://www.wholinks2me.com

Site Mapping Tools

Tool	Link
Octopus	https://octopus.do/sitemap/resource/generator
Screaming Frog SEO Spider Tool	https://www.screamingfrog.co.uk/seo-spider/v
Visual Site Mapper	http://www.visualsitemapper.com
XML-Sitemaps	https://www.xml-sitemaps.com

Identifying Publish Date

Tool	Link
Carbon14	https://github.com/Lazza/Carbon14
Carbon Date	http://carbondate.cs.odu.edu
Finitimus	https://chrome.google.com/webstore/detail/finitimus/ckdjcgaagfcnndkkknfmncedapdjaokb?utm_source=chrome-ntp-icon

Extracting Files

Tool	Link
IntelliTamper	http://www.softpedia.com/get/Internet/Other-Internet-Related/IntelliTamper.shtml
FOCA	https://www.elevenpaths.com/labstools/foca/index.html
Gobuster	https://github.com/OJ/gobuster
Goca	https://github.com/gocaio/goca
Pymeta	https://github.com/m8r0wn/pymeta
Spiderpig	https://github.com/hatlord/Spiderpig

Analysing URLs

Tool	Link
unfurl	https://github.com/obsidianforensics/unfurl

Identifying Technologies Behind Websites

Tool	Link
BuiltWith	http://builtwith.com
Finder	https://finder.app
Netcraft Site Report	https://sitereport.netcraft.com
urlscan	https://urlscan.io
W3techs Sites	https://w3techs.com/sites
Wappalyzer	https://wappalyzer.com
What Wordpress Theme Is That	https://whatwpthemeisthat.com

Finding SSL Certificates

Tool	Link
Certdomainfinder	https://github.com/amar-myana/certdomainfinder/blob/master/README.md
Certgraph	https://github.com/lanrat/certgraph
Certificate Search	https://crt.sh
CERT Spotter	https://sslmate.com/certspotter/api
Google Transparency Report: Certificates	https://transparencyreport.google.com/https/certificates
Internet-Wide Scan Data Repository	https://scans.io
OpenData Rapid7	https://opendata.rapid7.com
Purplepee.com	https://purplepee.co
spyse_ SSL Lookup	https://spyse.com/tools/ssl-lookup

Checking Website Status

Tool	Link
downdetector	http://downdetector.com
downforeveryoneorjustme	http://downforeveryoneorjustme.com
DownForMe	http://downforme.org
IstheServiceDown	https://istheservicedown.com
Social Down or Not	http://social.downornot.com

HTTPS Status

Tool	Link
httpstatus	https://httpstatus.io
HTTP Status Codes	https://www.restapitutorial.com/httpstatuscodes.html
HTTP Status Codes	https://www.iana.org/assignments/http-status-codes/http-status-codes.xhtml
List of HTTP Status Codes	https://en.wikipedia.org/wiki/List_of_HTTP_status_codes

Researching Cyber Threats

Tool	Link
Apility.io	https://apility.io
AbuseIPD	https://www.abuseipdb.com
Alien Vault	https://otx.alienvault.com
Auth0 IP	https://auth0.com/signals/ip
AutoShun	https://www.autoshun.org
Binary Edge	https://www.binaryedge.io
Blacklist Alert	http://blacklistalert.org
Blacklist Check Tool	http://www.blchecktool.com
Blacklisted IP Check	https://whoisip.ovh/blacklist
Blocked	https://www.blocked.org.uk
BrightCloud URL or IP Lookup	https://www.brightcloud.com/tools/url-ip-lookup.php
Censys	https://censys.io
CheckPhish	https://checkphish.ai
CINSscore	http://cinsscore.com
CloudFlair	https://github.com/christophetd/CloudFlair
CrimeFlare CFS	http://www.crimeflare.org:82/cfs.html
CVE Details	https://www.cvedetails.com
Cyber Cure	https://www.cybercure.ai
Desenmascara	http://desenmascara.me
Directory of Malicious IPs	http://www.projecthoneypot.org/list_of_ips.php
dnstwist	https://github.com/elceef/dnstwist
dnstwist	https://dnstwist.it
dnstwister	https://dnstwister.report
Firehol IP Lists	https://iplists.firehol.org

Google Hacking Tests	https://www.tutorialspoint.com/google_hacking_tests.htm
Google Transparency Report	https://transparencyreport.google.com/safe-browsing/search
GooHak	https://github.com/1N3/Goohak
hashd	https://hashdd.com
HoneyDB	https://riskdiscovery.com/honeydb
Hybrid Analysis	https://hybrid-analysis.com
I-Blocklist	https://www.iblocklist.com/lists.php
IBM X-Force Exchange	https://exchange.xforce.ibmcloud.com
Immuni Web	https://www.immuniweb.com/radar
Intrigue	http://intrigue.io
IPVoid	https://www.ipvoid.com
Is It Hacked?	http://www.isithacked.com
Is It Phishing	https://isitphishing.org
JoeSandbox Cloud	https://www.joesandbox.com
Kaspersky Threat Intelligence Portal	https://opentip.kaspersky.com
Maltiverse Search	https://maltiverse.com/search
Malware Domain List	http://www.malwaredomainlist.com/mdl.php
Malware URL Website Security Status	https://www.malwareurl.com/listing-urls.php
MXToolbox: Blacklists	https://mxtoolbox.com/blacklists.aspx
Netcraft Site Report	http://toolbar.netcraft.com/site_report?url=undefined#last_reboot
NMMAPPER	https://www.nmmapper.com
Norton Site Check	https://safeweb.norton.com
OPSWAT Metadefender	https://www.opswat.com/products/metadefender
Palo Alto URL Filtering	https://urlfiltering.paloaltonetworks.com
Pentest-Tools.com	https://pentest-tools.com
Pepipost Domain Blacklist Checker	https://tools.pepipost.com/email-blacklist-checker
PhishTank	https://www.phishtank.com
Pulsedive	https://pulsedive.com
Quttera	https://quttera.com

RiskIQ	https://community.riskiq.com
Scam Adviser	https://www.scamadviser.com
Search CVE List	http://cve.mitre.org/cve/search_cve_list.html
Security Headers	https://securityheaders.com
SecurityTrails	https://securitytrails.com
sploitus	https://sploitus.com
Sucuri Free Website and Malware Scanner	https://sitecheck.sucuri.net
Symantec WebPulse Site Review Request	https://sitereview.bluecoat.com
Talos Reputation Lookup	https://talosintelligence.com
The Hack Labs	https://www.thehacklabs.com
Threat Crowd	https://www.threatcrowd.org
Threat Intelligence Platform	https://threatintelligenceplatform.com
Threat Miner	https://www.threatminer.org
Threat Stop	https://threatstop.com
#totalhash	https://totalhash.cymru.com
Trend Micro Site Safety Center	https://global.sitesafety.trendmicro.com
Unmask Parasites	https://unmask.sucuri.net/security-report
URL Haus	https://urlhaus.abuse.ch
URLVoid	http://www.urlvoid.com
Virus Share	https://virusshare.com
Virus Total	https://www.virustotal.com
Vulmon	https://vulmon.com
Vulnerability Search Engine	https://infosec.cert-pa.it/search.html
WatchGuard Reputation Authority	http://www.reputationauthority.org
Web Cookies Scanner	https://webcookies.org
Web Filter Lookup	https://fortiguard.com/webfilter
Web Inspector	https://webinspector.com
WebSitePulse	https://www.websitepulse.com/help/testtools.dbl-test.html

Zulu URL Risk Analyzer	https://zulu.zscaler.com
ZveloLIVE	https://tools.zvelo.com

IoT Search Engines

Tool	Link
Binary Edge	https://www.binaryedge.io
FOFA	https://fofa.so
Grey Noise	https://viz.greynoise.io
kamerka	https://github.com/woj-ciech/kamerka
LeakIX	https://leakix.net
Purplepee.com	https://purplepee.co
Shodan	https://www.shodan.io
Shodan Filters	https://github.com/T43cr0wl3r/shodan-filters
Shodan Scripts	https://github.com/random-robbie/My-Shodan-Scripts
Thingful	https://www.thingful.net
ZoomEye	https://www.zoomeye.org

Exploit Search Engines

Tool	Link
CVE Circl.lu	https://cve.circl.lu
CVE Details	https://www.cvedetails.com
CVE Mitre	http://cve.mitre.org
Exploit-db	https://www.exploit-db.com
Exploit Search	http://exploitsearch.com
NMMapper	https://www.nmmapper.com
Rapid7	https://www.rapid7.com/db
Shodan Exploits	https://exploits.shodan.io
Sploitus	https://sploitus.com
Vulmon	https://vulmon.com
Vulnerability Assessment Platform	https://vulners.com/landing
WPScan Wordpress Vulnerability Database	https://wpvulndb.com

General Webint Tools and Toolkits

Tool	Link
Central Ops	http://centralops.net
Domain Tools	https://www.domaintools.com
DShield API	https://isc.sans.edu/api
Gaijin.at	https://www.gaijin.at/en/tools
HackerTarget	https://hackertarget.com/ip-tools
_IntelligenceX	https://intelx.io
Kloth	http://www.kloth.net/services
Maltego	https://www.maltego.com
Many Tools	https://manytools.org
Mitaka	https://chrome.google.com/webstore/detail/mitaka/bfjbejmeoibbdpfdbmbacmefcbannnbg | https://addons.mozilla.org/en-US/firefox/addon/mitaka_| https://github.com/ninoseki/mitaka
MXToolbox	https://mxtoolbox.com
Network Tools	http://network-tools.com
NirSoft	http://www.nirsoft.net
RiskIQ	https://community.riskiq.com
Robtex	https://www.robtex.com
Security Trails	https://securitytrails.com
Sputnik	https://chrome.google.com/webstore/detail/sputnik/manapjdamopgbpimgojkccikaabhmocd | https://addons.mozilla.org/en-US/firefox/addon/sputnik-osint | https://github.com/mitchmoser/sputnik
Spyse_	https://spyse.com
ViewDNS	https://viewdns.info
Web Wiz	https://network-tools.webwiz.net

You Get Signal http://www.yougetsignal.com

Multipurpose OSINT Frameworks

Tool	Link
Amass	https://github.com/OWASP/Amass
aquatone	https://github.com/michenriksen/aquatone
Belati	https://github.com/aancw/Belati
BlackWidow	https://github.com/1N3/BlackWidow
Bluto	https://github.com/darryllane/Bluto
DangerZone	https://github.com/woj-ciech/Danger-zone
datasploit	https://github.com/DataSploit/datasploit
FinalRecon	https://github.com/thewhiteh4t/FinalRecon
gasmask	https://github.com/twelvesec/gasmask
gobuster	https://github.com/OJ/gobuster
gOSINT	https://github.com/Nhoya/gOSINT
Harpoon	https://github.com/Te-k/harpoon
Inquisitor	https://github.com/penafieljlm/inquisitor
IntelOwl	https://github.com/intelowlproject/IntelOwl
Int-Rec-Pack	https://github.com/NullArray/IntRec-Pack
lazyrecon	https://github.com/nahamsec/lazyrecon
Maryam	https://github.com/saeeddhqan/Maryam
Metabigor	https://github.com/j3ssie/metabigor
mihari	https://github.com/ninoseki/mihari
Omnibus	https://github.com/InQuest/omnibus
OneForAll	https://github.com/shmilylty/OneForAll
OSINT Search	https://github.com/am0nt31r0/OSINT-Search
OSINT-SPY	https://github.com/SharadKumar97/OSINT-SPY
Osmedeus	https://github.com/j3ssie/Osmedeus
osrframework	https://github.com/i3visio/osrframework

Photon	https://github.com/s0md3v/Photon
pulsar	https://github.com/FooBallZ/pulsar
Racoon	https://github.com/evyatarmeged/Raccoon
recon	https://github.com/pownjs/recon
Recon	https://secapps.com/tools/recon
ReconDog	https://github.com/s0md3v/ReconDog
Recon-ng	https://github.com/lanmaster53/recon-ng
reconspider	https://github.com/bhavsec/reconspider
RED_Hawk	https://github.com/Tuhinshubhra/RED_HAWK
rengine	https://github.com/yogeshojha/rengine
Scumblr	https://github.com/Netflix/Scumblr
Scrummage	https://github.com/matamorphosis/Scrummage
Sifter	https://github.com/s1l3nt78/sifter
Sn0int	https://github.com/kpcyrd/sn0int
Sn1per	https://github.com/1N3/Sn1per
Spiderfoot	https://github.com/smicallef/spiderfoot
theHarvester	https://github.com/laramies/theHarvester
ThreatIngestor	https://github.com/InQuest/ThreatIngestor
TIDoS Framework	https://github.com/0xInfection/TIDoS-Framework
uDork	https://github.com/m3n0sd0n4ld/uDork
URLextractor	https://github.com/eschultze/URLextractor
xray	https://github.com/evilsocket/xray
Vault	https://github.com/abhisharma404/vault

B517

Web History and Site Capture

Tool	Link
Archive.fo	http://archive.fo
Archive.is	http://archive.is
Archive-it.org	https://www.archive-it.org/explore?show=Collections
Archive.vn	https://archive.vn
ArchiveBox	https://archivebox.io
ArchivedWeb	http://archivedweb.com
Arquivo.pt	https://arquivo.pt
Australia Web Archive	https://webarchive.nla.gov.au/collection?q=
Aware Online: Web Archive Search Tool	https://www.aware-online.com/osint-tools/web-archive-search-tool
Cached Pages	http://www.cachedpages.com
Cached View	http://cachedview.com
Cached View	https://cachedview.nl
Cached Views	https://cachedviews.com
Common Crawl	http://commoncrawl.org
Conifer	https://conifer.rhizome.org
Convert Web to PDF	https://play.google.com/store/apps/details?id=com.smobileteam.pdf.activity
FAW Project	https://en.fawproject.com
Go Back in Time	https://chrome.google.com/webstore/detail/go-back-in-time/hgdahcpipmgehmaaankiglanlgljlakj
HTTrack	http://www.httrack.com
Internet Archives	https://archive.org
Internet Archives Wayback Machine Link Ripper	https://tools.digitalmethods.net/beta/internetArchiveWaybackMachineLinkRipper

Library of Congress: Archived Websites	https://loc.gov/websites
Mass archive	https://github.com/motherboardgithub/mass_archive
OldWeb.today	http://oldweb.today
PageCached	https://pagecached.com
PageDash	https://www.pagedash.com
Pagefreezer	https://www.pagefreezer.com
PDFMyURL	http://pdfmyurl.com
Perma.cc	https://perma.cc
Print Friendly	https://www.printfriendly.com
Print What You Like	http://www.printwhatyoulike.com
Resurrect Pages	https://addons.mozilla.org/en-US/firefox/addon/resurrect-pages | https://github.com/arantius/resurrect-pages
Save as PDF Add-on	https://pdfcrowd.com/save-as-pdf-addon
Save to Google Drive	https://chrome.google.com/webstore/detail/save-to-google-drive/gmbmikajjgmnabiglmofipeabaddhgne?hl=en
SingleFile	https://github.com/gildas-lormeau/SingleFile
SiteSucker	https://ricks-apps.com/osx/sitesucker
Time Travel	http://timetravel.mementoweb.org
UK Web Archive	http://www.webarchive.org.uk
ViewCached.com	http://www.viewcached.com
View-page-archive	https://github.com/dessant/web-archives
Wayback Machine	http://archive.org/web/web.php
Wayback Machine downloader	https://github.com/hartator/wayback-machine-downloader
Wayback Machine Extension	https://chrome.google.com/webstore/detail/wayback-machine/fpnmgdkabkmnadcjpehmlllkndpkmiak?hl=en-US | https://addons.mozilla.org/en-US/firefox/addon/wayback-machine_new
waybackpack	https://github.com/jsvine/waybackpack
Web2PDF	https://www.web2pdfconvert.com
Web2Pdf.	https://www.microsoft.com/en-us/store/p/web2pdf/9nblgggz5phq
Web Archives	https://chrome.google.com/webstore/detail/web-archives/hkligngkgcpcolhcnkgccglchdafcnao/related |

B519

	https://addons.mozilla.org/en-US/firefox/addon/view-page-archive | https://github.com/dessant/web-archives
WebCitation	http://webcitation.org/query
Web page to PDF	http://webpagetopdf.com
Webrecorder	https://webrecorder.io
Website Downloader	https://websitedownloader.io
Wget	https://www.gnu.org/software/wget

Wifi Search

Tool	Link
Instabridge	https://instabridge.com
Mobile Free Wifi	https://www.wiman.me
Open WIFI Spots	http://openwifispots.com
Wifi Finder + Map	https://itunes.apple.com/us/app/map-wifi-wi-fi-finder/id946365975?mt=8&ign-mpt=uo%3D8
Wifi Finder Connect Internet Access	https://itunes.apple.com/us/app/wifi-finder-free-internet/id1011519183?mt=8&ign-mpt=uo%3D8
WifiFreeSpot	http://www.wififreespot.com
Wifi Map	https://www.wifimap.io
Wifi Places	https://wifiplaces.evidweb.com
Wifi Space	https://wifispc.com
Wigle	https://wigle.net
WikiFiox	https://foxnomad.com/2016/04/26/map-wireless-passwords-airports-lounges-around-world-updated-regularly
Xfinity Wifi	https://wifi.xfinity.com

Dark Web

Researching the Dark Web

Tool	Link
Ahmia	https://ahmia.fi
Dargle	http://www.dargle.net
Dark.fail	https://dark.fail
Darknet Live	https://darknetlive.com
DarkNet Stats	https://dnstats.net
Dark Owl	https://www.darkowl.com
Dark Scrape	https://github.com/itsmehacker/DarkScrape
Dark Search	https://darksearch.io
Dark Web Map	https://www.hyperiongray.com/dark-web-map
The Dark Web Sites	https://www.thedarkwebsites.com
Deep Explorer	https://github.com/blueudp/Deep-Explorer
Deep Onion Web	https://www.deeponionweb.com
DeepWeb Sites	https://www.deepweb-sites.com
DeepWebSitesLinks	https://www.deepwebsiteslinks.com
DNStats	https://dnstats.net
Docker-onion-nmap	https://github.com/milesrichardson/docker-onion-nmap
Exonera Tor	https://exonerator.torproject.org
freshonions-torscraper	https://github.com/dirtyfilthy/freshonions-torscraper
Gichidan	https://github.com/hIMEI29A/gichidan
The Hidden Wiki	https://thehiddenwiki.org
Hidden Wikitor	http://hiddenwikitor.com

Hunchly's Hidden Services Report	https://www.hunch.ly/darkweb-osint
IACA Dark Web Investigation Support	https://iaca-darkweb-tools.com
onioff	https://github.com/k4m4/onioff
Onion.Link	https://onion.link
Onion.Live	https://onion.live
Onionscan	https://onionscan.org | https://github.com/s-rah/onionscan
Onion Ingestor	https://github.com/danieleperera/OnionIngestor
Onion Land Search Engine	https://onionlandsearchengine.com
Onion Search Engine	http://onionsearchengine.com
OnionShare	https://onionshare.org
Reddit: Deep Web	https://www.reddit.com/r/deepweb
Reddit: Onions	https://www.reddit.com/r/onions
Reddit: Tor	https://www.reddit.com/r/TOR
Subgraph	https://subgraph.com/sgos
Tails	https://tails.boum.org
Tor2Web	https://www.tor2web.org
TorBot	https://github.com/DedSecInside/TorBoT
TorCrawl	https://github.com/MikeMeliz/TorCrawl.py
TorChat	https://github.com/prof7bit/TorChat/wiki
Tor Hidden Wiki	https://torhiddenwiki.com
Tor Node List	https://www.dan.me.uk/tornodes
Tor Project	https://www.torproject.org
Tor Stack Exchange	https://tor.stackexchange.com

Alternatives to Tor

Tool	Link
Commotion	https://commotionwireless.net
Freenet	https://freenetproject.org/index.html
GNUnet	https://gnunet.org
Hyperboria	http://hyperboria.net
I2P	https://geti2p.net/en
Panoramix	https://panoramix-project.eu/software
whonix	https://www.whonix.org
Zeronet	https://zeronet.io

Event Search

Event Search

Tool	Link
Evensi	https://www.evensi.com
Eventbrite	https://www.eventbrite.com
Meetup	https://www.meetup.com
Townscript	https://www.townscript.com
weezevent	https://weezevent.com
What up in town	https://whatupintown.com
WhereEvent	http://www.wherevent.com
Wikido	https://www.wikido.com

Working with Images

Image Search and Reverse Image Search

Tool	Link
500px	https://500px.com
Baidu Images	http://image.baidu.com
Berify	https://berify.com
Bing Images	http://www.bing.com/images
Camera Trace	http://www.cameratrace.com/trace
CamFind	https://camfindapp.com
CC Search	https://search.creativecommons.org
Dupli Checker	https://www.duplichecker.com/reverse-image-search.php
Eagle Eye	https://github.com/ThoughtfulDev/EagleEye
Explore Places	http://places2.csail.mit.edu/explore.html
EzGIF	https://ezgif.com/reverse
facesearch	http://www.facesaerch.com
Fast Image Research	https://chrome.google.com/webstore/detail/fast-image-research/epelbghekfokpolcmhhabjgehmplhjgp?hl=en | https://addons.mozilla.org/en-US/firefox/addon/fast-image-research
FindFace	https://findface.ru
Flickr	https://secure.flickr.com
Flickr Map	https://www.flickr.com/map
Fotki	http://www.fotki.com

Fotoforensics	http://fotoforensics.com
Google Images	https://images.google.com
Image Identification Project	https://www.imageidentify.com
Image Raider	https://infringement.report/api/raider-reverse-image-search
Imgops	http://imgops.com
_IntelligenceX: Image Lookup & Analysis	https://intelx.io/tools?tab=image
KarmaDecay	http://karmadecay.com
Loc.alize.us	https://loc.alize.us
Locationscout	https://www.locationscout.net
Multi-service Image Search	https://www.iqdb.org
Nohat	https://nohat.cc
OldTo	https://oldto.sidewalklabs.com
OSINT Combine: Reverse Image Analyser	https://www.osintcombine.com/reverse-image-analyzer
Photo Map	http://photo-map.ru
photosint	https://github.com/Haris87/photosint
PhotoTracker	http://phototracker.ru
Picsearch	http://www.picsearch.com
PimEyes	https://pimeyes.com/en
Places	http://places2.csail.mit.edu
Reverse GIF	https://ezgif.com/reverse
Reverse Image Search	http://www.reverse-image-search.org
Reverse Image Search	http://www.reverse-image-search.com
Reverse Image Search	https://chrome.google.com/webstore/detail/reverse-image-search/cdgbjhkjjghbjjikgjkkpljlmnpcakco | https://addons.mozilla.org/en-GB/firefox/addon/image-reverse-search | https://github.com/Brawl345/Image-Reverse-Search-WebExtension
Reverse Image Search	https://www.reverse-image-search.org
RevEye Reverse Image Search	https://chrome.google.com/webstore/detail/reveye-reverse-image-sear/keaaclcjhehbbapnphnmpiklalfhelgf?hl=en

Revimg	http://www.revimg.com
RootAbout	http://rootabout.com
SauceNAO	https://saucenao.com
Search-by-image	https://github.com/dessant/search-by-image
Search by Image	https://chrome.google.com/webstore/detail/search-by-image/cnojnbdhbhnkbcieeekonklommdnndci?utm_source=chrome-ntp-icon | https://addons.mozilla.org/en-US/firefox/addon/search_by_image | https://github.com/dessant/search-by-image
Search by Image (Google)	https://chrome.google.com/webstore/detail/search-by-image-by-google/dajedkncpodkggklbegccjpmnglmnflm/related?hl=en
ShotHotspot	https://www.shothotspot.com
Small SEO Tools: Reverse Image Search	https://smallseotools.com/reverse-image-search
Smugmug	https://www.smugmug.com/search
Social Catfish Reverse Image Search	https://socialcatfish.com/reverse-image-search
Startpage: Images	https://www.startpage.com/eng/pics.html
Stolen Camera Finder	https://www.stolencamerafinder.com
TinEye	https://tineye.com
Twitter Image Search	https://twitter.com/search?q=%3Csearchterm%3E&src=typd&vertical=default&f=images
VGG Image Search Engine (VISE)	http://www.robots.ox.ac.uk/~vgg/software/vise
View Image	https://chrome.google.com/webstore/detail/view-image/jpcmhcelnjdmblfmjabdeclccemkghjk || https://addons.mozilla.org/en-US/firefox/addon/view-image/ | https://github.com/bijij/ViewImage
What Was There	http://www.whatwasthere.com
Who Stole My Pictures?	https://chrome.google.com/webstore/detail/who-stole-my-pictures/mcdbnfhkikiofkkicppioekloflmaibd | https://addons.mozilla.org/en-US/firefox/addon/who-stole-my-pictures
Yahoo Image Search	https://images.search.yahoo.com
Yandex Images	https://www.yandex.com/images

Searching within Screenshots

Tool	Link
Darkshot	https://github.com/mxrch/darkshot
Gyazo	https://gyazo.com
Screenotate	https://screenotate.com
Shotlooter	https://github.com/utkusen/shotlooter

Facial Recognition

Tool	Link
Amazon Rekognition	https://aws.amazon.com/rekognition
Betaface	https://www.betafaceapi.com
Face Detection & Recognition	https://facedetection.com
Face Recognition	https://www.face-rec.org
FacePlusPlus: Face Comparing | Face Searching	https://www.faceplusplus.com/face-comparing | https://www.faceplusplus.com/face-searching
How Old	https://www.how-old.net
Image Recognize	https://imagerecognize.com
Kairos	https://www.kairos.com/demos
Microsoft Azure	https://azure.microsoft.com/en-us/services/cognitive-services/face
PicTriev	http://www.pictriev.com
PimEyes	https://pimeyes.com/en
Social_mapper	https://github.com/Greenwolf/social_mapper
StarByFace	https://starbyface.com
wwww	https://github.com/lorenzoromani1983/wwww

Logo Search and Identification Tools

Tool	Link
Brandfetch	https://brandfetch.io
brandslogo	https://brandslogo.net
Brands of the World	https://www.brandsoftheworld.com
Font in Logo	https://www.fontinlogo.com
Instant Logo Search	http://instantlogosearch.com
logoeps	https://logoeps.com
seeklogo	https://seeklogo.com
Similar Logo Checker	http://compute.vision/brands/index.html

Investigating Objects and Symbols

Tool	Link
Hate Symbols	https://www.adl.org/hate-symbols
What Is This Symbol	https://www.symbols.com/what-is-this-symbol.php
What Is This Thing	https://www.reddit.com/r/whatisthisthing

Image Analysis

Tool	Link
AnalogExif	https://sourceforge.net/projects/analogexif
BetaFaceAPI	https://www.betafaceapi.com/demo.html
CameraSummary	https://camerasummary.com
Diffchecker	https://www.diffchecker.com/image-diff
exifdata	http://exifdata.com
Exifer	https://www.thexifer.net
EXIF Hound	https://gumroad.com/l/EXIFHound
ExifPro	http://www.exifpro.com
Exif Purge	http://www.exifpurge.com
Exif QuickView	https://chrome.google.com/webstore/detail/exif-quickview/kjihpkahhpobojbdnknpelpgmcihnepj
EXIFRead	http://www.tawbaware.com/exifread.htm
exiftool	https://sourceforge.net/projects/exiftool
ExifTool by Phil Harvey	https://exiftool.org
EXIF.tools	https://exif.tools
Exif Viewer	https://addons.mozilla.org/en-US/firefox/addon/exif-viewer
Exif Viewer Classic	https://chrome.google.com/webstore/detail/exif-viewer-classic/nafpfdcmppffipmhcpkbplhkoiekndck?hl=en
Exif Viewer Pro	https://chrome.google.com/webstore/detail/exif-viewer-pro/mmbhfeiddhndihdjeganjggkmjapkffm
Extract Metadata	https://www.extractmetadata.com
Fake Image Detector	https://play.google.com/store/apps/details?id=fake_image_detector.coder.genuine.com.fakeimagedetector&hl=en
FastPreview	https://tn123.org/fastpreview
Forensically	https://29a.ch/photo-forensics/#level-sweep

FotoForensics	http://www.fotoforensics.com
GeoImgr	https://www.geoimgr.com
GeoSetter	http://www.geosetter.de
Ghiro	http://www.getghiro.org
Google Search "View Image" Button	https://chrome.google.com/webstore/detail/google-search-view-image/hgngncnljacgakaiifjcgdnknaglfipo
Hide in Picture	https://sourceforge.net/projects/hide-in-picture
How Old	https://how-old.net
Image Edited	http://imageedited.com
Image forensic	https://www.imageforensic.org
Image Identification Project	https://www.imageraider.com
Image Search Options	https://addons.mozilla.org/en-US/firefox/addon/image-search-options
Image Verification Assistant	http://reveal-mklab.iti.gr/reveal/index.html
imagga	https://imagga.com
Imago Forensics	https://github.com/redaelli/imago-forensics
ImgOps	http://imgops.com
ImpulseAdventure	http://www.impulseadventure.com/photo/jpeg-snoop.html
InVID	http://www.invid-project.eu/tools-and-services/invid-verification-plugin
Irfanview	http://www.irfanview.com
Java Exif Viewer	https://sourceforge.net/projects/jexifviewer
Jeffrey's Image Metadata Viewer	http://exif.regex.info/exif.cgi
JPEGsnoop	https://github.com/ImpulseAdventure/JPEGsnoop
Logos	http://logos.iti.gr
Metadata Analysis	https://www.metadataanalysis.com
Metadata-extractor	https://github.com/drewnoakes/metadata-extractor
Metadata Viewer	https://metadataviewer.herokuapp.com
metapicz	http://metapicz.com/#landing
Old To	https://oldto.sidewalklabs.com
Online EXIF Viewer	https://onlineexifviewer.com

phoenix	https://github.com/ebemunk/phoenix
OSINT Combine: Reverse Image Analyser	https://www.osintcombine.com/reverse-image-analyzer
Photo Detective	https://itunes.apple.com/us/app/photo-detective-pro/id1045128136?mt=8
Photo Location	https://photo-location.net
PhotoMe	http://www.photome.de
photosint	https://github.com/Haris87/photosint
Pic2Map	https://www.pic2map.com
Plaghunter	http://www.plaghunter.com
pngmeta	http://www.libpng.org/pub/png/apps/pngmeta.html
Reveal Image Verification Assistant	http://reveal-mklab.iti.gr/reveal/index.html
Send to Exif Viewer	https://chrome.google.com/webstore/detail/send-to-exif-viewer/gogiienhpamfmodmlnhdljokkjiapfck?hl=en-US
sherloq	https://github.com/GuidoBartoli/sherloq
tawbaware	http://www.tawbaware.com
Veracity (iPhone app)	https://itunes.apple.com/us/app/veracity-image-search/id870153874?mt=8
Verexif	http://www.verexif.com
VGG Face Finder (VFF) Engine	http://www.robots.ox.ac.uk/~vgg/software/vff
VGG Image Classification (VIC) Engine	http://www.robots.ox.ac.uk/~vgg/software/vic/
View Image	https://chrome.google.com/webstore/detail/view-image/jpcmhcelnjdmblfmjabdeclccemkghjk
Web Inspector	https://chrome.google.com/webstore/detail/web-inspector/enibedkmbpadhfofcgjcphipflcbpelf?hl=en | https://github.com/bensampaio/chrome-extension-web_inspector
What Was There?	http://www.whatwasthere.com
Where is the picture?	https://whereisthepicture.com
Who Stole My Pictures?	https://chrome.google.com/webstore/detail/who-stole-my-pictures/mcdbnfhkikiofkkicppioekloflmaibd | https://addons.mozilla.org/en-US/firefox/addon/who-stole-my-pictures

Stock Images

Tool	Link
Adobe Stock	https://stock.adobe.com
AlltheFreeStock	http://allthefreestock.com
Burst	https://burst.shopify.com
CC Search Commons	https://ccsearch.creativecommons.org
Clipstill	http://www.clipstill.com
Death to Stock	http://deathtothestockphoto.com
Duotone	https://duotone.shapefactory.co
Foca Stock	https://focastock.com
Fotolia	https://www.fotolia.com
Freeimages	http://www.freeimages.com
Free Nature Stock	https://freenaturestock.com
Freestocks.org	http://freestocks.org
FoodiesFeed	https://www.foodiesfeed.com
Getty Images	https://www.gettyimages.com
Gratisography	http://www.gratisography.com
Image Finder	https://imagefinder.co
IM Free	http://www.imcreator.com/free
ISO Republic	http://isorepublic.com
iStockphoto	http://www.istockphoto.com
Jay mantri	http://jaymantri.com
Kaboompics	http://kaboompics.com
LibreStock	https://librestock.com
Life of Pix	http://www.lifeofpix.com
Little Visuals	http://littlevisuals.co

Moose	https://photos.icons8.com
Morguefile	https://morguefile.com
Mostphotos	https://www.mostphotos.com
NegativeSpace	http://negativespace.co
New Old Stock	http://nos.twnsnd.co
Picjumbo	https://picjumbo.com
Picography	https://picography.co
Pixabay	https://pixabay.com
Pexels	https://www.pexels.com
Photobucket	http://photobucket.com
PhotoPin	http://photopin.com
Pikwizard	https://pikwizard.com
Piqsels	https://www.piqsels.com
Public Domain Archive	http://publicdomainarchive.com
pixelmob	https://pixelmob.co
reshot	https://www.reshot.com
Shot Stash	https://shotstash.com
Shutterstock	http://www.shutterstock.com
skitterphoto	https://skitterphoto.com
SplitShire	https://www.splitshire.com
Startup Stock Photos	http://startupstockphotos.com
StockSnap	https://stocksnap.io
Styled Stock	https://styledstock.co
tookapic	https://stock.tookapic.com
unDraw	https://undraw.co
Unplash	https://unsplash.com

Image and Photo Editing

Tool	Link
AddText+	https://addtext.com
Affinity Photo	https://affinity.serif.com
Alice Vision	https://alicevision.org/#meshroom
Annotable	https://itunes.apple.com/us/app/annotable-ultimate-image-annotation/id1099850421?mt=8
Apple Photos	http://www.apple.com/osx/photos
Artbreeder	https://www.artbreeder.com
Batch Photo	https://www.batchphoto.com/espresso
Befunky	https://www.befunky.com
Birme	https://birme.net
Blurity	https://www.blurity.com
Bzzt! Image Editor	https://singularlabs.com/software/bzzt-image-editor
Canva	https://www.canva.com
CoolTweak	http://www.cooltweak.com
Croppola	http://croppola.com
DeOldify	https://www.gradio.app/hub/hub-deoldify
Dezomify	https://ophir.alwaysdata.net/dezoomify/dezoomify.html
Exifer	https://www.thexifer.net
Ezgif.com	https://ezgif.com
FastStone	http://www.faststone.org
Flexxi – Batch Image Resizer	https://sourceforge.net/projects/flexxi-image-resizer
FlipA Picture	http://flipapicture.com
Fotor	http://www.fotor.com
Foto Flexer	http://fotoflexer.com

Free Batch Photo Resizer	http://www.sunlitgreen.com/free-batch-photo-resizer.html
Gimp	http://www.gimp.org
Hugin	http://hugin.sourceforge.net
Image Composite Editor	https://research.microsoft.com/en-us/um/redmond/projects/ice/
Image Enlarger	https://www.imageenlarger.com
Images Mixer	https://www.zapwallpaper.fr/accueil/imagesmixer
Image Scrubber	https://everestpipkin.github.io/image-scrubber
Image Tricks Lite	https://itunes.apple.com/us/app/image-tricks-lite/id403735824?mt=12
ImBatch	https://www.highmotionsoftware.com/products/imbatch
IMGonline	https://www.imgonline.com.ua
In 20 Years	http://in20years.co
Irfanview	http://www.irfanview.com
Let's Enhance	https://letsenhance.io
LightZone	http://lightzoneproject.org
Lunapic	http://www124.lunapic.com/editor
Make Photo Gallery	http://makephotogallery.net
Merge Images	https://pinetools.com/merge-images
Merge Images	https://onlineconvertfree.com/merge-image
Online Image Enlarger	https://www.imageenlarger.com
OnlineImageSplitter	http://www.htmlkit.com/services/is
Optimage	https://optimage.app
Pablo	https://pablo.buffer.com
Paint.NET	http://www.getpaint.net/index.html
photofunny	https://www.photofunny.net
Photo Joiner	https://www.photojoiner.net
Photo Resizer Expert	https://www.4dots-software.com/photo-resizer-expert
Photoscape	http://www.photoscape.org/ps/main/index.php
Photo Scissors	https://photoscissors.com
Photoshop	http://www.photoshop.com
Photovisi	https://www.photovisi.com
PicMoneky	http://www.picmonkey.com

Pink Mirror	https://pinkmirror.com
Pillow	https://pypi.org/project/Pillow
Pixlr	https://pixlr.com
Polarr	https://www.polarr.co
Promo Image Resizer	https://promo.com/tools/image-resizer
Remove.bg	https://www.remove.bg
Seashore	http://seashore.sourceforge.net
Smart Deblur	http://smartdeblur.net
Social Image Resizer Tool	https://www.internetmarketingninjas.com/seo-tools/favicon-generator-crop-images
sPhoto	https://sourceforge.net/projects/s-photo
Stickermule: Upscale	https://www.stickermule.com/upscale
SumoPaint	http://www.sumopaint.com
textify	http://textify.it
TinyPNG	https://tinypng.com
XnResize	https://www.xnview.com/en/xnresize
zapbg	https://www.zapbg.com

Creating World Clouds

Tool	Link
D3-cloud	https://github.com/jasondavies/d3-cloud
infogram	https://infogram.com
TagCrowd	https://tagcrowd.com
Vizzlo	https://vizzlo.com
WordArt	https://wordart.com
WordCloud	https://www.jasondavies.com/wordcloud
WorldCloud Generator	https://monkeylearn.com/word-cloud
WordClouds	https://www.wordclouds.com
WordItOut WordCloud	https://worditout.com/word-cloud/create
Wordle	http://www.wordle.net
WordSift	https://wordsift.org

OCR and Image Translation Tools

Tool	Link
Easy OCR	https://github.com/JaidedAI/EasyOCR
Easy Screen OCR	https://easyscreenocr.com
Free OCR	http://www.free-ocr.com
I2OCR	http://www.i2ocr.com
Image Translate	https://www.imagetranslate.com
iSolid	https://www.isolid.be
New OCR	http://www.newocr.com
Online OCR	http://www.onlineocr.net
Photo Scan	https://www.microsoft.com/en-us/p/photo-scan/9nblggh4s87w?activetab=pivot:overviewtab
Project Naptha	https://projectnaptha.com
Simple OCR	https://www.simpleocr.com

Other Image Processing Tools

Tool	Link
Behind!	https://addons.mozilla.org/en-US/firefox/addon/behind
Extract Images	https://extract.pics
Image-Toolbar	https://chrome.google.com/webstore/detail/image-toolbar/cpgaepnhfockgofcejphihfafgmenofb?hl=en
Tropy	https://tropy.org

Working with Videos

Video Search and Reverse Video Search

Tool	Link
9gag.video	https://9gag.com/video
altCensored	https://altcensored.com
American Archive of Public Broadcasting	http://americanarchive.org
Aol Videos	http://on.aol.com
Bing Videos	http://www.bing.com/?scope=video
BitChute	https://www.bitchute.com
DailyMotion	http://www.dailymotion.com
Dogpile Video Search	https://www.dogpile.com/?qc=video
D.Tube	https://d.tube
Giphy	https://giphy.com
Google Video Search	https://www.google.com/videohp
Ibry.tv	https://lbry.tv
Internet Archive	https://archive.org
Kwai	http://www.kwai.com
Kyro	https://kyro.ms
Likee	https://likee.com
LiveLeak	http://www.liveleak.com
MeFeedia	http://www.mefeedia.com
Metacafe	http://www.metacafe.com
Metatube	http://www.metatube.com
Mp4.city	https://www.mp4.city

The Open Video Project	https://open-video.org
Peertube.social	https://peertube.social
Petey Vid	https://www.peteyvid.com
PigPigGo	https://pigpiggo.net
Smugmug	https://www.smugmug.com/search
Snap Map	https://map.snapchat.com
Spaactor	https://www.spaactor.com
Startpage Videos	https://www.startpage.com/eng/video.html
TLDW	https://usetldw.video
tubidy	https://tubidy.mobi
TVOPEDIA	https://www.tvopedia.com
Veoh	http://www.veoh.com
VideoSearch	https://www.vsearch.me
VidLii	https://www.vidlii.com
Vimeo	https://vimeo.com
Vlive.tv	https://www.vlive.tv
VUVIDO	http://vuvido.com
Yahoo Video Search	http://video.search.yahoo.com
Yarn	https://getyarn.io
Yasiv	http://yasiv.com/youtube
YES-OKE	http://yesoke.com
Yivster	https://yivster.com
YouTube	https://www.youtube.com

Live Streaming and Webcams

Tool	Link
africam	https://www.africam.com
Air LIVE	https://cam.airlive.net
Airport Webcams	http://airportwebcams.net
Cam Hacker: Live Webcam Search Engine	https://www.camhacker.com/search/
Cams Collection	https://www.camscollection.ch
CamVista	http://www.camvista.com
City Webcams	https://city-webcams.com
Earthcam	http://www.earthcam.com
Explore.org: Livecams	https://explore.org/livecams
Explore Webcams	https://www.explorewebcams.com
Facebook Livemap	https://www.facebook.com/live/map
Fisgonia	http://www.fisgonia.com
Flixwagon	http://www.flixwagon.com
Freedocast	http://www.freedocast.com
Geocam.tv	https://geocam.tv
goandroam	https://www.goandroam.com
GoBefore: Cams	http://gobefore.me/cams
Holiday Live Cam	https://holidaylivecam.com/camera/search
Insecam	http://www.insecam.org
IP-24	https://ip-24.net
IP Live Cams	https://www.iplivecams.com
KeepVid	https://keepvid.com
Krooz Cams	http://www.kroooz-cams.com

LISD: Webcams	https://www.lisd.org/technology/itswebs/elem/curr/webcams.htm
Live ISS Stream	https://www.nasa.gov/multimedia/nasatv/iss_ustream.html
Liveleak	https://liveleak.com
Livestream	https://livestream.com
Live World Webcam	http://liveworldwebcam.net
MetaCafe	http://www.metacafe.com
Motorway Cameras	https://www.motorwaycameras.co.uk
MyLiveStreams	https://www.mylivestreams.com
My World Webcams	http://www.myworldwebcams.com
OnlineCamera	http://onlinecamera.com
OpenStreetCam	https://www.openstreetcam.org
Opentopia	http://www.opentopia.com
Periscope	https://www.periscope.tv | https://www.pscp.tv
Perisearch	https://www.perisearch.xyz
Pictimo	https://www.pictimo.com
Rail Webcams	http://railwebcams.net
RecPeriscope	http://www.recperiscope.com
Reddit: Controllable Webcams	https://www.reddit.com/r/controllablewebcams
Regional Webcams	http://myplace.frontier.com/~rojobo/local.htm
Resort Cams	https://www.resortcams.com
Rochester NY Webcams	http://rocpic.com/webcams
Scopedown	http://downloadperiscopevideos.com
See All The Things	https://github.com/baywolf88/seeallthethings
See.Cam	https://see.cam
Shodan	https://www.shodan.io/explore/tag/webcam
Skyline Webcams	https://www.skylinewebcams.com
snoweye	https://www.snoweye.com
tchannels	https://www.tchannels.tv
Thingful	https://www.thingful.net
Traffic Cameras	https://trafficcameras.uk
Twitch	https://www.twitch.tv

UK Weather Cams	https://www.ukweathercams.co.uk
The Ultimate List of Lists of Webcams	http://members.upc.nl/a.horlings/cam-list.html
Vaughn Live TV	https://vaughnlive.tv
Vevo	https://www.vevo.com
Vimeo	https://vimeo.com
WaWaShare	http://wawashare.com/webcam.php
Weather Underground	https://www.wunderground.com
Webcam Galore	https://www.webcamgalore.com
WebcamLocator	http://www.webcamlocator.com
Webcam Network Project	http://www.the-webcam-network.com
Webcam NL	https://webcam.nl/live_streaming
Webcams Mania	http://www.webcamsmania.com
Webcams Travel	https://www.webcams.travel
webcamtaxi	https://www.webcamtaxi.com
WebcamWorld	http://webcamworld.com
webviewcams	https://www.webviewcams.com
Wetter	https://www.wetter.com
what'sup cams	https://www.whatsupcams.com
Windy Webcams	https://www.windy.com
WindowSwap	https://www.window-swap.com
Wisuki	http://wisuki.com
WorldCam	https://worldcam.eu
World of Webcams	http://www.hereinreality.com/webcams/#.Xm_6UFVKjIU
World Webcams	http://www.world-webcams.net
World Webcams	http://world-webcams.nsspot.net
World Webcams	http://www.meteosurfcanarias.com
WXYZ WEB CAMS	https://wxyzwebcams.com
YouNow	https://www.younow.com
YouTube	https://www.youtube.com

YouTube Tools

Tool	Link
Anilyzer: Watch Videos Frame by Frame	http://anilyzer.com
Annotate.tv	https://annotate.tv
Aware Online: YouTube Search Tool	https://www.aware-online.com/osint-tools/youtube-search-tool
Bookmark It	https://bookmark-it.happydevelopers.co
DF Tube	https://chrome.google.com/webstore/detail/df-tube-distraction-free/mjdepdfccjgcndkmemponafgioodelna
Download Subtitles	https://downsub.com
Frame by Frame	https://chrome.google.com/webstore/detail/frame-by-frame-for-youtub/elkadbdicdciddfkdpmaolomehalghio?hl=en-GB
Hadzy	https://hadzy.com
hashcut	http://www.hashcut.com
hooktube	https://hooktube.com
HypeAuditor	https://hypeauditor.com
InstantView for YouTube	https://chrome.google.com/webstore/detail/instantview-for-youtube/pababfeapfpjaghmlfipkcoioeflpbio?hl=en
_IntelligenceX: YouTube	https://intelx.io/tools?tab=youtube
InVID	http://www.invid-project.eu/tools-and-services/invid-verification-plugin
Invideo for YouTube	https://chrome.google.com/webstore/detail/invideo-for-youtube/iacbjlffnpbhgkgknabhkfmlcpdcigab?
Looper	https://chrome.google.com/webstore/detail/looper-for-youtube/iggpfpnahkgpnindfkdncknoldgnccdg
Kodi	https://kodi.tv/addon/plugins-video-add-ons/youtube

NSWF YouTube	https://www.nsfwyoutube.com
OwlZoom	https://addons.mozilla.org/en-US/firefox/addon/owlzoom-youtube/ | https://github.com/LionRoar/WebExt-OwlZoom
RocketNote	https://getrocketnote.com
Slowtube	https://www.dkthehuman.com/slowtube
Softorino YouTube Converter	https://softorino.com/youtube-converter-2
Tiny.video	http://tiny.video
Transpose	https://chrome.google.com/webstore/detail/transpose-%E2%96%B2%E2%96%BC-pitch-%E2%96%B9-spee/ioimlbgefgadofblnajllknopjboejda?hl=en
Trinding	https://trinding.com
Turn Off the Lights	https://chrome.google.com/webstore/detail/turn-off-the-lights/bfbmjmiodbnnpllbbbfblcplfjjepjdn
Unlisted Videos	https://unlistedvideos.com
vidnote	http://www.vdnote.com
viewpure	http://www.viewpure.com
VLC	https://www.videolan.org/vlc
Watch Frame by Frame	http://www.watchframebyframe.com
Y2mate	https://y2mate.com
Yotter	https://github.com/ytorg/Yotter
Yout	https://yout.com
Yout-ube	https://www.yout-ube.com
YouTube Converter	https://youtubeconvert.cc
YouTube Data Tools	https://tools.digitalmethods.net/netvizz/youtube
YouTube DataViewer	https://www.amnestyusa.org/citizenevidence
Youtube-dl	https://rg3.github.io/youtube-dl
Youtube-dlc	https://github.com/blackjack4494/youtube-dlc
YouTube Geofind	https://mattw.io/youtube-geofind/location
YouTube Multi Downloader Online	https://youtubemultidownloader.net
YouTube Restriction Check	http://polsy.org.uk/stuff/ytrestrict.cgi?ytid=vg7wh_zf2X0
YouTube Thumbnail Graber	https://boingboing.net/features/getthumbs
youtube_tool	https://github.com/nlitsme/youtube_tool
YTtool	https://github.com/nlitsme/youtube_tool

General Video Downloaders and Archivers

Tool	Link
Applian	http://applian.com
Botdownloader	https://botdownloader.com/category/tools
DownloadHelper	http://www.downloadhelper.net
Downvids.net	http://www.downvids.net
EagleGet Smart Video Grabber	http://www.eagleget.com/features/smart-video-grabber
FFmpeg	https://ffmpeg.org
Flash Video Downloader	https://chrome.google.com/webstore/detail/flash-video-downloader/aiimdkdngfcipjohbjenkahhlhccpdbc?hl=de
freemake	https://www.freemake.com
Get_iplayer	https://github.com/get-iplayer/get_iplayer
Keep Flick	https://www.keepflick.com
Keep for Chrome	https://chrome.google.com/webstore/detail/keep-for-chrome/ghhhikeonlfpibbaibecmiellnmaikoh
Keep Save It	http://keepsaveit.com
Keepvid	https://keepvid.com
Savefrom.net	https://en.savefrom.net
Save the Video	https://savethevideo.net
SaveVideo	http://savevideo.me
VDownloader	https://vdownloader.com
Video Downloader Professional	https://chrome.google.com/webstore/detail/video-downloader-professi/elicpjhcidhpjomhibiffojpinpmmpil
Video Vault	https://www.bravenewtech.org
VideoVault for Chrome	https://chrome.google.com/webstore/detail/videovault-for-chrome/onoidkfboifjpllldnfnaebfigijckmk

VLC	https://www.videolan.org/vlc/index.html
Yout	https://yout.com
YTD Video Downloader	https://www.ytddownloader.com/macosx
Youtube-dl	https://rg3.github.io/youtube-dl

Downloading Videos from YouTube

Tool	Link
4K Video Downloader	https://www.4kdownload.com
ClipConverter.cc	https://www.clipconverter.cc
ddownr	https://ddownr.com
Deturl	http://deturl.com
Downvids.net	http://www.downvids.net
freemake	https://www.freemake.com
hooktube	https://hooktube.com
Keep Save It	http://keepsaveit.com
Savefrom.net	https://en.savefrom.net
VDownloader	https://vdownloader.com
Video Vault	https://www.bravenewtech.org
VideoVault for Chrome	https://chrome.google.com/webstore/detail/videovault-for-chrome/onoidkfboifjpllldnfnaebfigijckmk
Y2mate	https://y2mate.com
Yoo Download	https://yoodownload.com
Yout	https://yout.com
Youtube-dl	https://rg3.github.io/youtube-dl
YouTube Multi Downloader Online	https://youtubemultidownloader.net
YouTubetoMP3	https://youtubetomp3music.com

Downloading Videos from Twitter

Tool	Link
Botdownloader	https://botdownloader.com/twitter-video-downloader
Download Twitter Video	https://www.downloadtwittervideo.com
Download Twitter Video	https://ssstwitter.com
Keep Flick	https://www.keepflick.com/online-twitter-video-downloader
Keep Save It	http://keepsaveit.com
Savefrom.net	https://en.savefrom.net
Save the Video	https://savethevideo.net
SaveVideo	http://savevideo.me
TWDOWN	https://twdown.net
Twitter Video Downloader	http://twittervideodownloader.com

Downloading Videos from Facebook

Tool	Link
Botdownloader	https://botdownloader.com/facebook-video-downloader
Downvids.net	http://www.downvids.net
Facebook Private Video Downloader	https://getfbstuff.com/facebook-private-video-downloader
Facebook Video Downloader	https://www.downloadvideosfrom.com
FBDOWN	http://www.fbdown.net
fbdownloader	https://fbdownloader.net
Keep Flick	https://www.keepflick.com/online-facebook-video-downloader
Keep Save It	http://keepsaveit.com
Savefrom.net	https://en.savefrom.net
Save the Video	https://savethevideo.net
SaveVideo	http://savevideo.me
VDownloader	https://vdownloader.com
Yout	https://yout.com
YTD Video Downloader	https://www.ytddownloader.com/macosx

Downloading Videos from Instagram

Tool	Link
4K Video Downloader	https://www.4kdownload.com
DownloadGram	https://downloadgram.com
Downvids.net	http://www.downvids.net
Gramsave	https://gramsave.com
High Resolution Downloader for Instagram	https://chrome.google.com/webstore/detail/high-resolution-downloade/hbijmiokbffalbolieapplfhmmnioeao
Instagram Downloader	https://www.downloadvideosfrom.com/Instagram.php
instaloader	https://github.com/instaloader/instaloader
InstaLooter	https://github.com/althonos/InstaLooter
Instasave.zyx	https://instasave.xyz
Keep Save It	http://keepsaveit.com
Savefrom.net	https://en.savefrom.net
Save the Video	https://savethevideo.net
SaveVideo	http://savevideo.me

Downloading Videos from TikTok

Tool	Link
Downloaderi	https://downloaderi.com
Experts PHP: TikTok Video Downloader	https://www.expertsphp.com/tiktok-video-downloader.html
Keep Save It	http://keepsaveit.com
Save the Video	https://savethevideo.net
SaveVideo	http://savevideo.me
Snaptik.app	https://snaptik.app
ssstiktok	https://ssstiktok.io
ttdown	https://ttdown.org
ttDownloader	https://ttdownloader.com

Downloading Videos from Pinterest

Tool	Link
Botdownloader	https://botdownloader.com/pinterest-video-downloader
Experts PHP: Pinterest Video Downloader	https://www.expertsphp.com/pinterest-video-downloader.html
Keep Flick	https://www.keepflick.com/online-pinterest-video-downloader
Keep Save It	http://keepsaveit.com

Downloading Videos from Reddit

Tool	Link
Experts PHP: Reddit Video Downloader	https://www.expertsphp.com/reddit-video-downloader.php
Keep Save It	http://keepsaveit.com
Redv.co	https://redv.co
Viddit.red	https://viddit.red

Video Players

Tool	Link
5kPlayer	https://www.5kplayer.com
Cisdem Video Player	https://www.cisdem.com/video-player-mac.html
DivX	https://www.divx.com
GOM Player	https://www.gomlab.com/gomplayer-media-player
KMPlayer	http://www.kmplayer.com
Kodi	https://kodi.tv
PotPlayer	http://potplayer.daum.net
Quicktime	https://support.apple.com/quicktime
SMPlayer	https://www.smplayer.info
VLC	https://www.videolan.org/vlc/index.html
Watch Frame by Frame	http://www.watchframebyframe.com

Video Editors and Converters

Tool	Link
Adobe	https://www.adobe.com
Apple Clips	https://www.apple.com/clips
Apple iMovie	https://www.apple.com/imovie
Avidemux	http://avidemux.sourceforge.net
Clip Champ Create	https://clipchamp.com/en/video-editor
Clip Converter	https://www.clipconverter.cc
Convertio TS to MP4	https://convertio.co/ts-mp4
Corel Video Studio	https://www.videostudiopro.com
CyberLink	https://www.cyberlink.com
DaVinci Resolve	https://www.blackmagicdesign.com/products/davinciresolve
FFmpeg	https://ffmpeg.org
Filmora	https://filmora.wondershare.com
Final Cut Pro	https://www.apple.com/ca/final-cut-pro
Format Factory	http://www.pcfreetime.com/formatfactory/index.php
Freemake Video Converter	http://www.freemake.com/free_video_converter/
Handbrake	https://handbrake.fr
Hitfilm Express	https://hitfilm.com/express
iMovie (Mac)	https://www.apple.com/imovie
KEEPVID	http://keepvid.com
Kinemaster	https://www.kinemaster.com
Kizoa	https://www.kizoa.com/Video-Editor
Lightworks	https://www.lwks.com
Machete	http://www.machetesoft.com

Magisto	https://www.magisto.com
Magix	https://www.magix.com
Media 100	https://www.media100.com
Movie Maker Online	http://moviemakeronline.com
NCH Videopad Video Editor	http://www.nchsoftware.com/videopad
Nero	https://www.nero.com
Open Shot Video Editor	https://www.openshot.org
pinnacle	https://www.pinnaclesys.com
Powtoon	https://www.powtoon.com/home/?
Shotcut	https://shotcut.org
Softorino YouTube Converter	https://softorino.com/youtube-converter-2
Video Cleaner	http://videocleaner.com
Video Toolbox	http://www.videotoolbox.com
VSCD Free Video Editor	http://www.videosoftdev.com
Wideo	https://wideo.co
WeVideo	https://www.wevideo.com
Windows Movie Maker - Free	https://www.microsoft.com/en-us/store/p/movie-maker-free/9mvfq4lmz6c9
Wondershare Filmora	https://filmora.wondershare.com
YouTube Converter	https://youtubeconvert.cc
YouTube Video Editor	https://support.google.com/youtube/answer/183851?visit_id=0-636615121384437440-336407512&p=video_editor&hl=en&rd=1

Working with Video Metadata

Tool	Link
ExtractMetadata	http://www.extractmetadata.com
_intelligenceX Magic File Tool	https://intelx.io/tools?tab=filetool
ivMeta	https://digi.ninja/projects/ivmeta.php
MediaInfo	https://mediaarea.net/en/MediaInfo
Metadata2Go	https://www.metadata2go.com
Metashield Clean-up-Online	https://metashieldclean-up.elevenpaths.com
Tika	https://tika.apache.org
YouTube Metadata	https://mattw.io/youtube-metadata

Working with GIFs and Memes

Finding GIFs and Memes

Tool	Link
gfycat	https://gfycat.com
GIFbin	https://www.gifbin.com
Giphy	https://giphy.com
ifunny	https://ifunny.co/tags/finding
IMGflip	https://imgflip.com
Imgur	https://imgur.com
Know Your Meme	https://knowyourmeme.com
Reaction GIFs	http://www.reactiongifs.com
Reddit: Animal GIFs	https://www.reddit.com/r/AnimalGIFs
Reddit: GIFs	https://www.reddit.com/r/gifs
Reddit: Reaction GIFs	https://www.reddit.com/r/reactiongifs
Tenor: Search GIFs	https://tenor.com/search/search-gifs
Tumblr	https://www.tumblr.com/explore/gifs

Working with Audio

Working with Radio

Tool	Link
Accuradio	https://www.accuradio.com
American Archive of Public Broadcasting	http://americanarchive.org
AntennaSearch	http://www.antennasearch.com
Antenna Structure Registration Search	http://wireless2.fcc.gov/UlsApp/AsrSearch/asrRegistrationSearch.jsp
Aprs.fi	https://aprs.fi/#!lat=40.51860&lng=-74.34990
ArtSci	http://www.artscipub.com/repeaters
Bearcat1	http://www.bearcat1.com
Broadcastify	http://www.broadcastify.com
Digital Frequency Search	https://digitalfrequencysearch.com/index.php
DXing National Scanner Frequency Guide	https://www.dxing.com/scanfreq.htm
Frequency Finder	http://frequencyfinder.org.uk
Funkfrequenzen01	http://www.funkfrequenzen01.de
DX Zone	https://www.dxzone.com
Global Tuners	https://www.globaltuners.com
HF Underground	https://www.hfunderground.com/board
Intercept Radio	http://interceptradio.com
Internet Radio	https://www.internet-radio.com
Live365	https://live365.com/listen
Live ATC	https://www.liveatc.net

Motorola Business Radio Frequency Database	https://www.buytwowayradios.com/blog/2015/05/default_frequencies_for_motorola_business_radios.html
N4JRI's Security Scanning Blog	https://www.qsl.net/n4jri/index.htm
NWR: Nationwide Station Listing	https://www.weather.gov/nwr/station_listing
On the Radio	http://ontheradio.net/stations.aspx
ProScan	https://www.proscan.org
Public Radio Fan	http://publicradiofan.com
Radio.com	https://player.radio.com/station-directory
Radio Garden	http://radio.garden
Radioing	http://radioing.com
Radio Links	https://radiolinks.net
Radio-locator	https://radio-locator.com
Radio.net	https://www.radio.net
Radio Portal	http://www.radio-portal.org
RadioReference	http://www.radioreference.com
Radio Stations	http://radiostations.net
Radio Station World	http://radiostationworld.com
Radio Team	http://www.radioteam.eu
Radio Tower	http://radiotower.com
Rfsearch	http://rfsearch.com
Scanner Frequencies	https://www.scannerfrequencies.com
Scanner Master Blog	http://www.scannermasterblog.com/tag/scanner-radio
Signal Identification Guide	https://www.sigidwiki.com
Station Ratings	http://stationratings.com
SteamFinder	https://streamfinder.com
Streema	https://streema.com
TuneIn	https://tunein.com
vTuner	https://www.vtuner.com
World Wide DX	https://www.worldwidedx.com/forums/scanning-shortwave-listening.83
ZipScanners	https://www.zipscanners.com

Podcasts

Tool	Link
Anatomy Podcasts	https://anatomypodcasts.com
Antennapod	http://antennapod.org
The Audacity to Podcast	https://theaudacitytopodcast.com/tap069-top-podcast-directories-and-how-to-get-in-them
BeyondPod	http://www.beyondpod.mobi
Blubrry Podcast Directory	https://create.blubrry.com/resources/blubrry-podcast-directory
Breaker	https://breaker.audio
Castbox	https://castbox.fm
Castro	http://supertop.co/castro
Doggcatcher	http://www.doggcatcher.com
Downcast	http://www.downcastapp.com
Fyyd	https://fyyd.de
iCatcher! Podcast Player	http://www.joeisanerd.com/apps
iPodder	http://www.ipodder.org
Light.sx	https://light.sx
Listen Notes	https://www.listennotes.com
Narro	https://www.narro.co
NPR Podcast Directory	https://www.npr.org/podcasts
Player FM	https://player.fm
Overcast	https://overcast.fm
Pocket Casts	http://www.shiftyjelly.com/pocketcasts
Pocket Casts Voodoo	https://chrome.google.com/webstore/detail/pocket-casts-voodoo/eipnphplecohckkjkgldkmmkgdfbmlek | https://github.com/agarzola/pocket-casts-voodoo

Podbay	https://podbay.fm
Podbean	https://www.podbean.com
Podcast Finder	https://vocalmatic.com/podcasts
Podcast Hawk	https://podcasthawk.com
Podcast Player Prime	https://mybrowseraddon.com/podcast-player.html
Podcast Republic	http://podcastrepublic.net
Podcast Search	http://blubrry.com/podcast-search
Podcast Search	http://podcastsearch.david-smith.org
Podcasts	http://www.podcasts.com
Podchaser	https://www.podchaser.com
Podflix	https://podflix.app
Podkicker	https://play.google.com/store/apps/details?id=ait.podka&hl=en
Pod Search	https://podsearch.com
podStation Podcast Player	https://chrome.google.com/webstore/detail/podstation-podcast-player/bpcagekijmfcocgjlnnhpdogbplajjfn | https://github.com/podStation/podStation
podradio	https://podradio.live
RabbitHole.cloud	https://rabbithole.cloud
Read2me	https://read2me.online
RSSDemon News & Podcast Reader	https://play.google.com/store/apps/details?id=com.meecel.feedreader.RssDemonAd&hl=en
RSSRadio Podcast Player	http://rssrad.io
SoundCloud Podcasting	https://soundcloud.com/for/podcasting
Spaactor	https://www.spaactor.com
Speaker Podcast Radio	https://www.spreaker.com/download/spreaker-podcast-radio
Spotify	https://www.spotify.com
Stabl	http://www.wearestabl.com
Stitcher	https://www.stitcher.com
TL;DL	https://tldl.app
Winds	https://getstream.io/winds

Speech to Text Tools

Tool	Link
Apple Voice Control	https://support.apple.com/en-us/HT210539
Braina	https://www.brainasoft.com/braina
Dictation	https://dictation.io
Drafts	https://getdrafts.com
Dragon	https://shop.nuance.com/store/nuanceus/en_US/Content/pbPage.dragon-professional-individual
e-speaking	https://e-speaking.com
Google Docs Voice	https://support.google.com/docs/answer/4492226?hl=en
Microsoft Azure Speech to Text	https://azure.microsoft.com/en-us/services/cognitive-services/speech-to-text
otranscribe	https://otranscribe.com
Otter	https://otter.ai
Sonix	https://sonix.ai
Speechmatics	https://www.speechmatics.com
Speechnotes	https://speechnotes.co
SpeechText.ai	https://speechtext.ai
SpeechTexter	https://www.speechtexter.com
trint	https://trint.com
verbit	https://verbit.ai
Voice Finger	https://voicefinger.cozendey.com
Watson Speech to Text	https://www.ibm.com/cloud/watson-speech-to-text
Windows Dictation	https://support.microsoft.com/en-us/help/4042244/windows-10-use-dictation

Text to Speech Tools

Tool	Link
Balabolka	http://www.cross-plus-a.com/balabolka.htm
Capti	https://www.captivoice.com
festvox	http://www.festvox.org/voicedemos.html
Hearling	https://hearling.com
iSpeech	https://www.ispeech.org
Kukarella	https://www.kukarella.com
Linguatec	https://www.linguatec.de
Narro	https://www.narro.co
NaturalReader	https://www.naturalreaders.com
NextUp	https://nextup.com
Play.ht	https://play.ht
Pocket	https://www.getpocket.com
Podcastle	https://podcastle.ai
Read2me	https://read2me.online
Read The Words	http://www.readthewords.com
Text2speech	https://www.text2speech.org
Text2voice	https://www.text2voice.org
TTSMP3	https://ttsmp3.com
Voice Dream reader	https://www.voicedream.com/reader
Zabaware Text-to-Speech Reader	http://www.zabaware.com/reader

Audio Editors

Tool	Link
Acoustica	https://acondigital.com/products/acoustica-audio-editor
Adobe Audition	https://www.adobe.com/products/audition.html
Amadeus Pro	https://www.hairersoft.com/pro.html
Audacity	https://www.audacityteam.org
Audiotool	https://www.audiotool.com
Fission	https://rogueamoeba.com/fission
Hindenburg Journalist	https://hindenburg.com/products/hindenburg-journalist
Hya-Wave	https://wav.hya.io
Mp3cut	https://mp3cut.net
Narration Box	https://narrationbox.com
oceanstudio	https://www.ocenaudio.com
Qtractor	https://qtractor.sourceforge.io/qtractor-index.html
Soundation	https://soundation.com
Sound Forge Audio Studio	https://www.magix.com/us/music/sound-forge/sound-forge-audio-studio
Spext (Audio editor)	https://www.spext.co
TwistedWave	https://twistedwave.com
Wavelab	https://new.steinberg.net/wavelab/compare-editions
Wavepad	https://www.nch.com.au/wavepad
Wavosaur	https://www.wavosaur.com

Tool	Link
ExtractMetadata	http://www.extractmetadata.com
MediaInfo	https://mediaarea.net/en/MediaInfo
Metadata2Go	https://www.metadata2go.com
Metadata Extraction Tool	http://meta-extractor.sourceforge.net
Metadata Extractor	https://developer.tizen.org/dev-guide/2.3.1/org.tizen.guides/html/native/multimedia/metadata_extractor_n.htm
Metashield Clean-up-Online	https://metashieldclean-up.elevenpaths.com

3D Models and Designs

3D Models and Designs

Tool	Link
3D Export	https://3dexport.com
3D Face Reconstruction	https://cvl-demos.cs.nott.ac.uk/vrn/index.php
3DShook	http://www.3dshook.com
3DThis	https://3dthis.com
3D Warehouse	https://3dwarehouse.sketchup.com
cgtrader	https://www.cgtrader.com
Cults3D	https://cults3d.com
Grab CAD	https://grabcad.com
MyMiniFactory	https://www.myminifactory.com
pinshape	https://pinshape.com
Sketchfab	https://sketchfab.com
Thingverse	https://www.thingiverse.com
Turbosquid	https://www.turbosquid.com
Yeggi	https://www.yeggi.com

Working with Documents

Searching Web-based Documents

Tool	Link
Ask the EU	https://www.asktheeu.org
docjax	https://docjax.com
DOC-TXT	http://www.doc-txt.com
DocumentCloud Search	https://www.documentcloud.org/public/search
Find-pdf-doc	http://www.findpdfdoc.com
Free Full PDF	http://www.freefullpdf.com
PDF Drive	https://www.pdfdrive.com
PDF Search	https://www.pdfsearch.io
PDF Search Engine	http://www.pdfsearchengine.info
PDF Search Engine	http://www.pdfsearchengine.net
PDF Slide	https://pdfslide.net
Scribd	http://www.scribd.com
soPDF.com	http://www.sopdf.com
Sourceful	https://sourceful.co.uk
Voelspriet	https://www.voelspriet.nl/googledocs.htm

Searching Personal Document Collections

Tool	Link
Ambar	https://ambar.cloud | https://github.com/RD17/ambar
Command E	https://getcommande.com
DocFetcher	http://docfetcher.sourceforge.net
DocsVault	https://www.docsvault.com
Open Semantic Search	https://www.opensemanticsearch.org

Searching for Slides and Presentations

Tool	Link
Authorstream	http://www.authorstream.com
PPT Search Engine	http://www.pptsearchengine.org
PPT Search Engine	http://www.pptsearchengine.net
SlideSearch	https://www.slidesearch.net
SlideShare	http://www.slideshare.net
XPowerPoint	https://www.xpowerpoint.com

Searching Pastebins

Tool	Link
List of Pastebins	https://github.com/jamesacampbell/awesome-pastes
Pastebin_scraper	https://github.com/Critical-Start/pastebin_scraper
PasteLert	https://andrewmohawk.com/pasteLert
Paste Site Search	http://netbootcamp.org/pastesearch.html
PSBDMP API	https://psbdmp.ws
PwnBin	https://github.com/kahunalu/pwnbin

B577

Document and Reference Management

Tool	Link
BibDesk	https://bibdesk.sourceforge.io
Bibsonomy	http://www.bibsonomy.org
Citavi	https://www.citavi.com
DocumentCloud	https://www.documentcloud.org
Docuware Cloud	https://start.docuware.com/docuware-cloud
Dokmee	https://www.dokmee.com
eFileCabinet	https://www.efilecabinet.com
Endnote	http://endnote.com
JabRef	https://www.jabref.org
Keepmark	https://keepmark.io
LiquidText	https://www.liquidtext.net
Mendeley	https://www.mendeley.com
M-Files	https://www.m-files.com/en/document-management
Open Semantic Desktop Search	https://www.opensemanticsearch.org/doc/desktop_search
Overview	https://www.overviewdocs.com
Paperpile	https://paperpile.com
Papers	https://www.papersapp.com
Polar	https://getpolarized.io
Qiqqa	http://www.qiqqa.com
Readcube	https://www.readcube.com
refbase	http://www.refbase.net
Zotero	https://www.zotero.org

PDF Management

Tool	Link
CISDEM PDF Converter	https://www.cisdem.com/pdf-converter-ocr-mac.html
CleverPDF	https://www.cleverpdf.com
CutePDF	https://www.cutepdf.com
dangerzone	https://github.com/firstlookmedia/dangerzone
Free PDF Compressor	http://www.freepdfcompressor.com
Foxit Editor	https://www.foxitsoftware.com/pdf-editor
Foxit Reader	https://www.foxitsoftware.com/products/pdf-reader
Icecream Apps	https://icecreamapps.com
ilovepdf	http://www.ilovepdf.com
iSkysoft	https://pdf.iskysoft.com
Nitro PDF Reader	https://www.gonitro.com/pdf-reader
PDFCore	https://www.pdfcore.com
PDF Eraser	https://www.pdferaser.net
PDFEscape	https://www.pdfescape.com
PDF Exchange	https://www.tracker-software.com
PDFExpert	https://pdfexpert.com
Pdf-redact-tools	https://github.com/firstlookmedia/pdf-redact-tools
PDFSAM	https://pdfsam.org/download-pdfsam-basic
PDFx	http://www.metachris.com/pdfx
PrimoPDF	https://www.primopdf.com
pyPdf	https://pypi.org/project/pyPdf
Scrible	https://www.scrible.com
Sejda PDF Editor	https://www.sejda.com/pdf-editor
Smallpdf	http://smallpdf.com
Tabula	http://tabula.technology

Weava Highlighter	https://chrome.google.com/webstore/detail/weava-highlighter-pdf-web/cbnaodkpfinfiipjblikofhlhlcickei
Wondershare PDF Element	https://pdf.wondershare.com/business
XODO	http://xodo.com
Xpdf	http://www.foolabs.com/xpdf/home.html
Zanran	http://zanran.com

Tool	Link
Anonymouth	https://github.com/psal/anonymouth
Doc Scrubber	http://www.brightfort.com/docscrubber.html
Evermap AutoMetadata	http://www.evermap.com/autometadata.asp
ExtractMetadata	http://www.extractmetadata.com
FOCA	https://www.elevenpaths.com/labstools/foca/index.html
Goca	https://github.com/gocaio/goca
_intelligenceX Magic File Tool	https://intelx.io/tools?tab=filetool
Mat2	https://0xacab.org/jvoisin/mat2
Metadata2Go	https://www.metadata2go.com
Metadata Analysis	https://www.metadataanalysis.com
Metadata Extraction Tool	https://github.com/DIA-NZ/Metadata-Extraction-Tool
Metagoofil	http://www.edge-security.com/metagoofil.php
Metashield Clean-up-Online	https://metashieldclean-up.elevenpaths.com
OOMetaExtractor	https://archive.codeplex.com/?p=oometaextractor
PDF Candy Edit PDF Metadata	https://pdfcandy.com/edit-pdf-meta.html
Pdf-redact-tools	https://github.com/firstlookmedia/pdf-redact-tools
PDF Yeah Read PDF Metadata	https://www.pdfyeah.com/view-pdf-metadata
Pymeta	https://github.com/m8r0wn/pymeta
Spiderpig	https://github.com/hatlord/Spiderpig

Academic Resources and Grey Literature

Academic and Grey Literature Research Tools

Tool	Link
Academia	https://www.academia.edu
Academic Journals	http://www.academicjournals.org
African Journals Online	http://www.ajol.info
AI Index Search Engine	http://arxiv.aiindex.org/search
Altmetric	https://www.altmetric.com
American Society of Civil Engineers	http://ascelibrary.org
Amigo	http://amigo.geneontology.org/amigo
AMiner	https://aminer.org
Archive Grid	https://researchworks.oclc.org/archivegrid
Archives Portal Europe	http://www.archivesportaleurope.net
arXiv	https://arxiv.org
Authorea	https://www.authorea.com
A-Z Library Databases	http://guides.uflib.ufl.edu/az.php
Base	http://www.base-search.net
BioMedLib Search	http://bmlsearch.com
BioOne	https://bioone.org
bioRxiv	https://www.biorxiv.org
BioSeek	https://www.bioseek.eu/us/eng/research/home
BioText Search Engine	https://biosearch.berkeley.edu
Bitpipe	https://www.bitpipe.com
Cambridge Core	https://www.cambridge.org/core
CERN Document Server	https://cdsweb.cern.ch
Cite Seer X	http://citeseer.ist.psu.edu

Cochrane Library	https://www.cochranelibrary.com
Connected Papers	https://www.connectedpapers.com
Core	https://core.ac.uk
Corona Papers	https://covid19.ai2prod.com
dblp	https://dblp.uni-trier.de
deepdyve	https://www.deepdyve.com
Dissertation.com	http://dissertation.com
East view: Journals	https://www.eastview.com/resources/journals
EBSCOhost	http://web.a.ebscohost.com/ehost/search/advanced?vid=0&sid=a14e8eb2-3141-4adb-a441-2bf7b0279d17%40sessionmgr4008
EconPapers	https://econpapers.repec.org
Elsevier	https://www.elsevier.com
ERIC	https://eric.ed.gov
EThOS	http://ethos.bl.uk
Etymo	https://etymo.io
Europeana	https://www.europeana.eu
Europe PMC	http://europepmc.org
figshare	https://figshare.com
Find White Papers	http://findwhitepapers.com
Focus	https://focus.universite-paris-saclay.fr
Gene Ontology	http://geneontology.org
Get the Research	http://gettheresearch.org
The Getty Research Institute	http://www.getty.edu/research/library
Google Scholar	https://scholar.google.com
Google Scholar Button	https://chrome.google.com/webstore/detail/google-scholar-button/ldipcbpaocekfooobnbcddclnhejkcpn | https://addons.mozilla.org/en-US/firefox/addon/google-scholar-button
Grey Guide	http://greyguide.isti.cnr.it
Grey Literature – List of Gateways	http://csulb.libguides.com/graylit
Grey Literature Report	http://www.greylit.org
Grey Literature Strategies	http://greylitstrategies.info

B583

GreyNet International	http://www.greynet.org
Hathi Trust Digital Library	https://www.hathitrust.org
HighWire: Free Online Full-text Articles	http://portal.highwire.org/lists/browse.dtl
IEEE Xplore	https://ieeexplore.ieee.org/Xplore/home.jsp
Ingenta Connect	https://www.ingentaconnect.com
International Affairs Resources	https://internationalaffairsresources.com
Internet Archive	https://archive.org
iScienceSearch	https://akoscheminformatics.de/iss/start.html
iSpyBio	http://www.ispybio.com
IssueLab	https://www.issuelab.org
IT White Papers	https://resourcelibrary.itwhitepapers.com
Jisc Library Hub Discover	https://discover.libraryhub.jisc.ac.uk
Journal Guide	https://www.journalguide.com
Journal Map	https://www.journalmap.org
Journal Seek	http://journalseek.net
JSTOR	http://www.jstor.org
JURN.org	http://jurn.org
KFF	https://www.kff.org
Lazy Scholar	http://www.lazyscholar.org
Libguides Community	https://community.libguides.com
Library of Congress	https://www.loc.gov
LOADB	http://www.loadb.org
Mednar	https://mednar.com
Microsoft Academic	https://academic.microsoft.com
My Science Work	https://www.mysciencework.com
National Archives	https://www.archives.gov/research/catalog
The National Archives	http://discovery.nationalarchives.gov.uk
NRC Research Press	http://www.nrcresearchpress.com
Oajse Social Sciences	http://oajse.com/subjects/social_sciences.html
OCLC	https://www.oclc.org
OMICS International	http://research.omicsgroup.org
Online White Papers	https://www.onlinewhitepapers.com

B584

Open Access Scientific Journals	http://www.pagepress.org
Open Access Theses and Dissertations	https://oatd.org
OpenAIRE	https://www.openaire.eu
Open DOAR	http://v2.opendoar.sherpa.ac.uk
Open Grey	http://www.opengrey.eu
Open Knowledge Maps	https://openknowledgemaps.org
Open Syllabus Explorer	http://explorer.opensyllabusproject.org
The Open Syllabus Project	http://opensyllabusproject.org
Open Thesis	http://www.openthesis.org
OReFiL	http://orefil.dbcls.jp
OSF Preprints	https://osf.io/preprints/discover
OSTI.GOV	https://www.osti.gov
Oxford Journals	http://www.oxfordjournals.org
PagePress	https://www.pagepress.org
PhilPapers	https://philpapers.org
Pivot	https://pivot.proquest.com
PLOS	https://www.plos.org
PNAS	https://www.pnas.org
PQDT Open	https://pqdtopen.proquest.com/search.html
PubMed	http://www.ncbi.nlm.nih.gov/pubmed
PubPeer	https://pubpeer.com
Quertle	https://quertle.com
Quetzal Search	https://www.quetzal-search.info
refseek	https://www.refseek.com
Research Gate	http://www.researchgate.net
REPEC	http://repec.org
Resource Library: White Papers	https://resourcelibrary.itwhitepapers.com
Retraction Watch	https://retractionwatch.com
SAGE Journals	http://journals.sagepub.com
Scielo	https://scielo.org
Science Advisor	http://science-advisor.net

Science Daily	https://www.sciencedaily.com
ScienceDirect	http://www.sciencedirect.com
ScienceDomain	http://www.sciencedomain.org
Science.gov	https://www.science.gov
ScienceHack	http://sciencehack.com
Science Hub	https://scihub.org
Science Open	https://www.scienceopen.com
Science Magazine Search	https://search.sciencemag.org
Science Protocols	http://www.scienceprotocols.org
Science Publications	http://www.thescipub.com
Science Research	http://www.scienceresearch.com
Science Search	https://science-search.net
Science Search Engine	http://research.omicsgroup.org
sci-hub-now	https://github.com/0x01h/sci-hub-now
Scilit	https://www.scilit.net
scinapse	https://scinapse.io
SCIRP	http://www.scirp.org
Semantic Scholar	https://www.semanticscholar.org
Semion	http://semion.io
SOC ARXIV	https://osf.io/preprints/socarxiv
Sparrho	https://www.sparrho.com
Springer Link	http://link.springer.com
SSRN	https://www.ssrn.com
Sweet Search: A Search Engine for Students	https://www.sweetsearch.com
Taylor & Francis Online	http://www.tandfonline.com
Unpaywall	https://chrome.google.com/webstore/detail/unpaywall/iplffkdpngmdjhlpjmppncnlhomiipha?hl=en | https://addons.mozilla.org/en-US/firefox/addon/unpaywall
Vadlo	http://vadlo.com
Video Lectures	http://videolectures.net
VirtualLRC.com	https://www.virtuallrc.com

Web of Science	https://clarivate.com/webofsciencegroup/solutions/web-of-science
Web of Science: Journal Search	https://mjl.clarivate.com
White Paper	https://whitepaper.io
Whitepaper Database	http://whitepaperdatabase.com
White Papers Online	https://www.whitepapers.online
Wiley	http://eu.wiley.com
Wisdom.ai	https://www.wizdom.ai
WorldCat	https://www.worldcat.org
World Digital Library	http://www.wdl.org
World Wide Science	http://worldwidescience.org
zenodo	https://zenodo.org
Zetoc	http://zetoc.jisc.ac.uk

Medical Search Engines

Tool	Link
ALLMEDX	https://allmedx.com
DeepAIMed	https://deepaimed.com
Drug Bank	https://www.drugbank.ca
Drugs.com	https://www.drugs.com
FindZebra	https://findzebra.com
GoogleMT	https://www.googlemt.com
Medical NDX	http://medicalndx.com
Medical World Search	http://www.mwsearch.com
MedlinePlus	https://medlineplus.gov
MedNar	https://mednar.com
medwarm	https://medworm.com
Open Access Biomedical Image Search Engine	https://openi.nlm.nih.gov
openmd	https://openmd.com
Prescribers' Digital Reference	https://pdr.net
Seenso Health	https://www.seenso.com
Zocdoc	https://www.zocdoc.com

B588

Lectures, Talks, Presentations and Speeches

Lectures, Talks, Presentations and Speeches

Tool	Link
Academic Earth	https://academicearth.org
AutoDesk University	http://au.autodesk.com
Course Notes	https://course-notes.org
Free Video Lectures	https://freevideolectures.com
Global Academy for Medical Education	https://www.globalacademycme.com/conferences-archive
IEEE Xplore	https://ieeexplore.ieee.org/Xplore/home.jsp
iTunes U	https://itunes.apple.com/us/app/itunes-u/id490217893?mt=8
Kennedy Center Lecture Archive	http://kennedy.byu.edu/lectures
Lecture Hero	https://www.lecturehero.com
Lecture List	http://lecturelist.org
Lecture Notes	https://lecturenotes.in
Nature.com	https://www.nature.com/natureevents/science
Speakerdex	https://speakerdex.co
StuDocu	https://www.studocu.com
Talks at Google	https://talksat.withgoogle.com
Ted	https://www.ted.com
The Great Courses	https://www.thegreatcourses.com

B589

Books and Reading

Books Search and Reading Tools

Tool	Link
100 Million Book	http://www.100millionbooks.org
AllReaders	http://allreaders.com
Amazon Cheap Books	http://www.amazon.com/b?tag=mak041-20&linkCode=as2&ie=UTF8&node=2245146011
Apple Books	https://www.apple.com/apple-books
Audible	http://www.audible.com
Bibliomania	http://www.bibliomania.com
Blinkist	https://www.blinkist.com
BookBub	https://www.bookbub.com
BookClub	https://bookclub.cool
Bookish	https://www.bookish.com
Booklikes	http://booklikes.com
Bookmate	https://bookmate.com
Bookseer	http://bookseer.com
booksloth	https://www.booksloth.com
Books on the Knob	http://blog.booksontheknob.org
Bookstr	https://www.bookstr.com
Bookworm	https://babluboy.github.io/bookworm
Bungo Search	https://search.bungomail.com
Calibre	http://www.calibre-ebook.com
Cogden's Literature	https://cogdensliterature.com
Daily Cheap Reads	http://www.dailycheapreads.com

East view: Books and e-Books	https://www.eastview.com/resources/books-and-e-books
EBookee	https://ebookee.com
Ebooks Searcher	https://ebook-searcher.com
Europeana	https://www.europeana.eu
Favobooks	http://favobooks.com
FBReader	https://fbreader.org
Fready	https://www.fready.co
Free eBooks	https://www.free-ebooks.net
Free Kindle Books	http://freekindlebooks.org
The Getty Research Institute	http://www.getty.edu/research/library
Gnooks	http://www.gnooks.com
Google Books	https://books.google.com
Google Play Books	https://play.google.com/books
Goodreads	http://www.goodreads.com
Hathi Trust Digital Library	https://www.hathitrust.org
How Long to Read	https://www.howlongtoreadthis.com
I Love My Kindle	https://ilmk.wordpress.com
Inkitt	https://www.inkitt.com
Internet Archive Texts	http://archive.org/details.php?identifier=texts
ISBN Plus	http://isbnplus.com
IT Ebooks	https://it-ebooks-search.info
Jellybooks	https://www.jellybooks.com
Just Free Books	http://www.justfreebooks.info
kaffae	https://kaffae.com
Kindle: First Reads	https://www.amazon.com/firstreads
KindleNationDay	http://kindlenationdaily.com
kindleunlimited	https://www.amazon.com/kindle-dbs/hz/subscribe/ku
KindleWorld	http://kindleworld.blogspot.com
Lendle	http://lendle.me
libib	https://www.libib.com
LibraryThing	https://www.librarything.com

Librivox	https://librivox.org
Litsy	https://www.litsy.com
Loyal Books	http://www.loyalbooks.com
Many Books	http://manybooks.net
Map Filter Fold	https://mapfilterfold.com/?page=1
Most Recommended Books	https://mostrecommendedbooks.com
Narro	https://www.narro.co
The Online Books Page	http://digital.library.upenn.edu/books/search.html
Open Culture: Free Audiobooks	http://www.openculture.com/freeaudiobooks
Openingthebook	http://www.openingthebook.com
Open Library	https://openlibrary.org
OverDrive	https://www.overdrive.com
Pixel of Ink	http://www.pixelofink.com
Project Gutenberg	http://www.gutenberg.org
Quesba	https://www.quesba.com
Reader IQ	http://www.ereaderiq.com
Readgeek	http://www.readgeek.com
Readlax	https://chrome.google.com/webstore/detail/readlax-speed-reading/noggimpgfjnknjbldfibbdnocffdoii
Readminder	https://play.google.com/store/apps/details?id=com.boingon.readminder
Readwise	https://readwise.io
Reddit: 52 Weeks, 52 Books	https://www.reddit.com/r/52book
Reddit: Book Club	https://www.reddit.com/r/bookclub
Reddit: Book Quotes	https://www.reddit.com/r/bookquotes
Reddit: Books	https://www.reddit.com/r/books
Reddit: Literature	https://www.reddit.com/r/literature
Reddit: Non-Fiction Book Club	https://www.reddit.com/r/nonfictionbookclub
Reddit: Nonfiction Books	https://www.reddit.com/r/nonfictionbooks
Reddit: Suggest Me A Book	https://www.reddit.com/r/suggestmeabook

Riffle	https://www.rifflebooks.com
Scribd	https://www.scribd.com
Stack	https://stack.app
Storygraph	https://beta.thestorygraph.com
Talk to Books	https://books.google.com/talktobooks
TasteDive: Books	https://tastedive.com/books
TheFrugaleReader	http://www.thefrugalereader.com
Tinderizer	http://tinderizer.com
WhatShouldIReadNext	http://www.whatshouldireadnext.com
Whichbook	https://www.whichbook.net
YourNextRead	http://www.yournextread.com

B593

Working with Data and Statistics

Finding Data and Statistics

Tool	Link
Academic Torrents	https://academictorrents.com
AGOA Data Center	http://agoa.info
AidData	http://aiddata.org
ADB Statistical Database System	https://www.adb.org/data/sdbs
Archeology Data Service	http://archaeologydataservice.ac.uk
Awesome Public Datasets	https://github.com/awesomedata/awesome-public-datasets
AWS Public Datasets	https://registry.opendata.aws
Bank for International Settlements Statistics	http://www.bis.org/statistics/index.htm
BigQuery Public Datasets	https://cloud.google.com/bigquery/public-data
BP Statistical Review of World Energy	http://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html
Bizstats	http://www.bizstats.com
CIA World Factbook	https://www.cia.gov/library/publications/the-world-factbook
Center for International Earth Science Information Network	http://www.ciesin.org
Center for Global Development – Commitment to Development Index	https://www.cgdev.org/commitment-development-index-2018
CEPII	http://www.cepii.fr/CEPII/en/welcome.asp
Data 360	http://www.data360.org

Databasd	https://databasd.com
Data Catalog	https://catalog.data.gov/dataset
DataCite	https://search.datacite.org
Data Europa	https://data.europa.eu
Data.gov	https://www.data.gov
Data.gov.uk	https://data.gov.uk
Data Mendeley	https://data.mendeley.com/research-data
Data Portals	http://dataportals.org
Data Search	https://datasetsearch.research.google.com
Data.World	https://data.world
Datawrapper	https://www.datawrapper.de
DBPedia	http://wiki.dbpedia.org
DOE Data Explorer	https://www.osti.gov/dataexplorer
DRYAD	https://datadryad.org
EMBL-EBI	https://www.ebi.ac.uk
European Commission Eurobarometer	http://ec.europa.eu/COMMFrontOffice/PublicOpinion
European Data Portal	https://www.europeandataportal.eu
European Union Open Data Portal	https://data.europa.eu/euodp/en/data
Eurostat	http://ec.europa.eu/eurostat
FAIRsharing.org	https://fairsharing.org
FAOSTAT	http://www.fao.org/faostat/en/#home
FiveThirstyEight	https://data.fivethirtyeight.com
FRED	https://fred.stlouisfed.org
Gapminder World	http://www.gapminder.org/data
gesisDataSe	https://datasearch.gesis.org/search
globalEDGE Database of International Business Statistics	http://globaledge.msu.edu/tools-and-data/dibs
Google Dataset Search	https://datasetsearch.research.google.com
Google Finance	https://www.google.com/finance
Google Public Data Explorer	http://www.google.com/publicdata/directory
GOVDATA	https://www.govdata.de
Government of Canada Open Data	https://open.canada.ca/en/open-data

ICPSR	https://www.icpsr.umich.edu//web/pages/ICPSR/index.html
IHS Piers	https://www.ihs.com/products/piers.html
Human Development Reports	http://hdr.undp.org/en/global-reports
IDEA Databases	https://www.idea.int/data-tools
International Labour Comparisons	http://www.bls.gov/fls/chartbook.htm
ILOSTAT	https://ilostat.ilo.org
IMF Data	http://www.imf.org/en/Data
IMF World Economic Outlook Databases	http://www.imf.org/external/ns/cs.aspx?id=28
Index Mundi	http://www.indexmundi.com
International Energy Agency Energy Atlas	http://energyatlas.iea.org
International Energy Agency Statistics	http://www.iea.org/statistics
Junar	http://junar.com
Kaggle	https://www.kaggle.com/datasets
Knoema	https://knoema.com
LandMatrix	http://landmatrix.org
Latinobarometro	http://www.latinobarometro.org
Machine Learning Repository	http://archive.ics.uci.edu/ml/index.php
Mendeley: Find Research Data	https://data.mendeley.com/research-data
Microsoft Research Open Data	https://msropendata.com
Nation Master	http://www.nationmaster.com/statistics
Net Data Directory	http://netdatadirectory.org
OECD Data	https://data.oecd.org
OECD Factbook	http://www.oecd-ilibrary.org/economics/oecd-factbook_18147364
Open Data CERN	http://opendata.cern.ch
Open Data Network	http://www.opendatanetwork.com
Open Data Portal	http://www.opendataportal.at
Open Data Portal Munich	https://www.opengov-muenchen.de
Open Data Showroom	http://opendata-showroom.org
Pew Research Center	http://www.pewinternet.org/datasets
Population Reference Bureau Data Finder	http://www.prb.org/DataFinder.aspx

B596

PRS Risk Indicators	http://www.prsgroup.com
Public Open Data Soft	https://public.opendatasoft.com/explore/?sort=modified
Quandl	https://www.quandl.com
Re3data.org	https://www.re3data.org
Reddit: /r/Datasets	https://www.reddit.com/r/datasets
Research Pipeline	http://www.researchpipeline.com
SESRIC Basic Social and Economic Indicators	http://www.sesric.org/baseind.php
SESRIC Databases	http://www.sesric.org/databases-index.php
Socrata	https://opendata.socrata.com
Statista	http://www.statista.com
Statpedia	https://statpedia.com
The Atlas of Economic Complexity	http://atlas.cid.harvard.edu
The Data and Story Library	http://lib.stat.cmu.edu/DASL
Trading Economics	http://www.tradingeconomics.com
Transparency.org Corruption Perception Index	https://www.transparency.org/news/feature/corruption_perceptions_index_2016
UK Data Service	https://www.ukdataservice.ac.uk
UN COMTRADE Database	http://comtrade.un.org
UNCTAD Country Fact Sheets	http://unctad.org/en/Pages/DIAE/World%20Investment%20Report/Country-Fact-Sheets.aspx
UNCTAD Investment Country Profiles	http://unctad.org/en/Pages/Publications/Investment-country-profiles.aspx
UNCTAD STAT	http://unctadstat.unctad.org
UN Data	http://data.un.org
UNDP's Human Development Index	http://hdr.undp.org/en/data
UNECE	http://w3.unece.org/PXWeb/en
UNESCO Institute for Statistics	http://www.uis.unesco.org
UNIDO Statistical Databases	https://www.unido.org/researchers/statistical-databases
UNStats	https://unstats.un.org
US Census Bureau	https://www.census.gov
Upsala Conflict Data Program	http://www.pcr.uu.se/research/UCDP

B597

US Data and Statistics	https://www.usa.gov/statistics
Visual Data Discovery	https://www.visualdata.io/discovery
WHO Data	http://www.who.int/gho/en
Wikidata	https://www.wikidata.org
World Bank Data Catalog	https://datacatalog.worldbank.org
World Bank Open Data	http://data.worldbank.org
World Bank Doing Business	http://www.doingbusiness.org
World Bank Enterprise Surveys	http://www.enterprisesurveys.org
World Integrated Trade Solution	http://wits.worldbank.org
WTO Statistics	https://www.wto.org/english/res_e/statis_e/statis_e.htm

Infographics and Data Visualization

Tool	Link
Adobe Color CC	https://color.adobe.com/create/color-wheel
Aeon Timeline	http://www.aeontimeline.com
App Diagrams	https://app.diagrams.net
Bizint	http://www.bizint.com
Cacoo	https://cacoo.com
Canva	https://www.canva.com
chartblocks	http://www.chartblocks.com
Chart.js	http://www.chartjs.org
Circos	http://circos.ca
creately	http://creately.com
DataBasic	https://databasic.io
Data Visualization Catalogue	http://datavizcatalogue.com
D3js	https://d3js.org
DataWrapper	https://datawrapper.de
Diagram.codes	https://www.diagram.codes
dygraphs	http://dygraphs.com
easely	http://www.easel.ly
Exhibit	http://www.simile-widgets.org/exhibit
Flot	http://www.flotcharts.org
folium	https://github.com/python-visualization/folium
Free Timeline	http://free-timeline.com
FusionCharts	http://www.fusioncharts.com
Google Developers: Charts	https://developers.google.com/chart
Google Drawings	https://docs.google.com/drawings
GraphX	http://spark.apache.org/graphx

Hello Layers	https://www.hellolayers.com/flows
Highcharts	http://www.highcharts.com
Hohli	http://charts.hohli.com
Inkscape	https://inkscape.org
Infogr.am	https://infogr.am
JavaScript Infovis Toolkit	http://philogb.github.io/jit
JpGraph	http://jpgraph.net
jqPlot	http://www.jqplot.com
Knoema	https://knoema.com
Leaflet	http://leafletjs.com
Listify	http://listify.okfnlabs.org
Lucidchart	https://www.lucidchart.com
Neo4j	https://neo4j.com
Nodebox	https://www.nodebox.net
Office Timeline	https://www.officetimeline.com
Palladio	http://hdlab.stanford.edu/palladio
Piktochart	https://piktochart.com
Pixcone	http://www.pixcone.com
Pixxa	http://www.pixxa.com
Plotly	https://plot.ly
Preceden	https://www.preceden.com
Sizzle	https://www.sizzleanalytics.com
Quadrigram	http://www.quadrigram.com
Raphael	http://dmitrybaranovskiy.github.io/raphael
RAW Graphs	http://app.rawgraphs.io
Shanti Interactive	http://www.viseyes.org
Snappa	https://snappa.io
Statpedia	http://statpedia.com
Sutori	https://www.sutori.com
Tableau	http://www.tableau.com
Tableau Public	https://public.tableau.com
Textures.js	https://riccardoscalco.github.io/textures
Tiki-toki	http://www.tiki-toki.com

Tik-tok	https://datanews.github.io/tik-tok
Timeflow	https://github.com/FlowingMedia/TimeFlow/wiki
Timeglider	http://timeglider.com/widget
Time Graphics	https://time.graphics
Timeline	http://timeline.knightlab.com
Timeline	http://www.simile-widgets.org/timeline
Timeline Maker	https://www.timelinemaker.com
Timetoast	http://www.timetoast.com
Word Art	https://wordart.com
Wordle	http://www.wordle.net
Venngage	https://venngage.com
Visage	https://visage.co
Vis.js	http://visjs.org
Visme	http://www.visme.co
visually	https://visual.ly
Vortex	http://www.dotmatics.com/products/vortex
yEd	https://www.yworks.com/products/yed
ZingChart	http://www.zingchart.com

Dashboard Tools

Tool	Link
Analytics Portfolio	https://analyticsportfolio.com
Bilbeo	https://www.bilbeo.com
Chartio	https://chartio.com
Clicdata	http://www.clicdata.com
Cyfe	http://www.cyfe.com
Dasheroo	https://www.dasheroo.com
Dashthis	https://dashthis.com
DataBox	https://databox.com
DataDeck	https://www.datadeck.com
datapine	https://www.datapine.com
Geckoboard	https://www.geckoboard.com
Happy Metrics	https://www.happymetrix.com
iDashboards	https://www.idashboards.com
InetSoft	https://www.inetsoft.com
Klipfolio	http://www.klipfolio.com
Scoro	https://www.scoro.com
Smartsheet	https://www.smartsheet.com
Spider Strategies	https://www.spiderstrategies.com
Tableau	https://www.tableau.com
Target Dashboard	https://www.targetdashboard.com
Visually	http://visual.ly

Data Analysis

Tool	Link
Alteryx	https://www.alteryx.com
AW Stats	http://www.awstats.org
bigML	https://bigml.com
board	https://www.board.com
Cloud Automl	https://cloud.google.com/automl
Countly	https://count.ly/web-analytics
D3js	https://d3js.org
Dataiku	https://www.dataiku.com
Data Kleenr	http://chi2innovations.com/datakleenr
Data Pine	https://www.datapine.com/data-analysis-tools
Data Preparator	http://www.datapreparator.com
DataRobot	https://www.datarobot.com
Datashare	https://datashare.icij.org
Data Wrapper	https://www.datawrapper.de
Data Wrangler	http://vis.stanford.edu/wrangler
Displayr	https://www.displayr.com
Domo	https://www.domo.com
eAnalytics	http://www.eanalytics.de
Exmerg	http://www.exmerg.com
Google Analytics	https://www.google.com/analytics/?gclid=CjwKEAiAh7WkBRCQj-_zwZvk52ISJADj7z8COo_vM67BKDQAuisEzPwsNZ5Yphpu7Q5x2MirmakiUxoCZ6fw_wcB#?modal_active=none
Google Data Studio	https://www.google.com/analytics/data-studio
H2O.ai	https://www.h2o.ai
Hitachi Vantara	https://www.hitachivantara.com

ibi	https://www.ibi.com
IBM Analytics	https://www.ibm.com/analytics/business-analytics
Import.io	https://www.import.io
Infor Birst	https://www.infor.com/products/birst
JavaScript InfoVis Toolkit	http://philogb.github.io/jit
Knime Analytics Platform	https://www.knime.com/knime-analytics-platform
Looker	https://looker.com
Matomo	https://matomo.org
Microsoft Azure Machine Learning Studio	https://studio.azureml.net
Microsoft Power BI	https://powerbi.microsoft.com
MicroStrategy	https://www.microstrategy.com
MLBase	http://mlbase.org
MLJAR	https://mljar.com
Mr. Data Converter	https://shancarter.github.io/mr-data-converter
OpenRefine	https://github.com/OpenRefine
Open Web Analytics	http://www.openwebanalytics.com
Oracle Analytics Cloud	https://www.oracle.com/middleware/technologies/oracle-analytics-cloud.html
Orange	https://orange.biolab.si
Paxata	https://www.paxata.com
PDF Tables	https://pdftables.com
Public Open Data Soft	https://public.opendatasoft.com/explore/?sort=modified
Pyramid Analytics	https://www.pyramidanalytics.com
Qlik	https://www.qlik.com
Rapid Miner	https://rapidminer.com
R Project	https://www.r-project.org
SAP	https://www.sap.com
SAS	https://www.sas.com
Scumblr	https://github.com/Netflix/scumblr/wiki
SEM Rush	https://www.semrush.com
Sisense	https://www.sisense.com
Tableau Public	https://public.tableau.com/s
Talend	https://www.talend.com/products/data-preparation#free-desktop

TARGIT	https://www.targit.com
tellius	https://www.tellius.com
ThoughtSpot	https://www.thoughtspot.com
TIBCO	https://www.tibco.com
Trifacta	https://www.trifacta.com
Weka	https://www.cs.waikato.ac.nz/ml/weka
YellowFin	https://www.yellowfinbi.com
Zoho Analytics	https://www.zoho.com/analytics
Zoho Reports	https://www.zoho.com/reports
Qlik View	http://global.qlik.com/us/landing/go-sm/qlikview/download-qlikview

Data Scrapers

Tool	Link
80legs	https://80legs.com
Agenty	https://www.agenty.com
Beautiful Soup	https://www.crummy.com/software/BeautifulSoup/bs4/doc
Cola	https://github.com/chineking/cola
Content Bomb	http://www.contentbomb.com
Common Crawl	https://commoncrawl.org
Crawly	http://crawly.diffbot.com
Data Miner	https://data-miner.io
Demiurge	https://github.com/matiasb/demiurge
DiffBot	https://www.diffbot.com
FMiner	http://www.fminer.com
Google2Csv	https://github.com/psalias2006/Google2Csv
Helium Scraper	http://www.heliumscraper.com/en/index.php?p=home
Import.io	https://www.import.io
Include.ai	https://www.include.ai
Lassie	https://github.com/michaelhelmick/lassie
Listly	https://listly.io
Mechanical Soup	https://github.com/MechanicalSoup/MechanicalSoup
Mozenda	https://www.mozenda.com
Octoparse	https://www.octoparse.com
OutWit Docs	http://www.outwit.com/products/docs
OutWit Hub	http://www.outwit.com/products/hub
Parsehub	https://www.parsehub.com
Phantom Buster	https://phantombuster.com
ProWebScraper	https://prowebscraper.com

Reaper	https://reaper.social | https://github.com/ScriptSmith/reaper/blob/master/README.md
SocialList	https://sociallist.io
Scraper	https://chrome.google.com/webstore/detail/scraper/mbigbapnjcgaffohmbkdlecaccepngjd
Scraper.AI	https://scraper.ai
scrapestack	https://scrapestack.com
ScrapeStorm	https://www.scrapestorm.com
scrapinghub	https://www.scrapinghub.com/data-services
Scrapy	https://scrapy.org
Screen Scraper	https://www.screen-scraper.com
Simplescraper	https://simplescraper.io
Web Harvy	https://www.webharvy.com
Web Robots	https://webrobots.io
Web Scraper	http://webscraper.io
80 Legs	http://80legs.com

Working with News

Newspapers and News Directories

Tool	Link
ABYZNewsLinks	http://www.abyznewslinks.com
AllYouCanRead	http://www.allyoucanread.com
DailyEarth	http://dailyearth.com
East view: Newspaper	https://www.eastview.com/resources/newspapers
Google News Print Archive	http://news.google.com/newspapers
HeadlineSpot	http://www.headlinespot.com
Library of Congress – US Newspapers	http://chroniclingamerica.loc.gov/search/titles ll http://chroniclingamerica.loc.gov
Newspaper Archive	https://newspaperarchive.com
Newspaperindex	http://www.newspaperindex.com
Newspaper Map	http://newspapermap.com
Newspapers.com	http://www.newspapers.com
OnlineNewspapers	http://www.onlinenewspapers.com
Paperboy	http://www.thepaperboy.com
Press Reader	http://www.pressreader.com
W3newspapers	https://www.w3newspapers.com
World Newspapers	http://www.world-newspapers.com

News Digest and Discovery Tools

Tool	Link
10000 Flies	http://www.10000flies.de
1st Headlines	http://www.1stheadlines.com
AllTop	https://alltop.com
anderpink	https://anderspink.com
Banjo	https://ban.jo
Bing News	http://www.bing.com/news
Blende	https://launch.blendle.com
Brief	https://www.briefbeta.com
Correct Search	http://correctsearch.com
EMM	http://emm.newsbrief.eu/NewsBrief/clusteredition/en/latest.html
Factiva	http://www.dowjones.com/factiva
The Factual	https://www.thefactual.com/news
Flipboard	https://flipboard.com
Good Gopher	https://goodgopher.com
Google News	https://news.google.com
inkl	https://www.inkl.com
Inshorts	https://inshorts.com/en/read
Inside	https://inside.com
keen	https://staykeen.com
knewz	https://knewz.com
listle	https://www.listle.io
MagPortal	http://www.magportal.com
Microsoft News	https://www.microsoft.com/en-us/newsapp
News360	https://news360.com

News and Rumors	https://newsandrumors.com
NewsBot	https://getnewsbot.com
Newseum - Today Front Pages	http://www.newseum.org/todaysfrontpages
News Explorer	https://betamagic.nl/products/newsexplorer.html
NewsLookup	http://www.newslookup.com
News Map	http://newsmap.jp
News Now	http://www.newsnow.co.uk
Newsography	http://newsography.com
newsola	https://www.newsola.com
noovell	https://noovell.com
Nuzzle	http://nuzzel.com
Panda	https://usepanda.com
Paperball News	https://paperball.news
Patch	https://patch.com/map
Populast	http://populast.com
PR Newswire	http://www.prnewswire.com
Reality Brief	http://www.realitybrief.com
Eddit: /r/news	https://www.reddit.com/r/news
Reeder	http://reederapp.com
Silobreaker	http://www.silobreaker.com
SmartNews	https://www.smartnews.com
Spike	http://www.newswhip.com
Superdesk	https://www.superdesk.org
TV News Archive	https://archive.org/details/tv
Webhose	https://webhose.io
Wikinews	https://en.wikinews.org
Wikipedia: Current Events	https://en.wikipedia.org/wiki/Portal:Current_events
WorldNews	http://wn.com
Yahoo News	http://news.yahoo.com
YetiGoGo	https://yetigogo.com
YouGotTheNews.com	http://yougotthenews.com

Media Monitoring

Tool	Link
Agility PR	https://www.agilitypr.com
Burrelles	https://burrelles.com
Critical Mention	https://www.criticalmention.com
eMediaMonitor	https://www.emediamonitor.net
European Media Monitor	https://emm.newsbrief.eu/overview.html
ezyinsights	https://ezyinsights.com
IQ.Media	http://www.iq.media
isentia	https://www.isentia.com
Lexis Nexis Newsdesk	https://www.lexisnexis.com/en-us/products/newsdesk.page
Media Monitors	https://www.mediamonitors.com
Meltwater	https://www.meltwater.com
MetroMonitor	https://metromonitor.com
Muck Rack	https://muckrack.com
NewsBox	https://newsbox.com
News Exposure	https://www.newsexposure.com
Newspoint	https://www.newspoint.pl/en
SAIL Labs	https://www.sail-labs.com
Signal AI	https://www.signal-ai.com
tv.eyes	https://tveyes.com
Universal Information Services	https://universal-info.com

Finding Newsletters

Tool	Link
letterlist	https://letterlist.com
Milled	https://milled.com
Newsletter Slack	https://newsletterstack.com

Fact Checking and Verification

Tool	Link
AfricaCheck	https://africacheck.org
AIDR	http://aidr.qcri.org
AltNews	https://www.altnews.in
AP Fact Check	https://apnews.com/hub/ap-fact-check
Channel4 FactCheck	https://www.channel4.com/news/factcheck
Check	https://meedan.com/en/check
Chequeado	http://chequeado.com
Citizen Desk	https://www.sourcefabric.org/en/citizendesk
Credder	https://credder.com
Emergent	http://www.emergent.info
Fact Check	http://www.factcheck.org
Factual News Search	https://factualsearch.news
Fake News Sites on Facebook	https://www.dailydot.com/debug/fake-news-sites-list-facebook
Fakespot	https://www.fakespot.com
False, Misleading, Clickbait-y, and/or Satirical News Sources	https://docs.google.com/document/d/10eA5-mCZLSS4MQY5QGb5ewC3VAL6pLkT53V_81ZyitM/preview
FirstDraftNewsCheck	https://chrome.google.com/webstore/detail/firstdraftnewscheck/japockpeaaanknlkhagilkgcledilbfk
Full Fact	https://fullfact.org
Hoax Slayer	https://www.hoax-slayer.com
Hoaxy	https://hoaxy.iuni.iu.edu
InVID	http://www.invid-project.eu/tools-and-services/invid-verification-plugin

Media Bias / Fact Check	https://mediabiasfactcheck.com
Media Matters	https://www.mediamatters.org
Open Secrets	https://www.opensecrets.org
Pw Research Center Fact Tank	https://www.pewresearch.org/fact-tank
Politifact	https://www.politifact.com
Reporters Lab Fact Checking	https://reporterslab.org/fact-checking
ReviewMeta	https://reviewmeta.com
Snopes	http://www.snopes.com
StopFake	http://www.stopfake.org/en/news
Truly	http://www.truly.media
Trusted News	https://trusted-news.com
Truth or Fiction	https://www.truthorfiction.com
TrustServista	https://www.trustservista.com
Untrue News	http://untrue.news
Urban Legends	https://www.liveabout.com/urban-legends-4687955
Verificado	https://verificado.mx
Verification Checklist	https://revealproject.eu/a-roadmap-to-the-truth
Verification Handbook	http://verificationhandbook.com
Verify Syria	http://www.verify-sy.com/en
Wikipedia: List of Fact Checking Websites	https://en.wikipedia.org/wiki/List_of_fact-checking_websites

Translation and Language Tools

Foreign Language Translation Tools

Tool	Link
2lingual	http://www.2lingual.com
Apertium	https://www.apertium.org
Babelfish	https://www.babelfish.com
Bab.la	https://en.bab.la
Bablic	https://www.bablic.com
Babylon	https://translation.babylon-software.com
Baidu Translation	https://fanyi.baidu.com
Bing Translator	http://www.bing.com/translator
Cambridge Dictionary	https://dictionary.cambridge.org
Deepl Translator	https://www.deepl.com/translator
Dict.cn	http://dict.cn
Dictionary Farsi Translation	http://www.dictionary-farsi.com/dynamic_english_farsi_translator.asp
Farsi Translator	https://aryanpour.com/translator.php
Free Translator	http://www.free-translator.com
Free Website Translation	http://free-website-translation.com
Frengly	http://frengly.com
Gengo	http://gengo.com
Google Input Tools	https://www.google.com/inputtools/try
Google Translate	https://translate.google.com
Google Translate Extension	https://chrome.google.com/webstore/detail/google-translate/aapbdbdomjkkjkaonfhkkikfgjllcleb?hl=en
IdiomaX Translation	http://www.idiomax.com/online-translator.aspx

imTranslator	http://imtranslator.net/translation
India Typing	http://indiatyping.com/index.php/translations/english-to-hindi-translation
Irish Translator	http://www.whoohoo.co.uk/irish-translator.asp
iTranslate	https://www.itranslate.com
iTranslate Voice	http://itranslatevoice.com
Leo	https://www.leo.org/german-english
Lexicool Translation	http://www.lexicool.com/translate.asp
Lexilogos	https://www.lexilogos.com
Linguee	http://www.linguee.com
LingvoSoftOnline	http://www.lingvozone.com
MDBG Chinese Translation	https://www.mdbg.net/chinese/dictionary?page=translate
Microsoft Translator	http://www.microsoft.com/en-us/translator
OdysseyTranslator	http://odysseytranslator.com
Online Persian English Translator	http://www.etranslator.ro/persian-english-online-translator.php
Online Translator	http://www.online-translator.com
Pars Translator	http://www.parstranslator.net/eng/translate.htm
Pleco	https://www.pleco.com
PONS	https://en.pons.com/translate/german-english
PROMT-Online	http://translation2.paralink.com
Reddit/r/translator	https://www.reddit.com/r/translator
Reverso	http://www.reverso.net
Reverso Dictionary	https://dictionary.reverso.net
Sco Translate	http://www.scotranslate.com
Simple Translate	https://simple-translate.sienori.com
Spanish Dict	http://www.spanishdict.com
Systran	http://www.systransoft.com
Trans8it	http://transl8it.com
Translate British	https://www.translatebritish.com
Translate.eu	https://www.translate.eu
Translate Indonesian	http://www.indotranslate.com
Translate Turkish	https://cevirsozluk.com

Translate.com	https://www.translate.com
Translation2	http://translation2.paralink.com
Translator	http://www.stars21.com/translator
Unbabel	https://unbabel.com
WhatLanguageIsThis	https://whatlanguageisthis.com
Wiktionary	https://www.wiktionary.org
WorldLingo	http://www.worldlingo.com
WorldReference.com	http://www.wordreference.com
Yandex Translate	https://translate.yandex.ru

Slang Translators and Resources

Tool	Link
British Slang	http://www.britishslang.co.uk
Drug Slang Glossary	https://www.banyanstuart.com/slang-glossary
Gizoogle	http://gizoogle.net/textilizer.php
Noslang	http://www.noslang.com
Slangit	http://slangit.com
Street or Slang Names for Drugs	https://www.snohd.org/DocumentCenter/View/2516/Drug_Names_Slang_2019_05_09?bidId=
termwiki	https://www.termwiki.com
transL8it!	http://www.transl8it.com
Urban Dictionary	https://www.urbandictionary.com
Texting and Online Chat Abbreviations	https://www.webopedia.com/quick_ref/textmessageabbreviations.asp

Emoji Translators

Tool	Link
Emojipedia	https://emojipedia.org
Emoji Translate	https://emojitranslate.com
Emoji Translate	https://meowni.ca/emoji-translate
Emoji Translator	https://lingojam.com/%F0%9F%90%8CEmojiTranslator%F0%9F%8E%B2
Fast Emoji	https://www.fastemoji.com
iEmoji	https://www.iemoji.com
Super Emoji Translator	http://superemojitranslator.com

Other Translation Tools

Tool	Link
Lingo Jam: Create Your Own Translator	https://lingojam.com

Text Transliteration

Tool	Link
Arabic to Latin Converter	http://mylanguages.org/arabic_romanization.php
Google Input Tools	https://www.google.com/inputtools/services/features/transliteration.html
Lexilogos Arabic Transliteration	https://www.lexilogos.com/keyboard/arabic_latin.htm
Lexilogos Cyrillic-Latin Conversion	https://www.lexilogos.com/keyboard/russian_conversion.htm
Text Magic	https://www.textmagic.com/free-tools/text-transliteration-tool
Transliterating Arabic to English in One Step	https://stevemorse.org/arabic/ara2eng.html
Universal Cyrylic Decoder	https://2cyr.com/decode/?lang=en

Acronyms and Abbreviations

Tool	Link
Abbreviations	https://www.abbreviations.com
Acronym Finder	https://www.acronymfinder.com
The Acronym Server	http://acronyms.silmaril.ie
The Free Dictionary: Acronyms and Abbreviations	https://acronyms.thefreedictionary.com
Texting and Online Chat Abbreviations	https://www.webopedia.com/quick_ref/textmessageabbreviations.asp
Your Dictionary: Abbreviations	https://abbreviations.yourdictionary.com
Super Emoji Translator	http://superemojitranslator.com

Glossaries and Dictionaries

Tool	Link
Business Dictionary	http://www.businessdictionary.com
Dictionary of Banking Terms and Phrases	https://www.helpwithmybank.gov/dictionary/index-dictionary.html
Glossary of AML Terms	https://www.acams.org/en/resources/aml-glossary-of-terms
Glossary of Fraud Terms	https://www.agacgfm.org/Intergov/Fraud-Prevention/Resources-Best-Practices/Glossary-of-Terms.aspx
Glossary of Human-Trafficking Acronyms and Terms	https://www.americanbar.org/groups/judicial/publications/judges_journal/2013/winter/glossary_of_humantrafficking_acronyms_and_terms
Glossary of Legal Terms	https://seconddistrictcourt.nmcourts.gov/glossary-of-legal-terms.aspx
Industry Acronym List	https://www.ipc.org/ContentPage.aspx?pageid=Industry-Acronyms
Logistics Glossary	https://www.logisticsglossary.com
Stolen Asset Recovery Terminology	https://thesentry.org/terminology
Urban Dictionary	https://www.urbandictionary.com

B623

Information on Names and Naming Conventions

Tool	Link
A Guide to Names and Naming Practices	https://www.fbiic.gov/public/2008/nov/Naming_practice_guide_UK_2006.pdf
Indian Naming Conventions	http://learningindia.in/indian-naming-conventions
Law Enforcement Guide to International Names	https://info.publicintelligence.net/ROCICInternationalNames.pdf
Names and Surnames in Kosovo	https://ask.rks-gov.net/media/3820/names-and-surnames.pdf
Russian Names	https://www.russlandjournal.de/russisch-lernen/russische-namen
The Structure of Persian Names	http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.717.1899&rep=rep1&type=pdf

Language Research Tools

Tool	Link
Ethnologue	https://www.ethnologue.com
Languages Spoken in Each Country of the World	https://www.infoplease.com/world/countries/languages-spoken-in-each-country-of-the-world
Open Language Archive Community (OLAC)	http://olac.ldc.upenn.edu

Web Monitoring

RSS Readers

Tool	Link
Aggregator	https://play.google.com/store/apps/details?id=com.tughi.aggregator
Awasu	http://www.awasu.com
BazQux Reader	https://bazqux.com
Cappuccino	http://cappuccinoapp.com
Drop Feeds (Firefox Extension)	https://addons.mozilla.org/en-US/firefox/addon/drop-feeds
Fedora Reeder	https://www.microsoft.com/en-us/p/fedora-reader/9nblgggzm828
Feedbin	https://feedbin.com
Feedbro	https://nodetics.com/feedbro
Feedenlarger	http://feedenlarger.com
Feeder	https://feeder.co
feedjira	https://github.com/feedjira/feedjira
Feedly	http://www.feedly.com
FeedMe	https://github.com/seazon/FeedMe
FeedMe	https://play.google.com/store/apps/details?id=com.seazon.feedme
FeedReader	http://www.feedreader.com
feeds	https://github.com/felfele/feeds
Feedspot	https://www.feedspot.com
Fiery	http://cocoacake.net/apps/fiery
Flym	https://github.com/FredJul/Flym

Fluent Reader	https://hyliu.me/fluent-reader
fluxonaut	https://fluxonaut.com
fraidycat	https://fraidyc.at
Framareader	http://feedreader.com
Inoreader	https://www.inoreader.com
Liferea	https://github.com/lwindolf/liferea
Miniflux	https://miniflux.app
MyNews	https://github.com/lawzava/mynews
NetNewsWire	https://github.com/Ranchero-Software/NetNewsWire
Netvibes	http://www.netvibes.com
Newsbeuter	https://www.newsbeuter.org
Newsblur	http://newsblur.com
Newsboat	https://newsboat.org | https://github.com/newsboat/newsboat
Nextgen Reader	https://www.microsoft.com/en-us/p/nextgen-reader/9wzdncrfj262
The Old Reader	http://theoldreader.com
OmeaReader	http://www.jetbrains.com/omea/reader
Pine	https://pine.blog
Protopage	https://protopage.com
QuiteRSS	https://quiterss.org
Raven Reader	https://ravenreader.app
ReadKit	https://readkitapp.com
Reeder App	https://reederapp.com
rosselo	https://rosselo.com
Royal	http://www.the-sz.com/products/royal
RSS for the rest of us	https://github.com/wilderborn/rss-for-the-rest-of-us
RSS Ground	https://www.rssground.com
RSS Guard	https://github.com/martinrotter/rssguard
RSS Mobile	https://apps.apple.com/us/app/rss-mobile/id533007246
RSSOwl	http://www.rssowl.org
Rufus	https://github.com/jtanza/rufus
Telescope	https://itunes.apple.com/us/app/telescope-news-rss-reader/id1353282977?mt=8

Selfoss	http://selfoss.aditu.de
Tiny Tiny RSS	https://tt-rss.org
ViennaRSS	https://github.com/ViennaRSS/vienna-rss
Want My RSS (Firefox Extension)	https://addons.mozilla.org/en-US/firefox/addon/want-my-rss
weloveRSS	https://weloverss.com
Winds	https://getstream.io/winds
yarr	https://github.com/nkanaev/yarr

Feed Indexes

Tool	Link
Feeder	https://feeder.co/discover
Feedly	http://www.feedly.com
Feedspot	https://www.feedspot.com
Inoreader	https://www.inoreader.com
RSS Ground	https://www.rssground.com

RSS Search Tools

Tool	Link
DatoRSS	https://www.datorss.com
Feedsearch	https://feedsearch.dev
RSS Micro	http://www.rssmicro.com
RSS Search Hub	http://www.rsssearchhub.com
Wingee	http://www.wingee.com

RSS Generators

Tool	Link
DeltaFeed	https://bitreading.com/deltafeed
Feed43	https://feed43.com
Feedfry	https://feedfry.com
Feedity	https://feedity.com
Fetch RSS	http://fetchrss.com
Five Filters Feed Creator	http://createfeed.fivefilters.org
Pipes	https://www.pipes.digital
PolitePol	https://politepol.com
RSS.app	https://rss.app

RSS from Search

Tool	Link
Google Alerts	http://www.google.com/alerts
Google-alerts 0.1.5	https://pypi.org/project/google-alerts
Keyword to Full-RSS-Feed	http://keywordtorss.fullcontentrss.com

Social Media to RSS Tools

Tool	Link
Fetch RSS	http://fetchrss.com
RSS.app	https://rss.app
RSS Hub	https://github.com/DIYgod/RSSHub | https://docs.rsshub.app/en/social-media.html
RSS Box	https://github.com/stefansundin/rssbox | https://rssbox.herokuapp.com
RSS Bridge	https://github.com/RSS-Bridge/rss-bridge

Twitter to RSS

Tool	Link
Fetch RSS	http://fetchrss.com
Inoreader	https://www.inoreader.com
Nitter	https://nitter.net
RSS.app	https://rss.app
RSS Hub	https://github.com/DIYgod/RSSHub | https://docs.rsshub.app/en/social-media.html
RSS Box	https://github.com/stefansundin/rssbox | https://rssbox.herokuapp.com
RSS Bridge	https://github.com/RSS-Bridge/rss-bridge
TwiSSR	http://www.twissr.com
Twitter Followings OPML Export	https://opml.glitch.me

Facebook to RSS

Tool	Link
Fetch RSS	http://fetchrss.com
Inoreader	https://www.inoreader.com
RSS Hub	https://github.com/DIYgod/RSSHub | https://docs.rsshub.app/en/social-media.html
RSS Bridge	https://github.com/RSS-Bridge/rss-bridge

B635

Instagram to RSS

Tool	Link
Bibliogram (Instagram RSS)	https://bibliogram.art
RSS.app	https://rss.app
RSS Box	https://github.com/stefansundin/rssbox | https://rssbox.herokuapp.com

RSS Bridge

Tool	Link
RSS Bridge	https://github.com/RSS-Bridge/rss-bridge
RSS Bridge Boldly Keybored	https://boldly.keybored.me
RSS Bridge Chamallow	http://rssbridge.chamallow.com
RSS Bridge co.uk	https://rssbridge.co.uk
RSS Bridge Create rss4fun	https://create.rss4fun.xyz
RSS Bridge Eugene Molotov	https://feed.eugenemolotov.ru
RSS Bridge Heroku App	https://arcane-temple-24578.herokuapp.com
RSS Bridge Leslibres	https://bridge.leslibres.org
RSS Bridge Nixnet Services	https://rss.nixnet.services
RSS Bridge Nomagic	https://rss-bridge.nomagic.uk
RSS Bridge Novarata	https://rssbridge.novarata.net
RSS Bridge Pofilo	https://rssbridge.pofilo.fr
RSS Bridge Rolfcopter	https://wtf.roflcopter.fr/rss-bridge
RSS Bridge Sebsauvage	https://sebsauvage.net/rss-bridge
RSS Bridge Suumitsu	https://bridge.suumitsu.eu

Full-Text RSS

Tool	Link
Five Filters	https://www.fivefilters.org/full-text-rss
Free Full RSS	https://www.freefullrss.com
Full Context RSS	http://fullcontentrss.com
RSS Feed Content Spinner	http://spinner.fullcontentrss.com

Feed Filtering

Tool	Link
Feed Filter Maker	http://feed.janicek.co
Inoreader	https://www.inoreader.com
Pipes	https://www.pipes.digital
siftrss	https://siftrss.com

B639

Feed Mixing

Tool	Link
RSSMix	http://www.rssmix.com
RSS Unify	https://rssunify.com

RSS to Widget Tools

Tool	Link
Feed Informer	http://feed.informer.com
Feedwind	https://feed.mikle.com
Feedzy	https://themeisle.com/plugins/feedzy-rss-feeds
RSS Ground	https://www.rssground.com
webrss	http://www.webrss.com

RSS to Newsletter Tools

Tool	Link
Blogtrottr	https://blogtrottr.com
Cortado	https://cortadomail.com
eLink	https://elink.io
FLIPRSS	https://fliprss.com
FiveFilter PDF Newsletter	https://www.fivefilters.org/pdf-newspaper
Mailbrew	https://mailbrew.com
Mailchimp	https://mailchimp.com
RSS Mailer	https://rssmailer.app

RSS to Email Tools

Tool	Link
Feedsub	https://feedsub.com
Rss2email	https://github.com/rss2email/rss2email
Rss2imap	https://github.com/rcarmo/rss2imap
RSS by email	https://rssby.email

Newsletter to RSS Tools

Tool	Link
Kill the Newsletter	https://www.kill-the-newsletter.com

Podcasts to RSS Tools

Tool	Link
GetRSSFeed	https://getrssfeed.com

RSS to File System Tools

Tool	Link
rssfs	https://github.com/dertuxmalwieder/rssfs

OPML Generation

Tool	Link
OPML Generator	https://opml-gen.ovh

Website Monitoring

Tool	Link
ChangeDetect	http://www.changedetect.com
ChangeTower	https://changetower.com
deltafeed	http://bitreading.com/deltafeed
Distil Web Monitor	https://chrome.google.com/webstore/detail/distill-web-monitor/inlikjemeeknofckkjolnjbpehgadgge?hl=en-US | https://addons.mozilla.org/en-US/firefox/addon/distill-web-monitor-ff/
Feed43	http://feed43.com
Fluxguard	https://fluxguard.com
FollowThatPage	http://www.followthatpage.com
InfoMinder	http://www.infominder.com/webminder
OnWebChange	http://onwebchange.com
PageProbe	https://chrome.google.com/webstore/detail/pageprobe-automatic-page/kpkcofgbohgcpjkeidodnmaokbjlnmac | https://addons.mozilla.org/en-CA/firefox/addon/pageprobe
pagescreen	https://pagescreen.io
Sken.io	https://www.sken.io
Trackly	https://trackly.io
urlwatch	https://github.com/thp/urlwatch
versionista	http://versionista.com
visualping	https://visualping.io
Wachete	https://www.wachete.com
WatchThatPage	http://www.watchthatpage.com
Web Change Monitor	https://sourceforge.net/projects/webchangemon
WebSite Watcher	https://www.aignes.com

Price Monitoring

Tool	Link
camelcamelcamel	https://camelcamelcamel.com
CheapShark	https://www.cheapshark.com
Honey	https://www.joinhoney.com
Keepa	https://keepa.com
Nozzama	http://www.nozzama.com
Prisync	https://prisync.com
slickdeals	https://slickdeals.net

Brand Protection Monitoring

Tool	Link
Corsearch	https://corsearch.com/our-products/online-brand-protection
Incopro	https://www.incoproip.com
Mark Monitor	https://www.markmonitor.com
RedPoints	https://www.redpoints.com

Monitoring Newsletters

Tool	Link
OWLETTER	https://www.owletter.com

Data Collation and Data Processing Tools

Bookmarking

Tool	Link
Atavi	https://atavi.com
Bibsonomy	http://www.bibsonomy.org
Bookmark Ninja	https://www.bookmarkninja.com
Bookmark OS	https://bookmarkos.com
Booky	http://booky.io
ChannelKit	http://channelkit.com
Clipix	https://www.clipix.com
Curabase	https://www.curabase.com
Diigo	https://www.diigo.com
Evernote	http://evernote.com
Dropmark	http://www.dropmark.com
eLink	https://elink.io
Email This	https://www.emailthis.me
Eversync	https://www.everhelper.me/synchronizer.php
FAVable	http://www.favable.com
Flipboard	https://flipboard.com
Google Bookmarks	https://www.google.com/bookmarks
Granary	https://granary.pro
Gurn	https://www.gurn.io
Historious	https://historio.us
Instapaper	http://www.instapaper.com

Jooseph	https://jooseph.com
Juxtapost	http://www.juxtapost.com
Klart	https://klart.co
ktab	https://www.ktab.io
Larder	https://larder.io
Liner for Pocket	http://getliner.com/liner-for-pocket
Link.fish	https://link.fish
Linkstash	http://www.xrayz.co.uk
LiveBinders	http://www.livebinders.com
Memex	https://getmemex.com
Microsoft OneNote	http://office.microsoft.com/en-us/onenote
Mix	https://mix.com
P2K	https://p2k.co
PageMarker	https://www.pagemarker.io
Papaly	https://papaly.com
Pinboard	https://pinboard.in
Pearltrees	http://www.pearltrees.com
Pocket	http://getpocket.com
Raindrop	https://raindrop.io
Refind	https://refind.com
Savory	https://getsavory.co
Scoop.it	http://www.scoop.it
Scrapp	https://scrapp.it
Session Buddy	https://chrome.google.com/webstore/detail/session-buddy/edacconmaakjimmfgnblocblbcdcpbko?hl=en
Sidebar+	https://addons.mozilla.org/en-US/firefox/addon/sidebar_plus
Sitehoover	http://www.sitehoover.com
Stache	http://getstache.com
Symbaloo	https://www.symbaloo.com
syncmarx	https://syncmarx.mcleodgaming.com
TeamSync Bookmarks	https://teamsyncbookmarks.com
Thinkery	http://thinkery.me

Toby	https://www.gettoby.com
Trackplanet	https://trackpanel.net
Trello	https://trello.com
Turtl	https://turtlapp.com
Tusk	https://github.com/klauscfhq/tusk
unhoard	https://www.unhoard.io
vookmark	https://vookmark.co
wallabag	https://wallabag.org
Wepware	http://www.wepware.com
Zapmarks	https://zapmarks.io
Zotero	http://www.zotero.org
Zulu	https://tryzulu.com

Bookmarks to Newsletter Tools

Tool	Link
Mailist	https://mailist.app

Notetaking

Tool	Link
Agenda	https://agenda.com
Bear	https://bear.app
Brainio	https://brainio.com
Cherrytree	http://www.giuspen.com/cherrytree
CintaNotes	http://cintanotes.com
Collected Notes	https://collectednotes.com
Evernote	https://www.evernote.com
Google Keep	https://keep.google.com
inkdrop	https://www.inkdrop.app
Joplin	https://joplinapp.org
KeepNote	http://keepnote.org
Kl1p	http://kl1p.com
Laverna	https://laverna.cc
Listacular	http://www.bloomingsoft.com/listacular
Microsoft OneNote	https://www.onenote.com
Milanote	http://www.milanote.com
Mindful	https://chrome.google.com/webstore/detail/mindful-beta/cieekmjjdkckhpidgaffphlaljdfhhab
Outliney	https://glamdevelopment.com/outlinely/ios
Pear Note	http://www.usefulfruit.com/pearnote
Relanote	https://relanote.com
Simplenote	http://simplenote.com
Slite	https://slite.com
somnote	http://somcloud.com/about/somnote
Squid	http://squidnotes.com

Standard Notes	https://standardnotes.org
TagSpaces	https://www.tagspaces.org
Thinkery	https://thinkery.me
Tomboy	https://wiki.gnome.org/Apps/Tomboy
Trilium	https://github.com/zadam/trilium
Turtl	https://turtlapp.com
Tusk	https://github.com/klauscfhq/tusk
TypeLink	https://typelink.net
Workflowy	https://workflowy.com
Zoho Notebook	https://www.zoho.com/notebook

Annotation and Highlighting

Tool	Link
A.nnotate	http://a.nnotate.com
Annotate	https://annotate.net
Awesome Screenshot	https://www.awesomescreenshot.com
Beanote	https://chrome.google.com/webstore/detail/beanote-note-taking-on-we/nikccehomlnjkmgmhnieecolhgdafajb
Bounce	https://www.bounceapp.com
Diigo	https://www.diigo.com
Hypothesis	https://hypothes.is
Liner	http://getliner.com
Nimbus	https://nimbusweb.me
Note Anywhere	https://chrome.google.com/webstore/detail/note-anywhere/bohahkiiknkelflnjjlipnaeapefmjbh
Pund.it	http://thepund.it
Skitch	https://evernote.com/skitch
SORC'D Web Clipper	https://chrome.google.com/webstore/detail/sorcd-web-clipper/hdogibfgjikahjgdlnnbginhddpbmpii?hl=en-US
Sum It Up	http://rachitgulati.com/sum-it-up
Weava Highlighter	https://chrome.google.com/webstore/detail/weava-highlighter-pdf-web/cbnaodkpfinfiipjblikofhlhlcickei

Screenshot and Screen Capture Tools

Tool	Link
1Click Screenshot	https://chrome.google.com/webstore/detail/1click-screenshot/akgpcdalpfphjmfifkmfbpdmgdmeeaeo?hl=en
Awesome Screenshot	https://www.awesomescreenshot.com
blink	https://github.com/harleo/blink
Cockos LICEcap	https://www.cockos.com/licecap
droplr	https://droplr.com
EyeWitness	https://github.com/ChrisTruncer/EyeWitness
FastStone	http://www.faststone.org/FSCaptureDetail.htm
FireShot	https://getfireshot.com
Fraps	http://www.fraps.com
Full Page Screen Capture	https://chrome.google.com/webstore/detail/full-page-screen-capture/fdpohaocaechififmbbbbbknoalclacl?hl=en-US
Full Page Screenshot	https://chrome.google.com/webstore/detail/full-page-screenshot/glgomjpomoahpeekneidkinhcfjnnhmb?hl=en
Full Web Page Screenshots	https://addons.mozilla.org/en-US/firefox/addon/fireshot
Greenshot	https://github.com/greenshot/greenshot
Gyazo	https://gyazo.com
Jing	https://www.techsmith.com/jing-tool.html
lazyshot	https://github.com/mdhama/lazyshot
LightShot	https://app.prntscr.com
Monosnap	https://monosnap.com
Nimbus	http://nimbus.everhelper.me
MWSnap	https://www.snapfiles.com/publishers/7112705.html
Pages 2 Images	http://www.page2images.com
PickPick	http://ngwin.com/picpick

qSnap	https://chrome.google.com/webstore/detail/qsnap-screen-capture-scre/bijakfpegjnjmfdoiloebhaemhomjkon
QuickSnip	https://github.com/aaronedmistone/QuickSnip
screenrec	https://screenrec.com
Screenshot Layer	https://screenshotlayer.com
Screenshot Machine	https://www.screenshotmachine.com
Screenshot Utility	http://screenshot-utility.com
ScreenToGif	http://www.screentogif.com
ShareX	https://getsharex.com
Shrink the Web	https://www.shrinktheweb.com
Shutter	https://shutter-project.org
Snagit	https://www.techsmith.com/screen-capture.html
Snapito	https://snapito.com
Snapper	https://github.com/dxa4481/Snapper
Snip&Paste	https://www.snipaste.com
snippyly	https://snippyly.com
Take Webpage Screenshots Entirerly	https://chrome.google.com/webstore/detail/take-webpage-screenshots/mcbpblocgmgfnpjjppndjkmgjaogfceg?hl=en-US
textshot	https://github.com/ianzhao05/textshot
TinyTake	https://tinytake.com
URL2PNG	https://www.url2png.com
URL Box	https://urlbox.io
Web-Capture	https://web-capture.net
Web Page Saver	https://www.magnetforensics.com/free-tool-web-page-saver
webscreenshot	https://github.com/maaaaz/webscreenshot
WitnessMe	https://github.com/byt3bl33d3r/WitnessMe

Browsers and Browsing Tools

Browsers

Tool	Link
Alloy	http://alloy.simoncaminada.ch
Aloha Browser	https://alohabrowser.com
AntBrowser	https://antbrowser.pro
Basilisk	http://www.basilisk-browser.org
Brave	https://brave.com
CentBrowser	http://www.centbrowser.com
Chrome	https://www.google.com/chrome
Chromium	https://www.chromium.org
Colibri	https://colibri.opqr.co
Comodo Dragon	https://www.comodo.com/home/browsers-toolbars/browser.php
Cocoon	https://getcocoon.com
Coowon	http://coowon.com
Dooble	https://textbrowser.github.io/dooble
Edge	https://www.microsoft.com/en-us/windows/microsoft-edge/microsoft-edge
Firefox	https://www.mozilla.org
Ghost Browser	https://ghostbrowser.com
Indigo Browser	https://indigobrowser.com
Iridium	https://iridiumbrowser.de
Konqueror	https://konqueror.org
Maxthon	http://www.maxthon.com
Min	https://minbrowser.github.io/min

Motion	https://www.inmotion.app
Nyxt	https://nyxt.atlas.engineer
Opera	http://www.opera.com
Opera Neon	http://www.opera.com/computer/neon
Pale Moon	https://www.palemoon.org
Rambox	https://rambox.pro
Safari	http://www.apple.com/safari
SeaMonkey	https://www.seamonkey-project.org
Silo	https://www.authentic8.com
SRWare Iron	http://www.srware.net/en/software_srware_iron.php
Tenebris	https://ls.tenebris.cc
Torch	http://www.torchbrowser.com
Vivaldi	https://vivaldi.com
Yandex Browser	https://browser.yandex.com/desktop/main

Startpages

Tool	Link
allmyfaves	http://www.allmyfaves.com
ighome	http://www.ighome.com
iloggo	http://iloggo.com
Kadaza	http://www.kadaza.com
Myfav.es	http://myfav.es
My Yahoo	https://my.yahoo.com
Protopage	http://www.protopage.com
Start.io	http://start.io
Startme	http://www.startme.com
Symbaloo	http://www.symbaloo.com
uStart.org	http://www.ustart.org
Yourport	http://www.yourport.com

Customising New Tab

Tool	Link
Blank New Tab	https://chrome.google.com/webstore/detail/blank-new-tab-page/jonikckfpolfcdcgdficelkfffkloemh?hl=en
Bookmark Dial	https://addons.mozilla.org/en-GB/firefox/addon/bookmark-dial | https://github.com/sblask/webextension-bookmark-dial
Custom New Tabs	https://addons.mozilla.org/en-US/firefox/addon/custom-new-tabs | https://github.com/deadmund/Custom-New-Tab
Group Speed Dial	https://addons.mozilla.org/en-US/firefox/addon/groupspeeddial
Humble New Tab	https://addons.mozilla.org/en-US/firefox/addon/humble-new-tab
Infinite Dashboard	https://chrome.google.com/webstore/detail/infinite-dashboard-new-ta/meffljleomgifbbcffejnmhjagncfpbd
Infinity New Tab	https://chrome.google.com/webstore/detail/infinity-new-tab-pro/nnnkddnnlpamobajfibfdgfnbcnkgng
Initab	https://chrome.google.com/webstore/detail/initab/igmbdimmfbpdplpahpapkploofmgaipl
Live Start Page LST	https://chrome.google.com/webstore/detail/live-start-page-living-wa/ocggccaacacpienfcgmgcihoombokbbj?utm_source=site&utm_medium=install | https://addons.mozilla.org/en-US/firefox/addon/live-start-page-lst
Markdown New Tab	https://chrome.google.com/webstore/detail/markdown-new-tab/demppioeofcekpjcnlkmdjbabifjnokj?hl=en
Minimalist	http://www.getminimalist.com
Momentum	https://chrome.google.com/webstore/detail/momentum/laookkfknpbbblfpciffpaejjkokdgca?hl=en

NelliTab	https://addons.mozilla.org/en-US/firefox/addon/nellitab
New Tab Draft	https://chrome.google.com/webstore/detail/new-tab-draft/nmfjkeiebceinkbggliapgfdjphocpdh?hl=en |
New Tab To Do List	https://chrome.google.com/webstore/detail/new-tab-todo-list-checkli/hdkbnhcgfcokjhlfiicbphafdnipnhjf
New Tab Tools	https://chrome.google.com/webstore/detail/new-tab-tools/gfonmeedigdbjpgpeojioadpimflbogh | https://addons.mozilla.org/en-US/firefox/addon/new-tab-tools | https://github.com/darktrojan/newtabtools
Night Tab	https://chrome.google.com/webstore/detail/nighttab/hdpcadigjkbcpnlcpbcohpafiaefanki | https://addons.mozilla.org/en-GB/firefox/addon/nighttab | https://github.com/zombieFox/nightTab
Sametab	https://chrome.google.com/webstore/detail/sametab/glmeidaaambjhneppgaalmcjmcjpedeb?hl=en
Searf	https://www.searf.com
Speed Dial New Tab Page	https://chrome.google.com/webstore/detail/speed-dial-fvd-new-tab-pa/llaficoajjainaijghjlofdfmbjpebpa | https://addons.mozilla.org/en-US/firefox/addon/fvd-speed-dial
Start.me	https://chrome.google.com/webstore/detail/new-tab-page-by-startme/cfmnkhhioonhiehehedmnjibmampjiab | https://addons.mozilla.org/en-US/firefox/addon/startme
Tabliss	https://addons.mozilla.org/en-US/firefox/addon/tabliss
The New Tab	https://chrome.google.com/webstore/detail/the-new-tab-customize-you/ddjdamcnphfdljlojajeoiogkanilahc

Tab Management

Tool	Link
FoxyTab	https://addons.mozilla.org/en-US/firefox/addon/foxytab
OneTab	https://chrome.google.com/webstore/detail/onetab/chphlpgkkbolifaimnlloiipkdnihall?hl=en | https://addons.mozilla.org/en-US/firefox/addon/onetab
MySessions	https://addons.mozilla.org/en-US/firefox/addon/my-sessions
Quick Tab	https://chrome.google.com/webstore/detail/quick-tab/bdeifmcaonlafkglbdpbbhkeecjnkipo | https://github.com/tomlerendu/Quick-Tab
Session Buddy	https://chrome.google.com/webstore/detail/session-buddy/edacconmaakjimmfgnblocblbcdcpbko?hl=en
Sidebar+	https://addons.mozilla.org/en-US/firefox/addon/sidebar_plus
TabCloud	https://chrome.google.com/webstore/detail/tabcloud/npecfdijgoblfcgagoijgmgejmcpnhof?hl=en
TabJump	https://chrome.google.com/webstore/detail/tabjump-intelligent-tab-n/hokofmgcicpnjchllaccgedmmmbbnbmf?hl=en
Tabli	https://chrome.google.com/webstore/detail/tabli/igeehkedfibbnhbfponhjjplpkeomghi
Tablist	https://chrome.google.com/webstore/detail/tablist/eagbohciligljbgpbdbflaloangiodhe | https://addons.mozilla.org/en-US/firefox/addon/tablist
Tab Manager	https://chrome.google.com/webstore/detail/tab-manager/dklidlbmompnpdclmhaaemodlkpddaga | https://addons.mozilla.org/en-US/firefox/addon/tab-manager-webextension
Tab Manager Plus	https://chrome.google.com/webstore/detail/tab-manager-plus-for-chro/cnkdjjdmfiffagllbiiilooaoofcoeff | https://addons.mozilla.org/en-US/firefox/addon/tab-

	manager-plus-for-firefox | https://github.com/stefanXO/Tab-Manager-Plus
Tabs Outliner	https://chrome.google.com/webstore/detail/tabs-outliner/eggkanocgddhmamlbiijnphhppkpkmkl
Tab Session Manager	https://chrome.google.com/webstore/detail/tab-session-manager/iaiomicjabeggjcfkbimgmglanimpnae | https://addons.mozilla.org/en-US/firefox/addon/tab-session-manager
Tab Wrangler	https://chrome.google.com/webstore/detail/tab-wrangler/egnjhciaieeiiohknchakcodbpgjnchh?hl=en | https://addons.mozilla.org/en-US/firefox/addon/tabwrangler | https://github.com/tabwrangler/tabwrangler
The Great Suspender	https://chrome.google.com/webstore/detail/the-great-suspender/klbibkeccnjlkjkiokjodocebajanakg | https://github.com/greatsuspender/thegreatsuspender

Extension Managers

Tool	Link
Custom Chrome	https://chrome.google.com/webstore/detail/custom-chrome-extension-m/balnpimdnhfiodmodckhkgneejophhhm
Extensions Manager (aka Switcher)	https://chrome.google.com/webstore/detail/extensions-manager-aka-sw/lpleipinonnoibneeejgjnoeekmbopbc?hl=en
Extensity	https://chrome.google.com/webstore/detail/extensity/jjmflmamggggndanpgfnpelongoepncg/reviews
My Extensions	https://chrome.google.com/webstore/detail/my-extensions/igejgfmbjjjjplnnlgnbejpkpdajkblm?hl=en
One Click Extensions Manager	https://chrome.google.com/webstore/detail/one-click-extensions-mana/pbgjpgbpljobkekbhnnmlikbbfhbhmem?hl=en

Offline Browsing

Tool	Link
A1 Website Download	http://www.microsystools.com/products/website-download
ArchiveBox	https://archivebox.io
Cyotek WebCopy	http://www.cyotek.com/cyotek-webcopy
Getleft (download websites)	https://sourceforge.net/projects/getleftdown
HTTrack	http://www.httrack.com
Kiwix	https://www.kiwix.org
Offliberty	http://offliberty.com
Resolver	https://metaproductsrevolver.com
SingleFile	https://github.com/gildas-lormeau/SingleFile
SiteSucker	http://ricks-apps.com/osx/sitesucker/index.html
Website Ripper Copier	http://www.tensons.com/products/websiterippercopier

Browsing History

Tool	Link
Chrome History View	https://www.nirsoft.net/utils/chrome_history_view.html
Falcon	https://chrome.google.com/webstore/detail/falcon/mmifbbohghecjloeklpbinkjpbplfalb?hl=en | https://github.com/lengstrom/falcon
Fea KeyLogger	https://chrome.google.com/webstore/detail/fea-keylogger/fgkghpghjcbfcflhoklkcincndlpobja?hl=en
Fiddler	https://www.telerik.com/download/fiddler
Firefox Better History	https://addons.mozilla.org/en-US/firefox/addon/firefox-better-history | https://github.com/Vincent-P/firefox-better-history
Get Memex	https://getmemex.com
History Master	https://chrome.google.com/webstore/detail/history-master/mkfgjjeggnmkbobjmelbjhdchcoadnin | https://addons.mozilla.org/en-GB/firefox/addon/history-master | https://github.com/jiacai2050/history-master
History Search	https://historysearch.com
Hunchly	https://www.hunch.ly
Improved History	https://addons.mozilla.org/en-US/firefox/addon/improved-history

User Agent Switchers

Tool	Link
User Agent Switcher	https://addons.mozilla.org/en-US/firefox/addon/uaswitcher
User Agent Switcher	https://chrome.google.com/webstore/detail/user-agent-switcher/dbclpoekepcmadpkeaelmhiheolhjflj | https://addons.mozilla.org/en-US/firefox/addon/user-agent-switcher-revived
User Agent Switcher and Manager	https://chrome.google.com/webstore/detail/user-agent-switcher-and-m/bhchdcejhohfmigjafbampogmaanbfkg | https://addons.mozilla.org/en-US/firefox/addon/user-agent-string-switcher | https://github.com/ray-lothian/UserAgent-Switcher
User-Agent Switcher for Chrome	https://chrome.google.com/webstore/detail/user-agent-switcher-for-c/djflhoibgkdhkhhcedjiklpkjnoahfmg

Download Managers

Tool	Link
Download Organizer	https://chrome.google.com/webstore/detail/download-organizer/bpckijmccpnjipoekiilngedlnokkdgf | https://github.com/MireaRadu/download-organizer
DownThemAll!	https://chrome.google.com/webstore/detail/downthemall/nljkibfhlpcnanjgbnlnbjecgicbjkge | https://addons.mozilla.org/en-GB/firefox/addon/downthemall/
Free Download Manager	https://chrome.google.com/webstore/detail/free-download-manager/ahmpjcflkgiildlgicmcieglgoilbfdp?hl=en | https://addons.mozilla.org/en-US/firefox/addon/free-download-manager-addon/
NirSoft Browser Downloads	http://www.nirsoft.net/utils/web_browser_downloads_view.htm |
Turbo Download Manager	https://chrome.google.com/webstore/detail/turbo-download-manager/kemfccojgjoilhfmcblgimbggikekjip?hl=en |

Other Browsing Tools

Tool	Link
AutoPagerize	https://chrome.google.com/webstore/detail/autopagerize/igiofjhpmpihnifddepnpngfjhkfenbp
Firefox Multi-Account Containers	https://addons.mozilla.org/en-US/firefox/addon/multi-account-containers/?src=collection | https://github.com/mozilla/multi-account-containers
Panic Button	https://chrome.google.com/webstore/detail/panicbutton/faminaibgiklngmfpfbhmokfmnglamcm
Pawblock	https://chrome.google.com/webstore/detail/pawblock/jngmmiaolbliepfphdnelgfcclpnkoja | https://addons.mozilla.org/en-US/firefox/addon/pawblock
Prod	https://chrome.google.com/webstore/detail/prod-%E2%80%94-block-distractions/cpelgckpifnonijeenjbaglajimalpcl | https://addons.mozilla.org/en-US/firefox/addon/prod
Redirector	https://addons.mozilla.org/en-US/firefox/addon/redirector
Referer Control	https://chrome.google.com/webstore/detail/referer-control/hnkcfpcejkafcihlgbojoidoihckciin?hl=en
Scroll++	https://chrome.google.com/webstore/detail/scroll%20%20/kkbkeemffgiheholedniiicjhipnpdlp
SelfControl	http://selfcontrolapp.com
Simple Blocker	https://chrome.google.com/webstore/detail/simple-blocker/akfbkbiialncppkngofjpglbbobjoeoe
Super Easy Auto Refresh	https://chrome.google.com/webstore/detail/super-easy-auto-refresh/globgafddkdlnalejlkcpaefakkhkdoa
TabHunter	https://addons.mozilla.org/en-US/firefox/addon/tabhunter | https://github.com/ericpromislow/tabhunter

Tab Resize	https://chrome.google.com/webstore/detail/tab-resize-split-screen-l/bkpenclhmiealbebdopglffmfdiilejc
Workona	https://workona.com

Writing and Dissemination

Writing and Office Tools

Tool	Link
Apple iWork	https://www.apple.com/iwork
Arcane Docs	https://docs.arcaneoffice.com
FreeOffice	http://www.freeoffice.com
GoogleDocs	https://www.google.com/docs/about
LibreOffice	https://www.libreoffice.org
Manuskript	http://www.theologeek.ch/manuskript
MS Office	https://products.office.com
Office Online	https://chrome.google.com/webstore/detail/office-online/ndjpnladcallmjemlbaebfadecfhkepb/related
Ommwriter	https://ommwriter.com
OmniOutliner	https://www.omnigroup.com/omnioutliner
OnlyOffice	https://www.onlyoffice.com
oStoryBook	http://ostorybook.tuxfamily.org
Plume Creator	http://plume-creator.eu
Portway	https://getportway.com
Scrivener	http://literatureandlatte.com/scrivener.php
StoryToolz	http://storytoolz.com
TextExpander	https://smilesoftware.com/textexpander
UltraEdit	http://www.ultraedit.com
Ulysses	https://ulyssesapp.com
WriteApp	https://writeapp.me

Text Editors

Tool	Link
Atom	https://atom.io
BBEdit	https://www.barebones.com/products/bbedit
DocPad	https://www.gammadyne.com/docpad.htm
GNU Emacs	https://www.gnu.org/software/emacs
LightPaper	https://getlightpaper.com
Microsoft Notepad	https://www.microsoft.com/en-us/p/windows-notepad/9msmlrh6lzf3?activetab=pivot:overviewtab
Notepad++	https://notepad-plus-plus.org
NoteTab	https://www.notetab.com
PSPad	http://www.pspad.com
Sublime Text	https://www.sublimetext.com
TEDNotepad	http://jsimlo.sk/notepad
TextMate	https://macromates.com
TextPad	https://www.textpad.com
UltraEdit	https://www.ultraedit.com

Grammar and Spelling

Tool	Link
1Checker	http://www.1checker.com
Bibme	http://www.bibme.org
Ginger	https://www.gingersoftware.com
Grammarly	https://chrome.google.com/webstore/detail/grammarly-for-chrome/kbfnbcaeplbcioakkpcpgfkobkghlhen?hl=en
Hemmingway Editor	http://hemingwayapp.com
Ludwig.guru	https://ludwig.guru
OnlineCorrection	https://www.onlinecorrection.com
PaperRater	https://www.paperrater.com
ProWritingAid	https://prowritingaid.com
SlickWrite	https://www.slickwrite.com
textranch	https://textranch.com

Working with Citations

Tool	Link
Bibcitation	https://www.bibcitation.com
Bibliography	https://www.bibliography.com
bibme	https://www.bibme.org/apa
Citation Generator	https://www.citationgenerator.com
Citation Generator	https://www.citethisforme.com/us/citation-generator
Citation Machine	http://www.citationmachine.net
Citationsy*	https://citationsy.com
Citefast	https://www.citefast.com
CiteThisforMe	https://www.citethisforme.com
CustomWritings.com: Bibliography Generator	https://www.customwritings.com/citation_generator.html
EasyBib	https://www.easybib.com
KnightCite	https://www.calvin.edu/library/knightcite
MyBib: Citation	https://www.mybib.com/#/projects/49ZAam/citations

Argument Analysis

Tool	Link
Arguman	http://en.arguman.org
Argumentative	https://sourceforge.net/projects/argumentative
Argument Mapper	https://uncharted.software/product/argument-mapper
argunet	http://www.argunet.org
Rationale	https://www.rationaleonline.com

B679

Slideshow and Presentation Tools

Tool	Link
Canva	https://www.canva.com/create/presentations
Deckset	http://www.decksetapp.com
decktopus	https://decktopus.com
emaze	https://www.emaze.com
FlowVella	https://flowvella.com
genially	https://www.genial.ly
GoogleDocs	https://docs.google.com
Haiku Deck	https://www.haikudeck.com
Keynote	http://www.apple.com/de/mac/keynote
LibreOffice	https://www.libreoffice.org
MS Office	https://products.office.com
Padlet	https://padlet.com
Paste	https://fiftythree.com/paste
Piktochart	https://piktochart.com
Pitch Deck	https://pitchdeck.io
Powtoon	https://www.powtoon.com
presenterswall	http://www.presenterswall.com
Prezi	https://prezi.com
Slidebean	https://slidebean.com
Slidedog	http://slidedog.com
SlidePresenter	http://www.slidepresenter.com
SlideRocket	https://www.clearslide.com/product/sliderocket
Slides	https://slides.com
SpeechInMinutes	http://www.speechinminutes.com/
Sway	https://sway.com

WebSlides	https://webslides.tv
vcasmo	http://www.vcasmo.com
Visme	http://www.visme.co
Zoho Docs	https://www.zoho.com/docs/show.html

Slide Templates

Tool	Link
24slides	https://24slides.com
Adobe Spark: Presentation Templates	https://spark.adobe.com/templates/presentations
envatoelements: Presentation Templates	https://elements.envato.com/presentation-templates
Free Google Slides Templates	https://freegoogleslidestemplates.com
Freepik: Slide Template Images	https://www.freepik.com/free-photos-vectors/slide-template
Free PowerPoint Templates Design	https://www.free-powerpoint-templates-design.com
Google Slides PPT	http://googleslidesppt.com
HiSlide	https://hislide.io
Microsoft: PowerPoint Templates	https://templates.office.com/en-us/templates-for-powerpoint
Presenter Media	https://www.presentermedia.com
showeet	https://www.showeet.com
slideegg	https://www.slideegg.com
SlideGeeks	https://www.slidegeeks.com
Slide Hunter	https://slidehunter.com
Slide Model	https://slidemodel.com
Slide Team	https://www.slideteam.net
Slides Carnival: Templates	https://www.slidescarnival.com
slidesgala	https://slidesgala.com
slidesgo	https://slidesgo.com
Slides Store	https://slidestore.com

Digital Publishing

Tool	Link
Canva	https://www.canva.com
Issuu	https://issuu.com
Lucidpress	https://www.lucidpress.com
Mag.io	http://mag.io
My eBook	http://www.myebook.com
Omeka	http://omeka.org
Scribd	https://www.scribd.com
Yudu	http://yudu.com

Newsletter Tools

Tool	Link
AWeber	http://www.aweber.com
Benchmark	https://www.benchmarkemail.com
BombBomb	http://bombbomb.com
Campaign Monitor	https://www.campaignmonitor.com
Campaigner	https://www.campaigner.com
Campayn	http://campayn.com
Canva	https://www.canva.com
ConstantContact	http://www.constantcontact.com
Freshmail	http://freshmail.com
GetResponse	http://www.getresponse.com
Groupmail	https://groupmail.io
iContact	https://www.icontact.com
MadMimi	https://madmimi.com
Mailchimp	http://mailchimp.com
Mailjet	https://www.mailjet.com
Mailup	http://www.mailup.com
Moosend	https://moosend.com
sendinblue	https://www.sendinblue.com
Sendicate	https://www.sendicate.net
Sendloop	https://sendloop.com
Stripo	https://stripo.email
Sway	https://sway.com
TinyLetter	http://tinyletter.com
VerticalResponse	http://www.verticalresponse.com
Vision6	http://www.vision6.com.au

Zoho Campaigns	https://www.zoho.com/campaigns

Digital Storytelling

Tool	Link
Adobe Spark	https://spark.adobe.com/
Animatron	https://www.animatron.com
Animoto	https://animoto.com
Atavist	https://atavist.com
Eko Studio	https://studio.eko.com
Flipgrid	https://info.flipgrid.com
Google Tour Creator	https://poly.google.com/creator/tours
Juxtapose	https://juxtapose.knightlab.com
Klynt	http://www.klynt.net
Magisto	https://www.magisto.com
MakeBeliefsComix	http://www.makebeliefscomix.com
Maptia	https://maptia.com
Metaverse	https://studio.gometa.io
Neatline	http://neatline.org
Odyssey	https://cartodb.github.io/odyssey.js
Pageflow	http://pageflow.io
Racontr	https://racontr.com
RaptMedia	http://www.raptmedia.com
RawShorts	http://www.rawshorts.com
Shorthand	https://shorthand.com
Soundcite	http://soundcite.knightlab.com
sStory	https://ejfox.github.io/sStory
Steller	https://steller.co
Storyform	https://storyform.co
StoryMap	https://storymap.knightlab.com

StoryMaps	http://storymaps.arcgis.com
Sway	https://sway.com
Thinglink	https://www.thinglink.com
Tripline	http://www.tripline.net
Wevideo	https://www.wevideo.com
VideoScribe	http://www.videoscribe.co

On-Screen Video Recorders

Tool	Link
ActivePresenter	https://atomisystems.com/activepresenter
BandiCam	https://www.bandicam.com
CamStudio	https://camstudio.org
Camtasia	https://www.techsmith.com/video-editor.html
CaptureWizPro	http://www.pixelmetrics.com
liteCam	https://www.litecam.net
NCH Software	https://www.nchsoftware.com/capture/#101
OBS	https://obsproject.com
recordMyDesktop	http://recordmydesktop.sourceforge.net/about.php
Reflector	https://www.airsquirrels.com/reflector
SRecorder	http://srecorder.com
ScreenFlow	https://www.telestream.net/screenflow/overview.htm
ScreenHunter	http://www.wisdom-soft.com/products/screenhunter.htm
Screenpresso	https://www.screenpresso.com
X-Mirage	http://www.x-mirage.com/x-mirage

Website and App Builders

Website Builders

Tool	Link
Boldgrid	https://www.boldgrid.com
Duda	https://www.duda.co
Ghost	https://ghost.org
GoDaddy	https://ca.godaddy.com/websites/website-builder
Google Sites	https://gsuite.google.com/products/sites
IM Creator	http://www.imcreator.com
jimdo	https://www.jimdo.com
Publishthis.email	https://www.publishthis.email
Sheet2site	https://www.sheet2site.com
Simvoly	https://simvoly.com
Site Builder	https://www.sitebuilder.com
Sitey	https://www.sitey.com
Squarespace	https://www.squarespace.com
Strikingly	https://www.strikingly.com
UCoz	https://www.ucoz.com
UCraft	https://www.ucraft.com
Ukit	https://ukit.com
Unstack	https://www.unstack.com
Voog	https://www.voog.com
Web.com	https://www.web.com
Webflow	https://webflow.com
Webnode	https://us.webnode.com

Website Builder	https://www.websitebuilder.com
Webstarts	https://www.webstarts.com
Weebly	https://www.weebly.com
Wix	https://www.wix.com
Wordpress	https://wordpress.com
yola	https://www.yola.com
Zoho	https://www.zoho.com/sites/website-builder.html

App Builders

Tool	Link
Appery.io	https://appery.io
AppsBar	http://www.appsbar.com
AppsBuilder	http://www.apps-builder.com
Apps Geyser	https://www.appsgeyser.com
App Machine	http://www.appmachine.com
AppMakr	http://www.appmakr.com
Appy Pie	https://www.appypie.com
bubble	https://bubble.is
Build Fire	https://buildfire.com
Bizness Apps	https://www.biznessapps.com
Fliplet	https://fliplet.com
Game Salad	https://gamesalad.com
Good Barber	https://www.goodbarber.com/native
iBuild App	https://ibuildapp.com
Kony	https://www.kony.com
Mobile Roadie	https://mobileroadie.com
RAD Studio	https://www.embarcadero.com/products/rad-studio
SellMyApp	https://www.sellmyapp.com
Shoutem	http://www.shoutem.com
Siberian	https://www.siberiancms.com
Swiftpic	https://www.swiftic.com
Zoho Creator	https://www.zoho.com/creator

Setting Up Forums / Groups

Tool	Link
Discourse	https://www.discourse.org
Groups.io	https://groups.io
Peerboard	https://www.peerboard.com
ProBoards	https://www.proboards.com
Reddit	https://www.reddit.com
RocketReach	https://rocketreach.co

Creating Customised Workspaces

Tool	Link
Airtable	https://airtable.com
Boardlist	https://boardist.io
Coda	https://coda.io
Notion	https://www.notion.so
Wrike	https://www.wrike.com

Mind Mapping and Idea Generation

Mind and Concept Mapping Tools

Tool	Link
Ayoa	https://www.ayoa.com
The Brain	http://www.thebrain.com
Brainio	https://brainio.com
Bubbl.us	https://bubbl.us
Cmap	https://cmap.ihmc.us
Concept Draw	https://www.conceptdraw.com
Coogle	https://coggle.it
DebateGraph	https://debategraph.org
Freemind	http://freemind.sourceforge.net/wiki/index.php/Main_Page
Freeplane	http://freeplane.sourceforge.net/wiki/index.php/Main_Page
GitMind	https://gitmind.com
Heimer	https://github.com/juzzlin/Heimer
iMindQ	https://www.imindq.com
Inforapid Knowledge Builder	http://www.buildyourmap.com
Maps of Mind	https://www.mapsofmind.com
Mind42	http://mind42.com
Mind Genius	http://www.mindgenius.com
Mind Manager	https://www.mindmanager.com
Mind Map Ninja	https://mindmapninja.com
Mind Mup	https://www.mindmup.com | https://github.com/mindmup
Mindmeister	https://www.mindmeister.com

MindNode	https://mindnode.com
Mindomo	https://www.mindomo.com
Org-brain	https://github.com/Kungsgeten/org-brain
Popplet	http://popplet.com
Scapple	http://literatureandlatte.com/scapple.php
Simple Mind	https://simplemind.eu
Spiderscribe	http://www.spiderscribe.net
Stemic	https://stemic.app
Text2MindMap	https://tobloef.com/text2mindmap
VUE	http://vue.tufts.edu
Wise Mapping	http://www.wisemapping.com
WriteMapper	https://writemapper.com
Xmind	http://www.xmind.net

Idea Generation Tools

Tool	Link
BeeCanvas	https://early-access.beecanvas.com
Bluescape	https://www.bluescape.com
Concept Board	https://conceptboard.com
Excel Way	https://www.excelway.co
Fast Idea Generator	http://diytoolkit.org/tools/fast-idea-generator-2
Germ	https://germ.io
GroupMap	http://www.groupmap.com
Idea Flip	https://ideaflip.com
Klaxoon	https://klaxoon.com
Limnu	https://limnu.com
Lucidchart	https://www.lucidchart.com
Microsoft Dashboard	https://www.microsoft.com/en-us/microsoft-365/microsoft-whiteboard/digital-whiteboard-app
Miro	https://miro.com
Mural	https://mural.co
Rolljak	https://www.rolljak.com
Slatebox	https://slatebox.com
Stormboard	https://stormboard.com
WBO	https://github.com/lovasoa/whitebophir
Whimsical	https://whimsical.com
Wridea	https://wridea.com

Productivity and File Management

Work Management and Productivity Tools

Tool	Link
2Do	http://www.2doapp.com
amna	https://getamna.com
Any.do	http://www.any.do
Asana	https://asana.com
Ayoa	https://www.ayoa.com
Boomerang App	http://www.boomerangapp.com
ClickUp	https://clickup.com
Dayboard	https://dayboard.co
Flask	http://flask.io
Focus booster	https://www.focusboosterapp.com
Freedcamp	https://freedcamp.com
Freedom	https://freedom.to
Monday	https://monday.com
MyLifeOrganized	http://www.mylifeorganized.net
Noteplan	https://noteplan.co
Pintask	https://pintask.me
PomodoroTechnique	http://pomodorotechnique.com
Quire	https://quire.io
Remember the Milk	https://www.rememberthemilk.com
RescueTime	https://www.rescuetime.com
Restya	http://restya.com
StayFocusd	https://chrome.google.com/webstore/detail/stayfocusd/laankejkbhbdhmipfmgcngdelahlfoji/details

Taskboard	https://taskboard.matthewross.me
Theo.tools	https://www.theo.tools
TickTick	https://ticktick.com
TikiTiki	https://ticktick.com
Tinygain	https://tinygain.com
Trello	https://trello.com
Todo.ly	https://todo.ly
Todoist	https://en.todoist.com
Todo List	https://todol.ink
Toggl	https://www.toggl.com
Tomighty	http://www.tomighty.org
Toodledo	https://www.toodledo.com
Tweek	https://tweek.so

Calendars and Scheduling

Tool	Link
Book & Meet	https://bookmeet.us
Bunchapp	http://bunchapp.io
BusyCal	https://www.busymac.com/busycal
Calendly	https://calendly.com
Cozi	http://www.cozi.com
Doodle	http://doodle.com
Fanstatical	https://flexibits.com/fantastical
Fruux	https://fruux.com
Google Calendar	https://calendar.google.com/calendar
icloud Calendar	https://www.icloud.com/calendar
Meetin.gs	http://www.meetin.gs
MyMemorizer	http://www.mymemorizer.com
My Studio App	https://www.mystudylife.com
Noteplan	https://noteplan.co
OneCalendar	https://www.onecalendar.nl/onecalendar/overview
Outlook Calendar	https://outlook.live.com/calendar
ScheduleOnce	http://www.scheduleonce.com
TeamUp	http://www.teamup.com
TimeTree	https://timetreeapp.com
Tweek	https://tweek.so
Woven	https://woven.com

E-mail Management

Tool	Link
ActiveInbox	http://www.activeinboxhq.com
Batched Inbox	https://www.batchedinbox.com
Boomerang for Gmail	http://www.boomeranggmail.com
ClearContext	http://www.clearcontext.com
Cleanfox	https://www.cleanfox.io
Followupthen	https://www.followupthen.com
gorgias templates	https://www.gorgiastemplates.com
Hiver	http://hiverhq.com
Integrated gmail	https://addons.mozilla.org/en-US/firefox/addon/integrated-gmail
Mailstore	http://www.mailstore.com
NudgeMail	https://www.nudgemail.com
Sanebox	https://www.sanebox.com
Sortd	http://www.sortd.com
Subscription Zero	https://subscriptionzero.com
Ugly Email	https://uglyemail.com
Wisestamp	https://www.wisestamp.com

Cloud Storage and File Sharing

Tool	Link
ADrive	http://www.adrive.com
Amazon Cloud drive	https://www.amazon.com/clouddrive/home
Blackblaze	https://www.backblaze.com
Box	https://www.box.com
Boxcryptor	https://www.boxcryptor.com
Carbonite	https://www.carbonite.com
Cloudapp	http://www.getcloudapp.com
CloudFuze	https://www.cloudfuze.com
CloudHQ	https://www.cloudhq.net
Dropbox	https://www.dropbox.com
DropSend	http://www.dropsend.com
Duplicati	http://www.duplicati.com
Egnyte	http://www.egnyte.com
Ge.TT	http://ge.tt
GoodSync	http://www.goodsync.com
Google Drive	https://www.google.com/intl/nl/drive
Hightail	https://www.hightail.com
hubiC	https://hubic.com
iCloud	https://www.icloud.com
IDrive	https://www.idrive.com
LiveDrive	https://www2.livedrive.com
Mediafire	https://www.mediafire.com
Mega	https://mega.nz
Mindbox	https://minbox.com
MultCloud	https://www.multcloud.com

Onedrive	https://onedrive.live.com
Onehub	https://www.onehub.com
pCloud	https://www.pcloud.com
sendanywhere	https://send-anywhere.com
Sendthisfile	https://www.sendthisfile.com
Sendspace	https://www.sendspace.com
Simple.Savr	https://www.ssavr.com
SugarSync	https://www.sugarsync.com
Sync	https://www.sync.com
Syncthing	https://syncthing.net
TransferBigFiles	https://www.transferbigfiles.com
Tresorit	https://tresorit.com
WeTransfer	https://www.wetransfer.com
Zoho Work Drive	https://www.zoho.com/workdrive
Zoolz	https://www.zoolz.com

Workflow Automation

Tool	Link
Apiant	https://apiant.com
Automate.io	https://automate.io
Built.io	https://www.built.io
Elastic.io	https://www.elastic.io
huginn	https://github.com/huginn/huginn
IFTTT	https://ifttt.com
integromat	https://www.integromat.com
Kissflow	https://kissflow.com
Microsoft Flow	https://flow.microsoft.com
N8n.io	https://n8n.io
OneSaas	https://www.onesaas.com
piesync	https://www.piesync.com
platypush	https://github.com/BlackLight/platypush
Pushbullet	https://www.pushbullet.com
Tray.io	https://tray.io
Workato	https://www.workato.com
Workflow.is	https://workflow.is
wyzebulb	https://www.wyzebulb.com
Zapier	https://zapier.com

Collaboration and Communication

Collaboration and Project Management Tools

Tool	Link
5pm	http://www.5pmweb.com
ActiveCollab	https://www.activecollab.com
Advanseez	http://www.advanseez.com
Airtable	https://airtable.com
Any.do	http://www.any.do
Apollo	http://www.apollohq.com
Asana	https://asana.com
AWW	https://awwapp.com
Azendoo	https://www.azendoo.com
Basecamp	https://basecamp.com
Binfire	https://www.binfire.com
Box	https://www.box.com
Breeze	https://www.breeze.pm
Canvanizer	https://canvanizer.com
Casual	https://casual.pm
Cardboardit	https://cardboardit.com
Cardsmith	http://cardsmith.co
CollaborateCloud	http://www.collaboratecloud.com
Comindwork	http://www.comindwork.com
Conceptboard	https://conceptboard.com
Confluence	https://www.atlassian.com/software/confluence
eGroupWare	http://www.egroupware.org

Elegantt	https://elegantt.com
Firepad	https://firepad.io
Firesub	https://firesub.com
Flask	http://flask.io
Float	https://www.float.com
Flowdock	https://www.flowdock.com
Flow	https://www.getflow.com
Frame	https://frame.io
Freedcamp	https://freedcamp.com
Glasscubes	https://www.glasscubes.com
GQueues	https://www.gqueues.com
Hightail	https://www.hightail.com
hitask	https://hitask.com
Huddle	https://www.huddle.com
Infolio	https://infolio.co
KabanTool	http://kanbantool.com
Kanboard	https://kanboard.net
Kerika	http://kerika.com
Loomio	https://www.loomio.org
LumoFlow	https://lumoflow.com
Navigator	https://navigator.com
Nozbe	https://nozbe.com
Nuclino	https://www.nuclino.com
Nutcache	http://www.nutcache.com
meistertask	https://www.meistertask.com
Microsoft Sharepoint	https://www.microsoft.com/en-us/microsoft-365/sharepoint/collaboration
Minute	https://www.getminute.com
Miro	https://miro.com
Monday	https://monday.com
Mural	https://mural.co
OmniGroup	https://www.omnigroup.com
OnlyOffice	https://www.onlyoffice.com

Otixo	http://www.otixo.com
Piematrix	http://www.piematrix.com
Pinstriped	http://pinstriped.com
PivotalTracker	http://www.pivotaltracker.com
Plan	https://plan.io
Planleaf	http://www.planleaf.com
Planzone	https://www.planzone.com
Podio	https://podio.com
ProjectManager	https://www.projectmanager.com
ProjectPlace	https://www.projectplace.com
ProofHub	https://www.proofhub.com
Quip	https://quip.com
Quire	https://quire.io
Redbooth	https://redbooth.com
Slite	https://slite.com
Smartsheet	https://www.smartsheet.com
Stackfield	https://www.stackfield.com
Stormboard	https://www.stormboard.com
Taiga	https://taiga.io
Taskade	https://www.taskade.com
Taskboard	https://taskboard.matthewross.me
TeamAllocator	http://www.teamallocator.com
TeamWork	https://www.teamwork.com
Transparent Business	http://transparentbusiness.com
Trello	https://trello.com
Tuzzit	https://www.tuzzit.com
Twiddla	http://www.twiddla.com
updatey	http://updatey.com
Wire	https://wire.com
Weekdone	https://weekdone.com
Workfront	https://www.workfront.com
Wrike	https://www.wrike.com
YouTrack	https://www.jetbrains.com/youtrack

Zoho	https://www.zoho.com

Communication Tools

Tool	Link
Adobe Connect	http://www.adobe.com/products/adobeconnect.html
AnyMeeting	https://www.anymeeting.com
BeamYourScreen	http://www.beamyourscreen.com
Briar	https://briarproject.org
clearvale	https://www.clearvale.com/marketing/en
Digital Samba	http://www.digitalsamba.com
Discourse	http://www.discourse.org
FaceFlow	http://www.faceflow.com
Fleep	https://fleep.io
Franz	https://meetfranz.com
FreeConferenceCall	https://www.freeconferencecall.com
FreeScreenSharing	https://www.freescreensharing.com
Friends	http://moose-team.github.io/friends
GoToMeeting	http://www.gotomeeting.com
Highfive	https://highfive.com
icq	https://icq.com
Jitsi	https://jitsi.org
Join.me	https://www.join.me
Jostle	http://www.jostle.me
KIK	https://www.kik.com
Let's Chat	http://sdelements.github.io/lets-chat
lifesize	http://www.lifesize.com
Line	https://line.me
Linphone	http://www.linphone.org
Live Conference Pro	http://www.liveconferencepro.com

Lucid Meetings	http://www.lucidmeetings.com
Meet Franz	https://meetfranz.com
MeetingOne	https://www.meetingone.com
MeetNotes	https://meetnotes.co
MyBB	http://www.mybb.com
Phorum	http://www.phorum.org
ReadyTalk	https://www.readytalk.com
RingCentral	http://www.ringcentral.com
Rocket.Chat	https://rocket.chat
Signal	https://signal.org
Skype	http://www.skype.com
Slack	https://slack.com
StartMeeting	https://www.startmeeting.com
Stealthy	https://www.stealthy.im
Talky	https://talky.io
Teamviewer	https://www.teamviewer.com
Telegram	https://telegram.org
Tixeo	https://www.tixeo.com/en/secure-video-conferencing
Toc	http://toc.im
TrueConf	http://trueconf.com
Vanilla Forums	http://vanillaforums.org
Veeting rooms	https://www.veeting.com
VeriShow	http://www.verishow.com
Webex	http://www.webex.com
WeChat	https://web.wechat.com
WhatsApp	https://www.whatsapp.com
Yammer	https://www.yammer.com
Zeetings	http://www.zeetings.com
Zoho Meeting	https://www.zoho.com/meeting
Zoom.us	https://zoom.us
Zulip	https://www.zulip.org

Utility Tools

File Converters

Tool	Link
Adapter	https://macroplant.com/adapter
Any Video Converter	http://www.any-video-converter.com/products/for_video_free
Apowersoft	https://www.apowersoft.com/free-online-video-converter
cloudconvert	https://cloudconvert.com
Clip Convert	https://clipchamp.com/en/video-converter
Cometdocs	https://www.cometdocs.com
Convert Files	http://www.convertfiles.com
Convert Video Online	https://convert-video-online.com
CoolUtils	https://www.coolutils.com/online/Image-Converter
Covertion	https://convertio.co
DVD Video Soft	https://www.dvdvideosoft.com/products/dvd/Free-Image-Convert-and-Resize.htm
ezyZip	https://www.ezyzip.com
File Zig Zag	https://www.filezigzag.com
Free File Convert	https://www.freefileconvert.com
Free Make	http://www.freemake.com/free_video_converter
NCH Software	https://www.nchsoftware.com/software/converters.html
Online-Convert	https://www.online-convert.com
PIX Converter	https://www.coffeecup.com/pixconverter
RoboBraille	https://www.robobraille.org
XnConvert	https://www.xnview.com/en/xnconvert

YouConvertIt	https://www.youconvertit.com
Zamzar	https://www.zamzar.com

PDF Converters

Tool	Link
AConvert	https://www.aconvert.com/ebook
CISDEM PDF Converter OCR for Mac	https://www.cisdem.com/pdf-converter-ocr-mac.html
cometdocs	https://www.cometdocs.com
CutePDF	https://www.cutepdf.com
ExtractPDF	https://www.extractpdf.com
iSolid	https://www.isolid.be
Online2PDF	https://online2pdf.com
PDF2JPG	https://pdf2jpg.net
PDF Candy	https://pdfcandy.com
PDF Converter	https://www.freepdfconvert.com
PDF Converter	https://www.pdfconverter.com
PDF Converter	https://www.freeconvert.com/pdf-converter
PDF Converter	https://smallpdf.com/pdf-converter
PDF to Excel	https://www.pdftoexcel.com
PDF to Excel Online	https://www.pdftoexcelonline.com
PDF Forge	http://www.pdfforge.org/pdfcreator
PDF on Fly	https://pdfonfly.com
PDF OCR	https://www.investintech.com/pdf-ocr.htm
PDF Online	https://www.pdfonline.com
PDF Soda	https://www.sodapdf.com/ocr-pdf
PDF to Text	https://pdftotext.com
PDF to Word	https://www.pdftoword.com
PDF to Word OCR Converter	https://www.investintech.com/pdf-ocr.htm
PDF Yeah	https://www.pdfyeah.com

Publisher to PDF https://www.publishertopdf.com
To ePub https://toepub.com

Document Tracking

Tool	Link
LockLizard Tracking PDF Documents	https://www.locklizard.com/track-pdf-monitoring
MailTracking Document Tracking Service	http://www.mailtracking.com/mailtracking/pmdoctrack.asp

URL Shorteners

Tool	Link
Bit.do	https://bit.do
bitly	https://bitly.com
cuttly	https://cutt.ly
Is.gd	https://is.gd
LiTTY	https://litty.in
Porl	https://polrproject.org
Rebrandly	https://rebrandly.com
Shorte.st	https://shorte.st
T2mio	https://t2mio.com
Tiny.cc	https://tiny.cc
TinyURL	https://tinyurl.com
YOURLS	http://yourls.org

URL Expanders

Tool	Link
CheckShortURL	http://checkshorturl.com
Expand URL	https://www.expandurl.net
GetLinkInfo	http://www.getlinkinfo.com
Redirect Detective	https://redirectdetective.com
unfurl	https://dfir.blog/unfurl
Unshorten	https://unshorten.it
Unshorten.link	https://chrome.google.com/webstore/detail/unshortenlink/gbobdaaeaihkghbokihkofcbndhmbdpd?hl=en
urlex	http://urlex.org
URL X-ray	http://urlxray.com
Where Does This Link Go?	http://wheredoesthislinkgo.com

Keywords Discovery and Research

Tool	Link
Ahrefs Keywords Explorer	https://ahrefs.com/keywords-explorer
Describing Words	https://describingwords.io
Google Adwords	http://adwords.google.com
Google Trends	https://www.google.com/trends
Keyword Discovery	http://www.keyworddiscovery.com
Keyword Shitter	https://keywordshitter.com
KeywordTool	http://keywordtool.io
KParser	https://kparser.com
KWFinder	https://kwfinder.com
LSI Graph	https://lsigraph.com
MOZ Explorer	https://moz.com/explorer
One Look Reverse Dictionary	http://www.onelook.com/reverse-dictionary.shtml
Power Thesaurus	https://www.powerthesaurus.org
Rank Tracker	https://www.link-assistant.com/rank-tracker
Related Words	https://relatedwords.org
Reverse Dictionary	https://reversedictionary.org
SearchVolume	https://searchvolume.io
Soovle	http://www.soovle.com
SpyFu	https://www.spyfu.com
Ubersuggest	http://ubersuggest.org
Word Tracker	https://www.wordtracker.com

Android Emulators

Tool	Link
Andyroid	https://www.andyroid.net
BlueStacks	https://www.bluestacks.com
GenyMotion	https://www.genymotion.com
Leapdroid	https://leapdroid.en.softonic.com
NoxPlayer	https://www.bignox.com
Primeos	https://primeos.in
Stock Android	https://www.osboxes.org/android-x86

Virtual Machines

Tool	Link
Browser Appliance	http://browser.shell.tor.hu
Hyper-V	https://docs.microsoft.com/en-us/virtualization/hyper-v-on-windows/about
Linux KVM	https://www.linux-kvm.org/page/Main_Page
Microsoft VMS	https://developer.microsoft.com/en-us/microsoft-edge/tools/vms
Parallels	https://www.parallels.com
QEMU	https://www.qemu.org
Trace Labs OSINT VM	https://www.tracelabs.org/trace-labs-osint-vm
Veertu	https://veertu.com
VirtualBox	https://www.virtualbox.org/wiki/Downloads
VMWare	https://www.vmware.com
Windows Hyper-V	https://www.microsoft.com/en-us/cloud-platform/server-virtualization

Linux Distributions

Tool	Link
BackBox	https://www.backbox.org
CSI Linux	https://www.csilinux.com
Discreet	https://www.discreete-linux.org
Fedora	https://getfedora.org
ipredia	https://www.ipredia.org
Kodachi	https://www.digi77.com/linux-kodachi
Mint	https://linuxmint.com
Parrot	https://www.parrotsec.org
Pure OS	https://pureos.net
Qubes	https://www.qubes-os.org
Subgraph	https://subgraph.com
Tails	https://tails.boum.org
TENS	http://www.gettens.online
Tsurugi	https://tsurugi-linux.org
Ubuntu	https://ubuntu.com
whonix	https://www.whonix.org

User Script Managers

Tool	Link
Greasemonkey	https://addons.mozilla.org/en-US/firefox/addon/greasemonkey
Tampermonkey	https://chrome.google.com/webstore/detail/tampermonkey/dhdgffkkebhmkfjojejmpbldmpobfkfo?hl=en

Tool	Link
24timezones	https://24timezones.com
Coder's Toolbox	https://coderstoolbox.net/unixtimestamp
Current Millis	https://currentmillis.com
Earth Date to Martian Solar Longtitude	http://www-mars.lmd.jussieu.fr/mars/time/martian_time.html
EpochConverter	https://www.epochconverter.com
Epoch Timestamp Converter	https://www.unixtimestamp.com/index.php
Every Time Zone	http://everytimezone.com
ExcelJet	https://exceljet.net/formula/convert-time-to-time-zone
MoonCalc	https://www.mooncalc.org
NASA's HEASARC Tools	https://heasarc.gsfc.nasa.gov/cgi-bin/Tools/xTime/xTime.pl
Online Conversion	http://www.onlineconversion.com/unix_time.htm
Shadow Calculator	http://shadowcalculator.eu
Sonnenverlauf	https://www.sonnenverlauf.de
SunCalc.net	http://suncalc.net
SunCalc.org	https://www.suncalc.org
SunPath3	https://drajmarsh.bitbucket.io/sunpath3d.html
SunPath on Map	https://drajmarsh.bitbucket.io/sunpath-on-map.html
Timebie	http://www.timebie.com
Timeanddate	https://www.timeanddate.com
Time.is	https://time.is
Time Jones	https://www.timejones.com
Time Now	http://www.thetimenow.com
TimeStampConvert	http://www.timestampconvert.com

Time Temperature	https://www.timetemperature.com/time-tools-advanced/time-converter-future-date.php
Time Zone Converter	http://www.timezoneconverter.com/cgi-bin/tzc.tzc
Time Zone Converter	http://www.thetimezoneconverter.com
Unixtime Converter	https://unixtime-converter.com
World Time Buddy	https://www.worldtimebuddy.com
World Time Server	https://www.worldtimeserver.com
WolpframAlpha	http://www.wolframalpha.com

Holiday Lists and Alternative Calendars

Tool	Link
Holidays and Observances Around the World	https://www.timeanddate.com/holidays
Iranian Calendar Converter	http://www.iranchamber.com/calendar/converter/iranian_calendar_converter.php
Islamic Date Converter	https://www.islamicfinder.org/islamic-date-converter
Islamic Date Converter	https://www.islamicity.org/hijri-gregorian-converter/?AspxAutoDetectCookieSupport=1
National Day Calendar	https://nationaltoday.com/national-day-calendar
Office Holidays	https://www.officeholidays.com
Portal Seven: Holiday Calendars	http://portalseven.com/calendar

Unit Conversion

Tool	Link
Conversion Calculator	https://www.calculator.net/conversion-calculator.html
Convert Units	https://www.convertunits.com
Digital Dutch Unit Converter	https://www.digitaldutch.com/unitconverter/length.htm
Knovel Unit Converter	https://app.knovel.com/uc
Metric Conversions	https://www.metric-conversions.org
Unit Conversion	http://www.unitconversion.org
Unit Conversion	http://www.unit-conversion.info
Unit Converter	https://www.mathsisfun.com/unit-conversion-tool.php
Unit Converters	https://www.unitconverters.net

Weather

Tool	Link
AccuWeather Global	https://www.accuweather.com/en/world-weather
Aviation Weather Center	https://www.aviationweather.gov
BBC Weather	https://www.bbc.com/weather
Dark Sky	https://darksky.net
Earth	https://earth.nullschool.net
Global Sailing Weather	http://www.globalsailingweather.com
GreatWeather	http://www.greatweather.co.uk
Intellicast	http://www.intellicast.com
i-weather	https://i-weather.com
Kachelmann Wetter	https://kachelmannwetter.com/de
MeteoFrance	http://www.meteofrance.com
meteoradar	https://meteoradar.co.uk
MetEye	http://www.bom.gov.au/australia/meteye
MetOffice	https://www.metoffice.gov.uk
Mike's Weather Page	http://spaghettimodels.com
My Weather Search	https://myweathersearch.com
NOOA Weather	http://www.noaa.gov/weather
Open Weather Map	https://openweathermap.org
Sat24	https://en.sat24.com
UK Weather Cams	http://www.ukweathercams.co.uk
Ventusky	https://www.ventusky.com
weatherbase	http://www.weatherbase.com
Weather And Climate	https://weather-and-climate.com
Weather Bug	https://www.weatherbug.com
Weather.com	https://weather.com

Weather.gov	https://www.weather.gov
weather.org	http://weather.org
Weather Underground	https://www.wunderground.com
WeatherWX	https://www.weatherwx.com
Weatherzone.com	http://www.weatherzone.com.au/world
Wetter.com	https://www.wetter.com
Windy.com	https://www.windy.com/?39.538,-76.352,5
Wisuki	http://wisuki.com
Weather (Time and Date)	https://www.timeanddate.com/weather
Worlfram Alpha	https://www.wolframalpha.com
World Weather	http://worldweather.wmo.int/en/home.html
World Weather and Climate Extremes Archive	https://wmo.asu.edu
World Weather Online	https://www.worldweatheronline.com/lang/en-us
Ventusky	https://www.ventusky.com
XCWeather	https://www.xcweather.co.uk

Country Codes

Tool	Link
Nations Online: Country Codes List	https://www.nationsonline.org/oneworld/country_code_list.htm

Language Codes

Tool	Link
ISO 639.2	https://www.loc.gov/standards/iso639-2/php/code_list.php
List of ISO 639-1 Codes	https://en.wikipedia.org/wiki/List_of_ISO_639-1_codes

Working with Barcodes and QR Codes

Tool	Link
Barcode Link	http://www.barcodelink.net
Barcode Reader	https://online-barcode-reader.inliteresearch.com
CodeReader	https://www.codereadr.com/
IB Scanner	http://www.ibscanner.com/online-barcode-scanner
Online Barcode Reader	https://www.onlinebarcodereader.com
Online Barcode Reader	https://online-barcode-reader.com
QR Code	https://qrcode.kaywa.com
QR Code Generator	https://www.the-qrcode-generator.com
QR Code Generator	http://goqr.me
QR Code Readers	http://www.mobile-barcodes.com/qr-code-software
QR Code Scanner	https://webqr.com
Scandit	https://www.scandit.com
ZXing Decoder Online	https://zxing.org/w/decode.jspx

Finding Open Source Software

Tool	Link
BitBucket	https://bitbucket.org
F-Droid	https://f-droid.org
FossHub	https://www.fosshub.com
Github	https://github.com
launchpad	https://launchpad.net
Open Source Mac	http://opensourcemac.org
osalt	https://www.osalt.com
Open Hub	https://www.openhub.net
Open Source Software Directory	https://opensourcesoftwaredirectory.com
OSDN	https://osdn.net
Source Forge	https://sourceforge.net
Tux Family	https://project.tuxfamily.org

Finding Software

Tool	Link
Alternative.me	https://alternative.me
Alternativeto	https://alternativeto.net
BetaPage	https://betapage.co
Capterra	https://www.capterra.com
Download Astro	https://en.downloadastro.com
Download CNET	https://download.cnet.com
Download Crew	https://www.downloadcrew.com
File Hippo	https://filehippo.com
filehorse	https://www.filehorse.com
FilePuma	https://www.filepuma.com
Freeware Files	https://www.freewarefiles.com
Mac Apps	https://macapps.link
Mac App Store	https://apps.apple.com/us/genre/mac/id39
Mac Update	https://www.macupdate.com
Major Geeks	https://www.majorgeeks.com
Microsoft Store	https://www.microsoft.com/en-us/store/apps
Ninite	https://ninite.com
Only Freewares	http://www.onlyfreewares.com
ProductHunt	https://www.producthunt.com
Pure Mac	https://www.pure-mac.com
SnapFiles	https://www.snapfiles.com
Soft32	https://www.soft32.com
Softonic	https://en.softonic.com
Software Informer	https://software.informer.com
Softpedia	https://mac.softpedia.com

Source Forge	https://sourceforge.net
Techspot	https://www.techspot.com/downloads

Finding APIs

Tool	Link
Any API	http://any-api.com
API list	https://apilist.fun
APIs Guru	https://apis.guru/openapi-directory
API Search	http://apis.io
ProgrammableWeb	https://www.programmableweb.com
Public APIs	https://public-apis.io
RapidAPI	https://rapidapi.com
RapidAPI API Directory	https://rapidapi.com/blog/directory
SerpApi	https://serpapi.com

Analysis

Link / Network Analysis

Tool	Link
Analyst-CaseFile	https://github.com/deadbits/Analyst-CaseFile
Blackdot Solutions	https://blackdotsolutions.com
Flourish Network Graph	https://app.flourish.studio/@flourish/network-graph
Gephi	https://gephi.org
Graph Commons	https://graphcommons.com
IBM Analyst Notebook	https://www.ibm.com/us-en/marketplace/analysts-notebook
Kumu	https://kumu.io
Linkuroius	http://linkurio.us
Maltego	https://www.maltego.com
Neo4j	https://neo4j.com
NetworkX	https://networkx.github.io
NodeXL	https://archive.codeplex.com/?p=nodexl
Oligrapher	https://littlesis.org/oligrapher
ORA	http://www.casos.cs.cmu.edu/projects/ora/software.php
OSINT Combine: Data Visualisation Tool	https://osintcombine.tools
NetworkX	https://networkx.github.io
reknowledge	https://www.reknowledge.tech
Sentinel Visualizer	http://www.fmsasg.com
Siren	https://siren.io
SocioViz	http://socioviz.net
TwitterSearch2Gephi	https://github.com/hjunker/TwitterSearch2Gephi

Visallo	https://www.visallo.com
Visual Investigative Scenarios	https://vis.occrp.org

B736

Geospatial OSINT

World Maps

Tool	Link
Apple Maps	https://mapsconnect.apple.com
ArcGIS Online	https://www.arcgis.com
Baidu Maps	http://map.baidu.com
Batchgeo	http://batchgeo.com
Bing Maps	http://www.bing.com/maps
CrimeReports	https://www.crimereports.com
CrowdMap	https://crowdmap.com
CTLRQ Address Lookup	https://ctrlq.org/maps/address
DigitalGlobe ImageFinder	https://browse.digitalglobe.com/imagefinder
Dominoc925	https://dominoc925-pages.appspot.com/mapplets/cs_mgrs.html
DualMaps	http://data.mashedworld.com/dualmaps/map.htm
East View: Maps	https://www.eastview.com/resources/atlases-maps
Esri Search	https://esri-es.github.io/arcgis-search
Fallingrain Global Gazetteer	http://www.fallingrain.com/world/index.html
GeoFabrik	http://www.geofabrik.de
gmapcatcher	https://github.com/heldersepu/gmapcatcher
Go KML Maps	http://gokml.net/maps
Google Maps	https://www.google.com/maps
Google Maps Address Lookup	https://ctrlq.org/maps/address
Google Maps Downloader	http://www.allmapsoft.com/gmd

Google Maps Search Export	https://phantombuster.com/automations/google-maps/23412/google-maps-search-export
Google Maps Streetview Player	http://brianfolts.com/driver
Gosur Map	http://www.gosur.com/map
HibeBikeMap	http://hikebikemap.org
Instant Google Street View	http://www.instantstreetview.com
MAGIC Map	https://magic.defra.gov.uk/MagicMap.aspx
maplandia	http://www.maplandia.com
Mappilary	https://www.mapillary.com
Map Puzzle	http://www.mappuzzle.se
Map Overlays for Google Earth	http://www.mgmaps.com/kml/#view
Map QQ	https://map.qq.com
Mapquest	https://www.mapquest.com
maptiler	https://www.maptiler.com
National Geographic: Maps	https://www.nationalgeographic.com/maps
Nations Online: Maps	https://www.nationsonline.org/oneworld/maps.htm
New Earth Maps	https://newearthmaps.com
Old Maps Online	https://www.oldmapsonline.org
OpenLayers	http://openlayers.org
Open Street Map	http://www.openstreetmap.org
OsmAnd	https://osmand.net
Overpass Turbo	https://overpass-turbo.eu
Perry Castaneda Library	https://www.lib.utexas.edu/maps
Research UN Maps	http://research.un.org/en/maps
ShowMyStreet	https://showmystreet.com
Street View Online	https://www.streetviewonline.com
Topography Maps	https://www.topographymaps.com
ViaMichelin	http://www.viamichelin.com
ViewStreet	https://viewstreet.net
Wego.here	https://wego.here.com
WhatisWhere	https://www.whatiswhere.com
Wikimapia	http://wikimapia.org
WorldMap Harvard	http://worldmap.harvard.edu

Yandex Maps	https://yandex.ru/maps

Satellite Imagery

Tool	Link
Airbus Sample Imagery	https://www.intelligence-airbusds.com/en/8262-sample-imagery
ALOS	http://www.eorc.jaxa.jp/ALOS/en/aw3d30
ArcGIS Online	https://www.arcgis.com
Baidu Maps	http://map.baidu.com
Bhuvan	https://bhuvan-app3.nrsc.gov.in/data/download/index.php
Bing Maps	http://www.bing.com/maps
Copernicus Open Access Hub	https://scihub.copernicus.eu
Corona @ CAST	http://corona.cast.uark.edu
Digital Globe Open Data Program	https://www.digitalglobe.com/ecosystem/open-data
Dominoc925	https://dominoc925-pages.appspot.com/mapplets/cs_mgrs.html
DualMaps	http://data.mashedworld.com/dualmaps/map.htm
Earth Data	https://search.earthdata.nasa.gov/search
EarthExplorer	https://earthexplorer.usgs.gov
Earth Resources Observation and Science Center - USCG	https://eros.usgs.gov/find-data
EOLI	https://earth.esa.int/web/guest/eoli
EORC ALOS	https://www.eorc.jaxa.jp/ALOS/en/aw3d30
ESA Copernicus	https://www.esa.int/Applications/Observing_the_Earth/Copernicus | https://scihub.copernicus.eu/dhus/#/home
ESA Earth Online	https://earth.esa.int/eogateway/search?text=&category=Tools%20and%20toolboxes
ESA Snap	http://step.esa.int/main/toolboxes/snap

esri	http://www.esri.com
Esri Search	https://esri-es.github.io/arcgis-search
GeoVisual Search	https://search.descarteslabs.com
Global Explorer	https://www.globalxplorer.org
gmapcatcher	https://github.com/heldersepu/gmapcatcher
Go KML Maps	http://gokml.net/maps
Google Earth	http://www.google.com/earth
Google Earth Engine	https://earthengine.google.com
Google Maps	https://www.google.com/maps
Historic Aerials	https://www.historicaerials.com
INPE Image Catalog	http://www.dgi.inpe.br/CDSR
L3 Harris Geospatial	https://www.l3harrisgeospatial.com/Data-Imagery
Landsat Look	https://landsatlook.usgs.gov/viewer.html
Land Viewer	https://eos.com/landviewer
Mapquest	https://www.mapquest.com
maptiler	https://www.maptiler.com
NOAA CLASS	https://www.bou.class.noaa.gov/saa/products/catSearch
Old Maps Online	https://www.oldmapsonline.org
OpenLayers	http://openlayers.org
Planet Explorer	https://www.planet.com/explorer
SASGIS	http://www.sasgis.org
SASGIS SAS.Planet	http://sasgis.ru/sasplaneta
Satellites Pro	https://satellites.pro
Sentinel Hub Playground	http://apps.sentinel-hub.com/sentinel-playground
SOAR Earth	https://soar.earth
TerraPattern	http://www.terrapattern.com
View in Google Earth	http://www.mgmaps.com/kml/#view
VITO Free Satellite Imagery	http://www.vito-eodata.be/PDF/portal/Application.html
Wego.here	https://wego.here.com
Wikimapia	http://wikimapia.org
Worldview Earthdata NASA	https://worldview.earthdata.nasa.gov
Yandex Maps	https://yandex.ru/maps

Zoom Earth	https://zoom.earth

Aerial Imagery

Tool	Link
Aerial Photo Search	https://www.aerialphotosearch.com
Euroluftbild.de	https://www.euroluftbild.de
maptiler	https://www.maptiler.com
nearmap	https://www.nearmap.com
Open Aerial Map	https://openaerialmap.org

Working with Geographical Coordinates and Distance

Tool	Link
Batch Geocoding	https://www.doogal.co.uk/BatchGeocoding.php
Batch Reverse Geocoding	https://www.doogal.co.uk/BatchReverseGeocoding.php
Convert Latitude/Longitude to Decimal	https://andrew.hedges.name/experiments/convert_lat_long
Coordinate Conversion	http://www.synnatschke.de/geo-tools/coordinate-converter.php
doogal	https://www.doogal.co.uk
EarthPoint Convert	http://www.earthpoint.us/Convert.aspx
Find Latitude and Longitude	https://www.findlatitudeandlongitude.com
FreeMap Tools	https://www.freemaptools.com
Geobytes	http://geobytes.com/FreeServices
Geocaching Toolbox	https://www.geocachingtoolbox.com
Geocode: Locations to Coordinates	https://geocode.localfocus.nl
Geographic Coordinates Converter	http://www.synnatschke.de/geo-tools/coordinate-converter.php
geolocatethis	https://github.com/musafir-py/geolocatethis
GeoPlaner	http://www.geoplaner.com
GPS Coordinates	https://www.gpscoordinates.eu
GPS Coordinates	https://gpscoordinates.info
GPS Coordinates	https://www.gps-coordinates.net
GPS Koordinaten	https://www.gpskoordinaten.de
GPS Visualizer's Quick Geocoder	https://www.gpsvisualizer.com/geocode
_IntelligenceX: Location 2 Map	https://intelx.io/tools?tab=location

Latlong	https://www.latlong.net
Map Checking	https://www.mapchecking.com
MapsEasy.com	http://www.mapseasy.com/adress-to-gps-coordinates.php
Maps.ie: GPS Coordinates	https://www.maps.ie/coordinates.html
Maps.ie: Measure Distance / Area	https://www.maps.ie/distance-area-calculator.html
Maps.ie: Route Planner	https://www.maps.ie/route-planner.htm
Measure It Map	https://www.measureitmap.com
meetways	https://www.meetways.com
Synnatschke GeoTools	http://www.synnatschke.de

GIS and Mapping Software

Tool	Link
ArcGIS Online	https://www.arcgis.com
Batchgeo	http://batchgeo.com
Carto	https://carto.com
Colorbrewer	http://colorbrewer2.org
CrimeMapping	https://www.crimemapping.com
CrowdMap	https://crowdmap.com
DIgitalGlobe	http://www.digitalglobe.com
Directions Map	http://www.tripgeo.com/Directionsmap.aspx
Diva-GIS	http://www.diva-gis.org
esri	http://www.esri.com
GRASS GIS	https://grass.osgeo.org
Google My Maps	https://www.google.com/maps/about/mymaps
GPSVisualizer	http://www.gpsvisualizer.com
GrassGIS	http://grass.osgeo.org
Hivemapper	https://hivemapper.com
InstantAtlas	http://www.instantatlas.com
Kartograph	http://kartograph.org
Kepler	https://kepler.gl
Leaflet	http://leafletjs.com
MapAList	http://mapalist.com
MapBox	https://www.mapbox.com
Mapchart.net	https://mapchart.net
MapCrunch	https://www.mapcrunch.com
Map Developers	https://www.mapdevelopers.com

Maperitive	http://maperitive.net
MapHub	https://maphub.net
Mapillary	https://www.mapillary.com
MapIt	https://mapit.mysociety.org
Mapline	https://mapline.com
Mapotic	https://www.mapotic.com
Maptia	https://maptia.com
Maptive	https://www.maptive.com
Mashed World	http://www.mashedworld.com
Modest Maps	http://modestmaps.com
NGA GEOINT	https://github.com/ngageoint
pattrn	http://pattrn.co
Place.Guru	https://place.guru
QGIS	http://qgis.org
Scribble Maps	http://scribblemaps.com
StoryMap	https://storymap.knightlab.com
StoryMaps	http://storymaps.arcgis.com/en
Tableau	http://www.tableausoftware.com
What3words	https://what3words.com/clip.apples.leap
World Map Creator	http://worldmapcreator.com
Zeemaps	https://www.zeemaps.com

Regional Maps

Tool	Link
ACT Mapi Australia	http://www.actmapi.act.gov.au
Imergis	http://www.imergis.nl
Indian Geo-Platform of ISRO	http://bhuvan.nrsc.gov.in/data/download/index.php
Inspire Geoportal	http://inspire-geoportal.ec.europa.eu
Kakao Map	https://map.kakao.com
Land Information New Zealand	https://data.linz.govt.nz
Maps.ie (Ireland)	https://www.maps.ie
TopoQuest	https://www.topoquest.com
TopoZone	https://www.topozone.com
US Naviguide	http://www.usnaviguide.com

Thematic Maps

Tool	Link
360 Cities Map	https://www.360cities.net/map
ACLED Dashboard	https://www.acleddata.com/dashboard
ACT Government Incidents Map	http://esa.act.gov.au/community-information/incidents-map
APRS	https://aprs.fi
A World of Disputed Territories	http://metrocosm.com/disputed-territories-map.html
City Protect	https://cityprotect.com
Copernix	https://copernix.io
Crime Mapping (Police.uk)	https://www.police.uk
Cyber Squirrel	https://cybersquirrel1.com
Disputed Territories	http://metrocosm.com/disputed-territories-map.html
Europe Livemap	http://europe.liveuamap.com
Flickr Map	https://www.flickr.com/map
FootPathMap	https://footpathmap.co.uk
Gosur Map	http://www.gosur.com/map
Global Fishing Watch	http://globalfishingwatch.org/map
Global Forest Watch Deforestation Map	http://www.globalforestwatch.org/map/global
Global Incident Map	http://www.globalincidentmap.com
ICC Piracy & Armed Robbery Map	https://www.icc-ccs.org/piracy-reporting-centre/live-piracy-map
Industrial Maps	https://www.industryabout.com/country-territories-3
Lighting Maps	https://www.lightningmaps.org
Live Piracy Map	http://www.icc-ccs.org/piracy-reporting-centre/live-piracy-map

B749

Live Earthquakes Map	http://quakes.globalincidentmap.com
Mapping the Flow of International Trade	http://www.visualcapitalist.com/interactive-mapping-flow-international-trade
Mapping Militants	https://cisac.fsi.stanford.edu/mappingmilitants
MissileMap	http://nuclearsecrecy.com/missilemap
N2YO.com	http://www.n2yo.com
National Geographic Map Stories	https://www.nationalgeographic.com/maps
Newspaper Map	https://newspapermap.com
Nukemap	http://nuclearsecrecy.com/nukemap
OECD Maps	https://www.oecd.org/swac/maps
One.Network: Traffic Disruptions Across the UK	https://one.network
Open Infrastructure Map	https://openinframap.org
Open Railway Map	https://www.openrailwaymap.org
Photo.Map RU: Geotagged VK Photos	http://www.photo-map.ru
Relief Web Maps	https://reliefweb.int/countries
Risk Map	https://www.riskmap.com
Roman Heritage	http://sites.romaheritage.co.uk
RSOE EDIS Alert Map	http://hisz.rsoe.hu/alertmap/index2.php
Secret Bases	https://www.secret-bases.co.uk/google-earth.htm
Snapchat Map	https://map.snapchat.com
SnRadar: Geotagged VKPhotos	http://snradar.azurewebsites.net/search
Space Near Us	http://spacenear.us
Strava Global Heatmap	https://www.strava.com/heatmap#7.00/-120.90000/38.36000/hot/all
Submarine Cable Map	https://www.submarinecablemap.com
Submarine Cable Map	https://submarine-cable-map-2019.telegeography.com
Tracker.habhub	https://tracker.habhub.org
TRAVIC: Transit Visualisation Hub	https://tracker.geops.ch
The True Size Of	https://thetruesize.com
UK Grid Finder	https://gridreferencefinder.com

Wisuki: Wind and Waves Forecasts	http://wisuki.com
Your Navigation	http://yournavigation.org

Researching Buildings

Tool	Link
Emporis Buildings	https://www.emporis.com/buildings
Phorio	https://www.phorio.com

Privacy and Security

Secure Operating Systems

Tool	Link
Copperhead OS	https://copperhead.co/android
Debian	https://www.debian.org
Discreet Linux	https://www.privacy-cd.org
ipredia	https://www.ipredia.org
Qubes	https://www.qubes-os.org
Subgraph OS	https://subgraph.com/sgos
Tails	https://tails.boum.org
whonix	https://www.whonix.org

Secure Browsers

Tool	Link
Avast Secure Browser	https://www.avast.com/en-us/secure-browser
Brave	https://brave.com
Citrix	https://www.citrix.com/virtualization/secure-browser.html
Cocoon	https://getcocoon.com
Comodo's Dragon	https://www.comodo.com/home/browsers-toolbars/browser.php
Dissentr	https://dissenter.com
Epic Privacy Browser	https://www.epicbrowser.com
Globus VPN Browser	https://globus-vpn-browser.en.softonic.com
Iridium	https://iridiumbrowser.de
SRWare Iron	http://www.srware.net/en/software_srware_iron.php
Ungoogled Chromium	https://github.com/Eloston/ungoogled-chromium

System and Browser Cleaners

Tool	Link
BleachBit	https://www.bleachbit.org
CCEnhancer	https://singularlabs.com/software/ccenhancer
CCleaner	https://www.piriform.com/ccleaner
Cleanersoft	https://www.cleanersoft.com
CleanMyMac	https://macpaw.com/cleanmymac
Cookie AutoDelete	https://addons.mozilla.org/en-US/firefox/addon/cookie-autodelete/?src=search
DBAN	https://dban.org
Eraser	http://eraser.heidi.ie
History Cleaner	https://addons.mozilla.org/en-US/firefox/addon/history-cleaner/?src=collection
HotCleaner	https://www.hotcleaner.com
MacBooster	https://www.macbooster.net
Privazer	http://privazer.com
Revo Uninstaller	https://www.revouninstaller.com
Vanilla Cookie Manager	https://chrome.google.com/webstore/detail/vanilla-cookie-manager/gieohaicffldbmiilohhggbidhephnjj?hl=en | https://github.com/laktak/vanilla-chrome
WiseCleaner	https://www.wisecleaner.com

Browser Tests

Tool	Link
Am I Unique?	https://amiunique.org
Browser Capabilities Project: User Agent Lookup	http://browscap.org/ua-lookup
Browserleaks	https://browserleaks.com
BrowserSpy	http://browserspy.dk
CentralOps.net	https://centralops.net
Device Info	https://www.deviceinfo.me
Doileak	https://www.doileak.com
IPFingerprints	http://www.ipfingerprints.com
IPInfo: Browser Privacy Check	https://ipinfo.info/html/privacy-check.php
IPLeak	https://www.ipleak.net
My IP	https://www.myip.com
Netperf Tools	https://netperf.tools
Panopticlick	https://panopticlick.eff.org
Social Media Leak	https://robinlinus.github.io/socialmedia-leak
Sploit.io	https://sploit.io
User Agent String	http://useragentstring.com
What browser am I using?	http://www.whatbrowseramiusing.co
WhatIsMyBrowser	https://www.whatismybrowser.com
WhatIsMyIP	https://www.whatismyip.com
WhatIsMyIPAddress	http://whatismyipaddress.com
WhatMyIP.co	http://whatmyip.co
WHOER	https://whoer.net

Ads, Tracking, and Script Blockers

Tool	Link
AdblockPlus	https://adblockplus.org
AskBlocker	https://adamlynch.com/askblocker
Bitdefender Traffic Light	https://www.bitdefender.co.uk/solutions/trafficlight.html
Blokada	http://blokada.org
Decentraleyes	https://addons.mozilla.org/en-US/firefox/addon/decentraleyes/?src=rating
Disconnect	https://disconnect.me/disconnect
Disconnect from Facebook	https://addons.mozilla.org/en-US/firefox/addon/facebook-disconnect-ii/?src=collection
Do Not Track Me Google	https://chrome.google.com/webstore/detail/dont-track-me-google/gdbofhhdmcladcmmfjolgndfkpobecpg?hl=en
DuckDuckGo Privacy Essentials	https://chrome.google.com/webstore/detail/duckduckgo-privacy-essent/bkdgflcldnnnapblkhphbgpggdiikppg | https://addons.mozilla.org/en-US/firefox/addon/duckduckgo-for-firefox/?src=collection | https://github.com/duckduckgo/duckduckgo-privacy-extension
Facebook Container	https://addons.mozilla.org/en-US/firefox/addon/facebook-container/?src=collection | https://github.com/cluclead/facebook-disconnect
Firefox Multi-Account Containers	https://addons.mozilla.org/en-US/firefox/addon/multi-account-containers/?src=collection | https://github.com/mozilla/multi-account-containers
Flashcontrol	https://chrome.google.com/webstore/detail/flashcontrol/mfidmkgnfgnkihnjeklbekckimkipmoe
Forget Me Not	https://addons.mozilla.org/en-US/firefox/addon/forget_me_not/?src=featured | https://github.com/Lusito/forget-me-not
Ghostery	https://www.ghostery.com

Kimetrak	https://addons.mozilla.org/en-US/firefox/addon/kimetrak/?src=search | https://github.com/davlgd/kimetrak
Link Cleaner	https://addons.mozilla.org/en-US/firefox/addon/link-cleaner
Nixory	http://nixory.sourceforge.net
No Script	https://noscript.net
No-Script Suite Lite	https://chrome.google.com/webstore/detail/no-script-suite-lite/ahnanjpbkghcdgmlchbcfoiefnifjeni?hl=en | https://addons.mozilla.org/en-US/firefox/addon/no-script-suite-lite-revived
Panopticlick	https://panopticlick.eff.org
PixelBlock	https://chrome.google.com/webstore/detail/pixelblock/jmpmfcjnflbcoidlgapblgpgbilinlem?hl=en
Privacy Badger	https://www.eff.org/privacybadger
Privacy Possum	https://chrome.google.com/webstore/detail/privacy-possum/ommfjecdpepadiafbnidoiggfpbnkfbj | https://addons.mozilla.org/en-US/firefox/addon/privacy-possum/?src=collection | https://github.com/cowlicks/privacypossum
Script Safe	https://chrome.google.com/webstore/detail/scriptsafe/oiigbmnaadbkfbmpbfijlflahbdbdgdf?hl=en
Trackography	https://trackography.org
uBlock Origin	https://github.com/gorhill/uBlock
UMatrix	https://addons.mozilla.org/en-US/firefox/addon/umatrix | https://github.com/gorhill/uMatrix

Blocking of Currency Miners

Tool	Link
CryptoPrevent Malware Prevention	https://www.foolishit.com/cryptoprevent-malware-prevention/#gsc.tab=0
minerBlock	https://chrome.google.com/webstore/detail/minerblock/emikbbbebcdfohonlaifafnoanocnebl | https://addons.mozilla.org/en-US/firefox/addon/minerblock-origin | https://github.com/xd4rker/MinerBlock

HTTPs

Tool	Link
Privacy Settings	https://addons.mozilla.org/en-GB/firefox/addon/privacy-settings I https://github.com/schomery/privacy-settings
WebRTC Network Limited	https://chrome.google.com/webstore/detail/webrtc-network-limiter/npeicpdbkakmehahjeeohfdhnlpdklia

Javascript Security

Tool	Link
Activate JavaScript	http://activatejavascript.org/en/instructions
BrowserSPY JavaScript	http://browserspy.dk/javascript.php
Javascript Test	http://raymondhill.net/httpsb/httpsb-test-js-1.html
JavaScript Tester	https://javatester.org/javascript.html
Netcraft Anti-Phishing Extension	https://chrome.google.com/webstore/detail/netcraft-extension/bmejphbfclcpmpohkggcjeibfilpamia?hl=en | https://addons.mozilla.org/en-US/firefox/addon/netcraft-toolbar

Add-on Security

Tool	Link
Extension Source Viewer	https://chrome.google.com/webstore/detail/chrome-extension-source-v/jifpbeccnghkjeaalbbjmodiffmgedin | https://addons.mozilla.org/en-US/firefox/addon/crxviewer/?src=rating | https://github.com/Rob--W/crxviewer
SalesForce Security	https://chrome.google.com/webstore/detail/salesforce-security/ccmccoifgmogllppkahijhkingoeapph

Working with Incognito Mode

Tool	Link
Hidden: Auto-Incognito Filter	https://chrome.google.com/webstore/detail/hidden-auto-incognito-fil/ilankdeoodaclegebpfgkfnbciiaabeo?hl=en-US

Protecting Personal Data

Tool	Link
Abine	https://www.abine.com
Jumbo Privacy	https://www.jumboprivacy.com
Mine	https://saymine.com
MyPermissions	https://mypermissions.com
Noiszy	https://chrome.google.com/webstore/detail/noiszy/immakaidhkcddagdjmedphlnamlcdcbg
Opt-Out Doc	https://docs.google.com/spreadsheets/d/1UY9U2CJ8Rnz0CBrNu2iGV3yoG0nLR8mLINcnz44XESI/edit#gid=1864750866
Pribot	https://pribot.org
Prism Break	https://prism-break.org
Privacy Checker	http://www.privacychecker.nl/en
TOSBack	https://tosback.org
ToSDR	https://tosdr.org

Secure Account Deletion

Tool	Link
AccountKiller	https://www.accountkiller.com
DeleteMe	https://joindeleteme.com
deseat	https://www.deseat.me
justdeleteme	http://justdelete.me

Private Search Engines

Tool	Link
Disconnect Search	https://disconnect.me/search
Discrete search	https://www.discretesearch.com
Duck Duck Go	https://duckduckgo.com
Gibiru	http://www.gibiru.com
Infinity Search	https://infinitysearch.co
Lukol	https://www.lukol.com
MetaGer	https://metager.de
My Private Search	https://myprivatesearch.com
Oscobo	https://oscobo.co.uk
peekier	https://peekier.com
Privado	https://www.privado.com
Private.sh	https://private.sh
QWANT	https://www.qwant.com
runnaroo	https://www.runnaroo.com
Search encrypt	https://www.searchencrypt.com
Search Incognito	https://www.searchincognito.com
Searx.me	https://searx.me
Snap Search	https://snapsearch.online
Startpage	https://www.ixquick.com
Swisscows	https://swisscows.com
Qwant	https://www.qwant.com
Whoogle-search	https://github.com/benbusby/whoogle-search
yippy	https://www.yippy.com

Website Security and Reputation Check

Tool	Link
Apility.io	https://apility.io
AbuseIPD	https://www.abuseipdb.com
Auth0 IP	https://auth0.com/signals/ip
BBB Scam Tracker	https://www.bbb.org/scamtracker
Blacklight	https://themarkup.org/blacklight
Blacklist Alert	http://blacklistalert.org
Blacklist Check Tool	http://www.blchecktool.com
Blocked	https://www.blocked.org.uk
BrightCloud URL or IP Lookup	https://www.brightcloud.com/tools/url-ip-lookup.php
CheckPhish	https://checkphish.ai
Desenmascara	http://desenmascara.me
Google Transparency Report	https://transparencyreport.google.com/safe-browsing/search
hashd	https://hashdd.com
IBM X-Force Exchange	https://exchange.xforce.ibmcloud.com
Immuni Web	https://www.immuniweb.com/radar
IPVoid	https://www.ipvoid.com
Is It Hacked?	http://www.isithacked.com
Is It Phishing	https://isitphishing.org
JoeSandbox Cloud	https://www.joesandbox.com
Kaspersky Threat Intelligence Portal	https://opentip.kaspersky.com
List of Scamming Websites	https://www.scam-detector.com/article/list-of-scamming-websites
List of Scams and Fake Online Shops	https://fakeinet.com/list-of-scams-and-fake-online-shops-of-internet

List of Scam Websites	https://wegetscammedforyou.com/a-list-of-scam-websites
Malware URL Website Security Status	https://www.malwareurl.com/listing-urls.php
MXToolbox: Blacklists	https://mxtoolbox.com/blacklists.aspx
WOT	https://www.mywot.com
Norton Site Check	https://safeweb.norton.com
Palo Alto URL Filtering	https://urlfiltering.paloaltonetworks.com
Pepipost Domain Blacklist Checker	https://tools.pepipost.com/email-blacklist-checker
PhishTank	https://www.phishtank.com
Quttera	https://quttera.com
Ripoff Report	https://www.ripoffreport.com
Scam Adviser	https://www.scamadviser.com
Scamalytics	https://scamalytics.com
Sucuri Free Website and Malware Scanner	https://sitecheck.sucuri.net
Symantec WebPulse Site Review Request	https://sitereview.bluecoat.com
Talos Reputation Lookup	https://talosintelligence.com
ThreatMiner	https://www.threatminer.org
Trend Micro Site Safety Center	https://global.sitesafety.trendmicro.com
Unmask Parasites	https://unmask.sucuri.net/security-report
URLVoid	http://www.urlvoid.com
Virus Total	https://www.virustotal.com
WatchGuard Reputation Authority	http://www.reputationauthority.org
Web Cookies Scanner	https://webcookies.org
Web Filter Lookup	https://fortiguard.com/webfilter
Web Inspector	https://webinspector.com
WebSitePulse	https://www.websitepulse.com/help/testtools.dbl-test.html
Zulu URL Risk Analyzer	https://zulu.zscaler.com
ZveloLIVE	https://tools.zvelo.com

Secure Data Deletion

Tool	Link
ATA Secure Erase	https://tinyapps.org/docs/wipe_drives_hdparm.html
DBAN	https://dban.org
Eraser	https://eraser.heidi.ie
KillDisk	https://www.killdisk.com

Hard Drive Encryption

Tool	Link
BitLocker	https://www.microsoft.com/en-in/download/details.aspx?id=7806
CipherShed	https://www.ciphershed.org
cryptsetup	https://gitlab.com/cryptsetup/cryptsetup
FileVault	https://support.apple.com/en-us/HT204837
Folder Lock	http://www.newsoftwares.net/folderlock
Veracrypt	https://www.veracrypt.fr/en/Home.html

Other Encryption Tools

Tool	Link
AES Crypt	https://www.aescrypt.com
Axcrypt	https://www.axcrypt.net
BitLocker	https://www.microsoft.com/en-in/download/details.aspx?id=7806
boxcryptor	https://www.boxcryptor.com
CertainSafe	https://certainsafe.com/digital-safety-deposit-box
Challenger	https://encryption-software.de/challenger/en/index.html
Cryptainer LE	https://www.cypherix.com/cryptainerle
CryptoExpert	https://www.cryptoexpert.com
CryptoForge	http://www.cryptoforge.com
cryptonite	https://github.com/neurodroid/cryptonite
Dekart	https://www.dekart.com/free_download
FileVault	https://support.apple.com/en-us/HT204837
Folder Lock	http://www.newsoftwares.net/folderlock
GNU PG	https://www.gnupg.org/download/index.html
HTTPs Everywhere	https://www.eff.org/https-everywhere
Intercrypto	https://www.intercrypto.com
Rohos	https://www.rohos.com
Secure IT	https://www.cypherix.com/secureit2000
Silent Circle	https://www.silentcircle.com
Steganos	https://www.steganos.com/de/steganos-safe-19
Streak SecureGmail	https://www.streak.com/securegmail
Veracrypt	https://www.veracrypt.fr/en/Home.html
7-Zip	https://www.7-zip.org/download.html

Backup Tools

Tool	Link
Acronis	https://www.acronis.com
Arq	https://arqbackup.com
AWS	https://aws.amazon.com/backup-restore/?nc1=h_ls
BackBlaze	https://www.backblaze.com
Box	https://www.box.com
Carbon Copy Cloner	https://bombich.com
Carbonite	https://www.carbonite.com
Crashplan	https://www.crashplan.com
CryptSync	https://tools.stefankueng.com/CryptSync.html
Dropbox	https://www.dropbox.com/?landing=dbv2
Duplicati	https://www.duplicati.com
FreeFile Sync	https://sourceforge.net/projects/freefilesync
Handy Backup	https://www.handybackup.net/backup-website.shtml
IBackup	https://www.ibackup.com
iCloud	https://www.apple.com/icloud
IDrive	https://www.idrive.com
Jungle Disk	https://www.jungledisk.com
Least Authority	https://leastauthority.com
Mozy	https://mozy.com/#slide-11
NextCloud	https://nextcloud.com
Norton Online backup	https://nobu.backup.com/session/new
OpenDrive	https://www.opendrive.com
Site Vault	http://www.site-vault.com

SpiderOak	https://spideroak.com
SOS Online Backup	https://www.sosonlinebackup.com
Tresorit	https://tresorit.com

Secure File Sharing

Tool	Link
Box	https://www.box.com
DropBox	https://www.dropbox.com/?landing=dbv2
Drop Send	https://www.dropsend.com
Egnyte	https://www.egnyte.com
FileCap	https://filecap.com
HighTail	https://www.hightail.com
Just Cloud	http://www.justcloud.com
KPN File Transfer	https://filetransfer.kpn.com
Least Authority	https://leastauthority.com
NextCloud	https://nextcloud.com
OneHub	https://www.onehub.com
OpenDrive	https://www.opendrive.com
Securesha	https://securesha.re
Send This File	https://www.sendthisfile.com
Share File	https://www.sharefile.com
Smart Room	https://smartroom.com
Sugar Sync	https://www2.sugarsync.com
Synqion	https://synqion.com
transfernow	https://www.transfernow.net
Tresorit	https://tresorit.com

Cloud Storage Encryption

Tool	Link
boxcryptor	https://www.boxcryptor.com
Cryptomator	https://cryptomator.org
idgard	https://www.idgard.de/en
OwnCloud	https://owncloud.com
SpiderOak	https://spideroak.com
Tahoe-LAFS	https://tahoe-lafs.org/trac/tahoe-lafs
tresorit	https://tresorit.com

Encrypted Pastebins

Tool	Link
0bin.net	https://0bin.net
Ghostbin	https://ghostbin.com
Hardbin	https://hardbin.com
Hastebin	https://hastebin.com

Secure Communication Tools

Tool	Link
Adium	https://adium.im
Buddycloud	http://buddycloud.com
Chanty	https://www.chanty.com
ChatSecure	https://chatsecure.org
Fleep	https://fleep.io
Google Hangouts	https://hangouts.google.com
Go To Meeting	https://www.gotomeeting.com
IPGMAIL	https://ipgmail.com
Jitsi	https://jitsi.org
Join.me	https://www.join.me
Off-the-Record-Messaging	https://otr.cypherpunks.ca
Pidgin	https://www.pidgin.im
Ricochet	https://ricochet.im
Signal	https://signal.org
Silent Circle	https://www.silentcircle.com
Skype for Business	https://www.skype.com/en/business
Slack	https://slack.com/r/02tltzm1-02tpl6m9
Spideroak: Semaphor	https://spideroak.com/semaphor
Stealthy	https://www.stealthy.im
Surveilliance Self Defense	https://ssd.eff.org
Telegram	https://telegram.org
Tibbr	http://www.tibbr.com
TorChat	https://github.com/prof7bit/TorChat
Unseen.is	https://unseen.is
Wickr	https://wickr.com

Workfront	https://www.workfront.com
Zabber	https://www.xabber.com
Yammer	https://www.yammer.com

E-mail Privacy Tests

Tool	Link
Email Leak Tools	https://emailipleak.com
Email Privacy Tester	https://www.emailprivacytester.com
Heise Security Email Check	https://www.heise.de/security//dienste/emailcheck/html-mails/webbug
TLS Secure Email	https://www.checktls.com

Privacy-First E-mail Providers and Encrypting E-mails

Tool	Link
CounterMail	https://countermail.com
Disroot	https://disroot.org
Email Self-Defence	https://emailselfdefense.fsf.org
Enigmail	https://addons.thunderbird.net/en-us/thunderbird/addon/enigmail
GPG Tools	https://gpgtools.org
Fastmail	https://www.fastmail.com
InfoEncrypt	https://www.infoencrypt.com
Kolab Now	https://kolabnow.com
Lockbin	https://lockbin.com
Mailbox	https://mailbox.org
Mailfence	https://mailfence.com
Mail-in-a-Box	https://mailinabox.email
Mailvelope	https://www.mailvelope.com
Neomailbox	https://www.neomailbox.com
Posteo	https://posteo.de/en
ProtonMail	https://protonmail.com
RISEUP	https://riseup.net
Tutanota	https://tutanota.com
Unseen	https://unseen.is

Disposable E-mails and E-mail Aliases

Tool	Link
10minutemail	https://10minutemail.com
10minutemail	http://10minutemail.co.za
20minutemail	http://www.20minutemail.com
33mail	https://33mail.com
anonmails	https://anonmails.de
Anonymouse	http://anonymouse.org
Bloody Vikings	https://addons.mozilla.org/en-US/firefox/addon/bloody-vikings/?src=collection
BspamFree	http://bspamfree.org
burnermail	https://burnermail.io
DCMail	http://dcemail.com
E4ward	http://e4ward.com
EmailOnDeck	https://www.emailondeck.com
Emkei.cz	https://emkei.cz
Fake E-mail Generator	http://www.fakemailgenerator.com
Fake inbox	http://www.fakeinbox.com
GetNada	https://getnada.com
gishPuppy	https://www.gishpuppy.com
Guerrilla Mail	https://www.guerrillamail.com
ImprovMX	https://improvmx.com
Incognito Mail	http://www.incognitomail.com
Jetable	https://jetable.org
Maildrop	https://maildrop.cc
mailgutter	http://mailgutter.com
Mailinator	http://www.mailinator.com

MailNull	https://mailnull.com
mohmal	https://www.mohmal.com
MyTrashMail	http://mytrashmail.com
nBox	https://nbox.notif.me
Send Email	http://send-email.org
SimpleLogin	https://simplelogin.io
Sneakemail	https://sneakemail.com
Spamex	https://www.spamex.com
SpamGourmet	https://www.spamgourmet.com
Sudo App	https://sudoapp.com
tempinbox	http://www.tempinbox.com
Tempr.email	https://tempr.email
TempMail	https://temp-mail.org
ThrowAwayMail	https://www.throwawaymail.com
TMail	http://www.temporary-email-address.com
TrashMail	https://trashmail.com
Volto	https://www.volto.io
YOPmail	http://www.yopmail.com

Block E-mail Tracking

Tool	Link
Pixel Block	https://chrome.google.com/webstore/detail/pixelblock/jmpmfcjnflbcoidlgapblgpgbilinlem
Scamdex	http://www.scamdex.com

E-mail-based Scams

Tool	Link
Scamdex	http://www.scamdex.com

Password Management and Secure Login

Tool	Link
Authy	https://authy.com
Avast Passwords	https://www.avast.com/passwords#mac
1Password	https://1password.com
bitwarden	https://bitwarden.com
Buttercup	https://buttercup.pw
Codebook	https://www.zetetic.net/codebook
Dashlane	https://www.dashlane.com
Enpass	https://www.enpass.io
Have I Been Pwned	https://haveibeenpwned.com/Passwords
Give Me a Password	http://givemeapassword.com
Google 2-Step Verification	https://www.google.com/landing/2step
How Secure Is My Password	https://howsecureismypassword.net
iCloud Keychain	https://support.apple.com/en-ca/HT204085
KeePass Password Safe	http://keepass.info
Last Pass	https://lastpass.com
LessPass	https://lesspass.com
MacPass	https://github.com/MacPass/MacPass
Make Me Password	https://makemeapassword.ligos.net
Master Password	http://masterpasswordapp.com
Microsoft Authenticator	https://www.microsoft.com/en-us/account/authenticator
Passbolt	https://www.passbolt.com
passfault	http://passfault.com
Password Alert	https://chrome.google.com/webstore/detail/password-alert/noondiphcddnnabmjcihcjfbhfklnnep
Password Generator	https://my.norton.com/extspa/passwordmanager

Password Meter	https://www.safetydetectives.com/password-meter
Passwords Generator	https://passwordsgenerator.net
Password Store	https://www.passwordstore.org
Password Strength Test	http://rumkin.com/tools/password/passchk.php
PW-Gen	https://www.elfqrin.com/pwgen.php
Random.org Passwords	https://www.random.org/passwords
Secure Password Generator	https://passwordsgenerator.net
Spideroak: Encrypt	https://spideroak.com/encryptr
SplashID	https://www.splashid.com
Strong Box Safe	https://strongboxsafe.com
Two Factor Auth	https://twofactorauth.org
yubico	https://www.yubico.com

Searching Breached Data

Tool	Link
4iq	https://4iq.com
Ashley Madison Hack	https://ashley.cynic.al
BaseQuery	https://github.com/g666gle/BaseQuery
BreachAlarm	https://breachalarm.com
Burnermail Data Breach Checker	https://burnermail.io/resources/data-breach-checker
Cr3dOv3r	https://github.com/D4Vinci/Cr3dOv3r
Dehashed	https://dehashed.com
Dumpster Diver	https://github.com/securing/DumpsterDiver
Firefox Monitor	https://monitor.firefox.com
Ghost Project	https://ghostproject.fr
Hacked Emails	https://hacked-emails.com
h8mail	https://github.com/khast3x/h8mail
Hasso-Plattner-Institut	https://sec.hpi.uni-potsdam.de/ilc/search
Have I Been Pwned	https://haveibeenpwned.com
Have I Been Sold	https://haveibeensold.app
HPI Identity Leak Checker	https://sec.hpi.uni-potsdam.de/ilc/search;jsessionid=A94B3A03C67B00F3B0FADB4A8C08E6FA
Infoga	https://github.com/m4ll0k/infoga
_IntelligenceX	https://intelx.io
Leaked Source	https://leakedsource.ru
MELANI Check Tool	https://www.checktool.ch
Passdb-frontend	https://github.com/audibleblink/passdb-frontend
Psbdmp.ws	https://psbdmp.ws//
Pulsar	https://github.com/FooBallZ/pulsar

pwned	https://github.com/davidtavarez/pwndb
pwnedOrNot	https://github.com/thewhiteh4t/pwnedOrNot
Scavenger	https://github.com/rndinfosecguy/Scavenger
Scylla	https://scylla.sh
Snusbase	https://snusbase.com
SpyCloud	https://spycloud.com/products/fraud-investigations
Vigilante	https://www.vigilante.pw
WhatBreach	https://github.com/Ekultek/WhatBreach

Working with Hashes

Tool	Link
CrackStation	https://crackstation.net
Dehashed	https://dehashed.com
_IntelligenceX Reverse Hash Lookup	https://intelx.io/tools?tab=hash
M5decrypt	https://md5decrypt.net/en/#answer
Md5hashing: Hash and Unhash	https://md5hashing.net/hash
Mobile Fish Hash Generator	https://www.mobilefish.com/services/hash_generator/hash_generator.php
Online Hash Crack	https://www.onlinehashcrack.com/hash-identification.php
Sha1	http://www.sha1-online.com
Sha-256 Hash Calculator	https://xorbin.com/tools/sha256-hash-calculator

Second Phone Apps

Tool	Link
2ndLine	https://www.2ndline.co
Burner App	https://www.burnerapp.com
CloudSIM	https://www.cloudsimapp.com
Dingtone	http://www.dingtone.me
Flexible Numbers	https://flexiblenumbers.com
flyp	https://getflyp.com
Google Voice	https://voice.google.com
Hushed	https://hushed.com
onoff	https://www.onoff.app
Sideline	https://www.sideline.com
sipgate	https://www.sipgatebasic.co.uk
Sudo App	https://sudoapp.com
Telos	http://www.telosapp.com
textnow	https://www.textnow.com

SMS Verification Online

Tool	Link
7sim.net	http://7sim.net
Free Online Phone	https://www.freeonlinephone.org
Free Phone Num	https://freephonenum.com
Get Free SMS Number	https://getfreesmsnumber.com
Hs3x	https://hs3x.com
My Trash Mobile	https://www.mytrashmobile.com
Online SIM	https://onlinesim.ru
Proovl	https://www.proovl.com
Receive a SMS	https://www.receiveasms.com
Receive Free SMS	http://receivefreesms.com
Receive SMS	https://www.receivesms.co
Receive SMS	https://receive-sms.com
Receive SMS Now	http://receive-sms-now.com
Receive SMS Online	http://receive-sms-online.com
Receive SMS Online.info	http://receive-sms-online.info
Receive SMS Online	https://www.receivesmsonline.net
Receive SMS Online	https://receive-smss.com
SMS Finders	https://smsfinders.com
SMS Receive	https://sms-receive.net
SMS Sellaite	http://sms.sellaite.com
smsver	https://www.smsver.com
Spoof Box: My Trash Mobile	https://www.spoofbox.com/en/tool/trash-mobile
text verified	https://www.textverified.com

VPN Services

Tool	Link
AirVPN	https://airvpn.org
Box PN	https://boxpn.com
CryptoStorm	https://cryptostorm.is/#section5
CyberGhost	https://www.cyberghostvpn.com
Encrypt.me	https://encrypt.me
ExpressVPN	https://www.expressvpn.com
Golden Frog	https://www.goldenfrog.com
HideMyAss	https://www.hidemyass.com
Hoxx	https://hoxx.com
Hotspot Shield	https://www.hotspotshield.com
IPVanish	https://www.ipvanish.com
IVPN	https://www.ivpn.net
Mullvad	https://mullvad.net
NordVPN	https://nordvpn.com
Overplay	https://www.overplay.net/en/products/vpn
Perfect Privacy	https://www.perfect-privacy.com
Personal VPN	https://www.personalvpn.com
Proton VPN	https://protonvpn.com
Pure VPN	https://www.purevpn.com
SatoshiVPN	https://satoshivpn.com
TorGuard	https://torguard.net
TunnelBear	https://www.tunnelbear.com
Perfect Privacy	https://www.perfect-privacy.com/en
Private Internet Access	https://www.privateinternetaccess.com
Speedify	http://speedify.com/desktop-vpn

Strong VPN	https://strongvpn.com
Viking VPN	https://vikingvpn.com
VPN Unlimited	https://www.vpnunlimitedapp.com
Vypr VPN	https://www.goldenfrog.online/vyprvpn
Windscribe	https://windscribe.com
ZenMate	https://zenmate.com
ZenVPN	https://zenvpn.net/en

VPN Testing

Tool	Link
BrowserLeaks: WebRTC Leak Test	https://browserleaks.com/webrtc
Check IP	https://www.perfect-privacy.com/check-ip
DNS Leak	https://www.dnsleaktest.com
DNS Leak Test	http://dnsleak.com
Email Leak Test	http://emailipleak.com
IPCheck	http://ip-check.info
IPFingerprints	http://www.ipfingerprints.com
IPLeak	https://ipleak.net
IP Tracker Online	https://www.iptrackeronline.com/locate-ip-on-map-mini.php?lang=1
IPv6 Leak Test	http://ipv6leak.com
My IP	https://www.myip.com
Netperf Tools	https://netperf.tools
WhatIsMyIP	https://www.whatismyip.com
WhatIsMyIPAddress	http://whatismyipaddress.com
WhatMyIP.co	http://whatmyip.co
WHOER	https://whoer.net

Proxy Tools

Tool	Link
4everproxy	http://www.4everproxy.com
Anonymouse	http://anonymouse.org/anonwww.html
FilterBypass	https://www.filterbypass.me
Guardster Free Web Proxy	http://www.guardster.com/free
Hide.me	https://hide.me/en/proxy
HideMyAss Proxy	https://www.hidemyass.com/proxy
Premium Proxy	https://premproxy.com
ProxFree	https://www.proxfree.com
Proxify	https://proxify.com
Proxy4Free	http://www.proxy4free.com
ProxySite	https://www.proxysite.com
Public Proxy Servers	http://www.publicproxyservers.com

Antivirus Software

Tool	Link
AIRO	https://www.airoav.com
Avast	https://www.avast.com
AVG	https://www.avg.com
BitDefender	https://www.bitdefender.com
BullGuard	https://www.bullguard.com
Comodo	https://www.comodo.com
ESET	https://www.eset.com
F-Secure Anti-Virus	https://www.f-secure.com
McAfee	https://www.mcafee.com
Norton	https://www.norton.com
Sophos	https://home.sophos.com
Trend Micro	https://www.trendmicro.com
Webroot	https://www.webroot.com

Anti-Malware / Spyware

Tool	Link
Malwarebytes	https://www.malwarebytes.com
Spybot	https://www.safer-networking.org
Spyware Terminator	http://www.spywareterminator.com
SUPERAntiSpyware	https://www.superantispyware.com

Dealing with Ransomware

Tool	Link
ID Ransomware	https://id-ransomware.malwarehunterteam.com
NoMoreRansom	https://www.nomoreransom.org

Anti-Theft Software

Tool	Link
Absolute	https://homeoffice.absolute.com
Avast Anti-Theft	https://support.avast.com/en-my/article/Use-Android-Anti-Theft
Find My	https://www.apple.com/icloud/find-my
Hidden App	https://hiddenapp.com
Lookout	https://www.lookout.com
PreyProject	https://preyproject.com

Copyright Infringement, Plagiarism and Takedowns

Tool	Link
Copyscape	https://www.copyscape.com/compare.php
Copyright.gov	https://www.copyright.gov
Copywrited.com	https://www.copyrighted.com
DMCA	https://www.dmca.com/Takedowns.aspx
DMCA Pro	http://dmca.pro
Google Transparency Report Copyright Infringement	https://transparencyreport.google.com/copyright/overview
Google Webmasters	https://www.google.com/webmasters/#?modal_active=none
Hack Hunter	https://www.hack-hunt.com
Lumen Database	https://lumendatabase.org
MyVows	https://myows.com
Plagiarism Checker	https://www.scribbr.com/plagiarism-checker
Plagiarism Checker	http://smallseotools.com/plagiarism-checker
Plague Hunter	https://www.plaghunter.com

General Privacy Resources

Tool	Link
Electronic Frontier Foundation	https://www.eff.org
Electronic Privacy Information Center	https://epic.org
Future of Privacy Forum	https://fpf.org
Greysec	https://greysec.net
Guardian Project	https://guardianproject.info
IAPP Resources	https://iapp.org/resources
Information Commissioner's Office	https://ico.org.uk
JDSUPRA Privacy Updates	https://www.jdsupra.com/law-news/privacy
My Shadow	https://myshadow.org
PRISM BREAK	https://prism-break.org/en
Privacy International	https://privacyinternational.org
Privacy Rights Clearinghouse	https://www.privacyrights.org
Privacy Tools	https://www.privacytools.io
ProPrivacy	https://proprivacy.com
Security Checklist	https://securitycheckli.st
Security in a Box	https://securityinabox.org
Security Planner	https://securityplanner.org
Surveillance Self-Defence	https://ssd.eff.org
TechSolidarity Resources	https://techsolidarity.org/resources.html

Other OSINT Research Tools

OSINT Platforms

Tool	Link
Lampyre	https://lampyre.io
Maltego	https://www.maltego.com
OSINT Browser	http://osirtbrowser.com
Shadow Dragon	https://shadowdragon.io

Tools for Creating Sock Puppets

Tool	Link
avachara	https://avachara.com/avatar
avatarify	https://github.com/alievk/avatarify
Avatar Maker	https://avatarmaker.com
Avatar Maker	http://www.theavatarmaker.com
Behind the Name	https://www.behindthename.com/random
Cartoonize Avatar	https://www.cartoonize.net/avatar.htm
Data Fake Generator	http://www.datafakegenerator.com/generador.php
Fake Card Generator	https://generator-credit-card.com
Fake ID	https://www.elfqrin.com/fakeid.php
Fake Identity Generator	http://backgroundchecks.org/justdeleteme/fake-identity-generator
Fakena.me	https://fakena.me
Fake Name Generator	https://www.fakenamegenerator.com
Fake Person Generator	https://www.fakepersongenerator.com
Generated Photos Faces	https://generated.photos/faces
Generative Photos	https://app.generative.photos
kartunix	https://www.kartunix.com
List of Random Names	http://listofrandomnames.com
miniRandom	https://minirandom.com
My Sudo	https://mysudo.com
Name Generator	https://www.name-generator.org.uk
Name Generators	http://namegenerators.org
Name Fake	https://en.namefake.com
Online Name Generator	https://online-generator.com
Random Name Generator	http://random-name-generator.info/random/?n=10&g=1&st

Random Name Generator	https://randomwordgenerator.com/name.php
Random User	https://randomuser.me
Random User Photos	https://randomuser.me/photos
Sudo App	https://sudoapp.com
This Person Does Not Exist	https://thispersondoesnotexist.com

Tracking Investigation

Tool	Link
Forensic Notes	https://www.forensicnotes.com
Hunchly	https://www.hunch.ly
OSIRT	http://osirtbrowser.com
Pagefreezer	https://www.pagefreezer.com
Paliscope	https://www.paliscope.com
Vortimo	https://vortimo.com

OSINT Resources

OSINT Tools Lists

Tool	Link
101+ OSINT Resources for Investigators (i-sight)	https://i-sight.com/resources/101-osint-resources-for-investigators
1-osint-toolset	https://start.me/p/MEw7be/1-osint-toolset
AML Toolbox	https://start.me/p/rxeRqr/aml-toolbox
AsINT_Collection	https://start.me/p/b5Aow7/asint_collection
Aware Online OSINT Tools	https://www.aware-online.com/en/osint-tools
Awesome OSINT	https://github.com/jivoi/awesome-osint
Awesome Security	https://github.com/sbilly/awesome-security
Awesome Threat Intelligence	https://github.com/hslatman/awesome-threat-intelligence
OSINT_Collection	https://github.com/Ph055a/OSINT_Collection
Bellingcat OSINT Landscape	https://start.me/p/ELXoK8/bellingcat-osint-landscape
Bellingcat OSINT Links	https://docs.google.com/document/d/1BfLPJpRtyq4RFtHJoNpvWQjmGnyVkfE2HYoICKOGguA/edit
BooleanStrings Tools	https://booleanstrings.com/tools
Bruno Mortier GEOINT	https://start.me/p/W1kDAj/geoint
Bruno Mortier IMINT	https://start.me/p/ZMXLlA/imint-vi
Bruno Mortier INT.INFRA	https://start.me/p/V0PXgr/int-infra
Bruno Mortier Keywords	https://start.me/p/VvGz56/keywords
Bruno Mortier Monitoring	https://start.me/p/3xMXnP/monitoring
Bruno Mortier OSINT	https://start.me/p/ZME8nR/osint
Bruno Mortier OSTER	https://start.me/p/7kmvEK/oster
Bruno Mortier Security	https://start.me/p/Zz4gyM/security

Bruno Mortier SOCMINT	https://start.me/p/Wp1kpe/socmint
Bruno Mortier Sources	https://start.me/p/3g0aKK/sources
Bruno Mortier Toolkit	https://start.me/p/W1AXYo/toolkit
CiberPatrulla	https://ciberpatrulla.com/links
CNTY USA	https://start.me/p/kxMBv9/cnty-usa
The Cyber Post: OSINT Tools & Resources	https://thecyberpost.com/open-source-intelligence-osint-tools
Digital intelligence Research Tools	https://atlas.mindmup.com/digintel/digital_intelligence_training/index.html
Financial Crimes Research Links	https://www.amlresearchtoolsforall.com
HR Sourcing Toolbox	https://hrsourcingtoolbox.wixsite.com/main
Hun-OSINT	https://start.me/p/kxGLzd/hun-osint
IntelTechniques OSINT Packet 2019	https://inteltechniques.com/JE/OSINT_Packet_2019.pdf
Julia Bayer Verification Toolset	https://start.me/p/ZGAzN7/verification-toolset
Jungla OSINT	https://start.me/p/7k48PK/jungla-osint-por-ra1000
Kitsploit OSINT Tools	https://www.kitploit.com/search/label/OSINT
Lorand Bodo	https://start.me/u/1kmODD/lorand-bodo
Marc Kranat OSINT	https://300m.com/osint
MIDASearch	https://midasearch.org
Netbootcamp OSINT Tools	https://netbootcamp.org/osinttools
Onstrat OSINT Starting Points	http://www.onstrat.com/osint/#startingpoints
OSINT Browser Plugins	https://github.com/IVMachiavelli/OSINT-Browser-Plugins
The OSINT Curious Project Resource List	https://docs.google.com/document/d/14li22wAG2Wh2y0UhgBjbqEvZJCDsNZY8vpUAJ_jJ5X8/edit
OSINT Essentials	https://www.osintessentials.com
OSINT for Finding People by cybersecstu	https://docs.google.com/spreadsheets/d/1JxBbMt4JvGr--G0Pkl3jP9VDTBunR2uD3_faZXDvhxc/edit#gid=603724104
OSINT Framework	http://osintframework.com
OSINT Geek Tools	https://osintgeek.de/tools
OSINTIA	https://start.me/u/8yvqGD/osintia-zoekslag
OSINT Link	http://osint.link

OSINT Links	https://start.me/p/q6naJo/osint-links
OSINT Team Links	https://github.com/IVMachiavelli/OSINT_Team_Links
OSINT Techniques: OSINT Tools	https://www.osinttechniques.com/osint-tools.html
The OSINT Toolkit	https://medium.com/osint/the-osint-toolkit-3b9233d1cdf9
OSINT Tools by Lorand Bodo	https://start.me/p/7kxyy2/osint-tools-curated-by-lorand-bodo
OSINT Toolset	https://start.me/p/MEw7be/1-osint-toolset
OSTER	https://start.me/p/7kmvEK/oster
RBA Business Information Resources	http://www.rba.co.uk/sources
Research Clinic	http://www.researchclinic.net
Reuser OSINT Discovery Toolkit	http://rr.reuser.biz
Search Social Media	https://start.me/p/RMKeQv/search-social-media
Social Media	https://start.me/p/4K0DXg/social-media
Social Media Intelligence Dashboard	https://start.me/p/m6MbeM/social-media-intelligence-dashboard
Sprp77's OSINT Resources	https://drive.google.com/drive/folders/1CBcemFdorkAqJ-Sthsh67OVHgH4FQF05
Startme Open Source Investigative Tools by Malachy Browne	https://start.me/p/gyvaAJ/open-source-investigative-tools
Start page	https://start.me/p/rx6Qj8/start-page
TDiDDY OSINT	https://start.me/p/b56xX8/osint
Technisette	https://start.me/u/Z9Oamm/technisette
Telegram: HowToFind Bot	https://t.me/HowToFind_bot
Threat Intelligence	https://start.me/p/rxRbpo/ti
Toddington Resources	https://www.toddington.com/resources/free-osint-resources-open-source-intelligence-search-tools-research-tools-online-investigation
Tomoko Discovery Tools List	https://tomokodiscovery.com/free-tools-osint-socmint-dark-web-darknet-tor-bitcoin
ToolsInsight	http://www.toolsinsight.com
UK OSINT	https://www.uk-osint.net
The Ultimate OSINT Collection	https://start.me/p/DPYPMz/the-ultimate-osint-collection

Verification Toolkit	https://start.me/p/ZGAzN7/verification-toolset

Blogs and Websites

Tool	Link
Aware Online OSINT Tutorials	https://www.aware-online.com/en/osint-tutorials
Bellingcat	https://www.bellingcat.com
<Ben> Blog	https://benjaminstrick.com/blog
Bublup Roll by Kirby Plessas	https://rolls.bublup.com/kirbstr/read
Chris J: Cybersecurity and Other Rambles	https://www.rattis.net
Cyber Cops Blog	https://cyber-cops.com/blog
eInvestigator	https://www.einvestigator.com
Exposing the Invisible	https://exposingtheinvisible.org
Fiete Stegers Medium	https://medium.com/@stegers
Forensic Architecture	https://forensic-architecture.org
Haking Blog	https://hakin9.org/blog-2
Hunchly OSINT Articles	https://www.hunch.ly/osint-articles
KeyFindings	https://keyfindings.blog
Nem.ec Blog Posts	https://blog.nem.ec
NixIntel	https://nixintel.info
OSINTCurious.us	https://osintcurio.us
Secjuice OSINT	https://www.secjuice.com/tag/osint
Week in OSINT	https://sector035.nl

Forums and Discussion Boards

Tool	Link
Bellingcat Discord	https://discord.com/invite/nTaNPmz
Independent OSINT Investigations Discord	https://discord.com/invite/2DGJ2EC
OSINT Editor	https://discord.com/invite/M5pk9rE
OSINT Monkey	https://discord.com/invite/c6Y4CHP
OSINT.Team	https://osint.team
Project Owl	https://discord.com/invite/projectowl
/r/OSINT	https://www.reddit.com/r/OSINT
Searchlight	https://discord.com/invite/DGWVK5k
TraceanObject	https://www.reddit.com/r/TraceAnObject
TraceLabs Slack	https://tracelabs.slack.com

Podcasts

Tool	Link
Bellingcat Podcasts	https://www.bellingcat.com/category/resources/podcasts
Cyber Warrior Princess	https://podcasts.apple.com/us/podcast/cyber-warrior-princess/id1447704787
The Infosec & OSINT Show	https://podcasts.apple.com/us/podcast/the-infosec-osint-show/id1507803617
Jake Creps: The OSINT Podcast	http://osintpodcast.com
Janes: The World of Intelligence Podcast	https://www.janes.com/podcast
Layer 8 Podcast	https://anchor.fm/layer-8-podcast
OSINTCurious	https://anchor.fm/osintcurious
PI Perspectives	https://podcasts.apple.com/us/podcast/pi-perspectives/id1481502619
The Privacy, Security, & OSINT Show	https://inteltechniques.com/podcast.html
The Social Engineer Podcast	https://www.social-engineer.org/category/podcast
Tech Against Terrorism	https://www.techagainstterrorism.fm/episodes
Workman Forensics	https://www.workmanforensics.com/the-podcast

Quizzes and Challenges

Tool	Link
A Google a Day	http://www.agoogleaday.com
Cyber Detective CTF	https://ctf.cybersoc.wales
GeoGuessr	https://www.geoguessr.com
Hack the Box CTF Platform	https://ctf.hackthebox.eu
E-mail-based OSINT Quiz	https://www.reddit.com/r/OSINT/comments/ekcp5b/osint_quiz
Intelligence CTF	https://ictf.io
Missing Persons Hackthon	https://www.missingpersonshackathon.com.au
PictureGame	https://www.reddit.com/r/PictureGame
Quiztime	https://twitter.com/quiztime
SearchResearch	http://searchresearch1.blogspot.com
Sourcing Games	https://sourcing.games
Trace Labs: Events	https://www.eventbrite.ca/o/trace-labs-18447984222
Try Hack Me: 0hOSINT	https://tryhackme.com/room/ohsint
WhatIsThisThing	https://www.reddit.com/r/whatisthisthing

I-INTELLIGENCE

Contact

Chris Pallaris
Director
i-intelligence
+41 (0) 43 243 3849 | info@i-intelligence.eu
www.i-intelligence.eu | @i_intelligence

City of Boston
Purchase Order

City of Boston

Purchasing Department
One City Hall
Room 808
Boston MA 02201
United States

Dispatched		
Purchase Order	**Date**	**Revision**
BOSTN-0000652357	2015-01-13	
Payment Terms	**Freight Terms**	
00	DES PPD	
Buyer		
Habershaw,Deirdre		

Vendor: 0000078005
Geofeedia, Inc.
444 N. Wells St. Suite 502
Chicago IL 60654
United States

Bill To: Auditing Department
One City Hall
Room M-4
Boston MA 02201
United States

Ship To: BPD New Police Headquarters
One Schroeder Plaza
Roxbury MA 02120
United States
Attention: See Detail Below

Tax Exempt? Y **State Tax Exempt ID:** 04-6001380

Line-Sch	Item/Description	Quantity	UOM	PO Price	Extended Amt	Due Date
1 - 1	Geofeedia location-based social media monitoring, analysis, and engagement platform - Through July 31, 2015	1.00	EA	9999.00	9999.00	01/18/2015
				Attention: David Carabin-BRIC		
52907-200-211100-508F-2304-2014-HLS14002		1.00				

U13-3.3 - Jan 13, 2015 through July 31, 2015 - trial period
< REAL-TIME SEARCH
Search seven social media sources by location and view results in our map or collage views, Unlimited data from monitored Geofeeds per this proposal, otherwise limited to the last 24 hours
LOCATION MONITORING
Geofeedia will continuously monitor and record social media from user defined locations providing the ability to perform historical searches and analysis, Unlimited number of location recordings and ability to change locations at any time
STREAMING
View up to five concurrent live streams of social media per licensed user
USER TRACK
Connect undercover Twitter and Instagram accounts and follow specific users posts
ARCHIVE AND EXPORT
Unlimited monitored Geofeeds and archival in secure data warehouse, Export Geofeed data to CSV format
ANALYTICS
Filtering by timeframe, keyword and user; trend views by volume, media, keyword and user; detailed view of feed items and associated metadata; curate items in collections
ALERTS
Create unlimited email alert notifications triggered by specific keywords, phrases or users, Customize Alerts at any time
LANGUATE TRANSLATION
Translate all content to and from more than 40 different languages
HOSTING AND STORAGE
Included
USER LICENSES AND DATA CHARGES
Unlimited number of user licenses (internal BRIC use only), Data includes up to 200,000 items per month >>

On hold, needs contract. nw 1/14/15

City of Boston
Purchase Order

City of Boston

Purchasing Department
One City Hall
Room 808
Boston MA 02201
United States

Dispatched		
Purchase Order	**Date**	**Revision**
BOSTN-0000652357	2015-01-13	
Payment Terms	**Freight Terms**	
00	DES PPD	
Buyer		
Habershaw,Deirdre		

Vendor: 0000078005
Geofeedia, Inc.
444 N. Wells St. Suite 502
Chicago IL 60654
United States

Bill To: Auditing Department
One City Hall
Room M-4
Boston MA 02201
United States

Ship To: BPD New Police Headquarters
One Schroeder Plaza
Roxbury MA 02120
United States
Attention: See Detail Below

Tax Exempt? Y **State Tax Exempt ID:** 04-6001380

Line-Sch	Item/Description	Quantity	UOM	PO Price	Extended Amt	Due Date
				Total PO Amount	9999.00	

******The above Purchase Order number must be included on all invoices to ensure accurate and timely payment.******

Official Approvals

I certify that all records regarding this procurement are on file	Approved as to availability of appropriation	
Deirdre Habershaw	Sally Glora	1/16/2015
Department Head/Purchasing Agent/BPS Business Manager	City Auditor/BPS Business Manager	

This is not a valid purchase order without the above signatures.

City of Boston
Purchase Order

City of Boston

Purchasing Department
One City Hall
Room 808
Boston MA 02201
United States

Dispatched		
Purchase Order	**Date**	**Revision**
BOSTN-0000663364	2015-12-29	
Payment Terms	**Freight Terms**	
00	DES PPD	
Buyer		
Habershaw,Deirdre		

Vendor: 0000078005
Geofeedia, Inc.
444 N. Wells St. Suite 502
Chicago IL 60654
United States

Bill To: Auditing Department
One City Hall
Room M-4
Boston MA 02201
United States

Ship To: BPD New Police Headquarters
One Schroeder Plaza
Roxbury MA 02120
United States
Attention: See Detail Below

Tax Exempt? Y **State Tax Exempt ID:** 04-6001380

Line-Sch	Item/Description	Quantity	UOM	PO Price	Extended Amt	Due Date
1 - 1	Geofeedia Standard Service Package for Boston Regional Intelligence Center - 2/1/16 through 5/31/16	1.00	EA	6700.00	6700.00	01/03/2016
	Attention: David Carabin-BRIC					
52907-200-211100-508F-2304-2015-HLS15002		1.00				

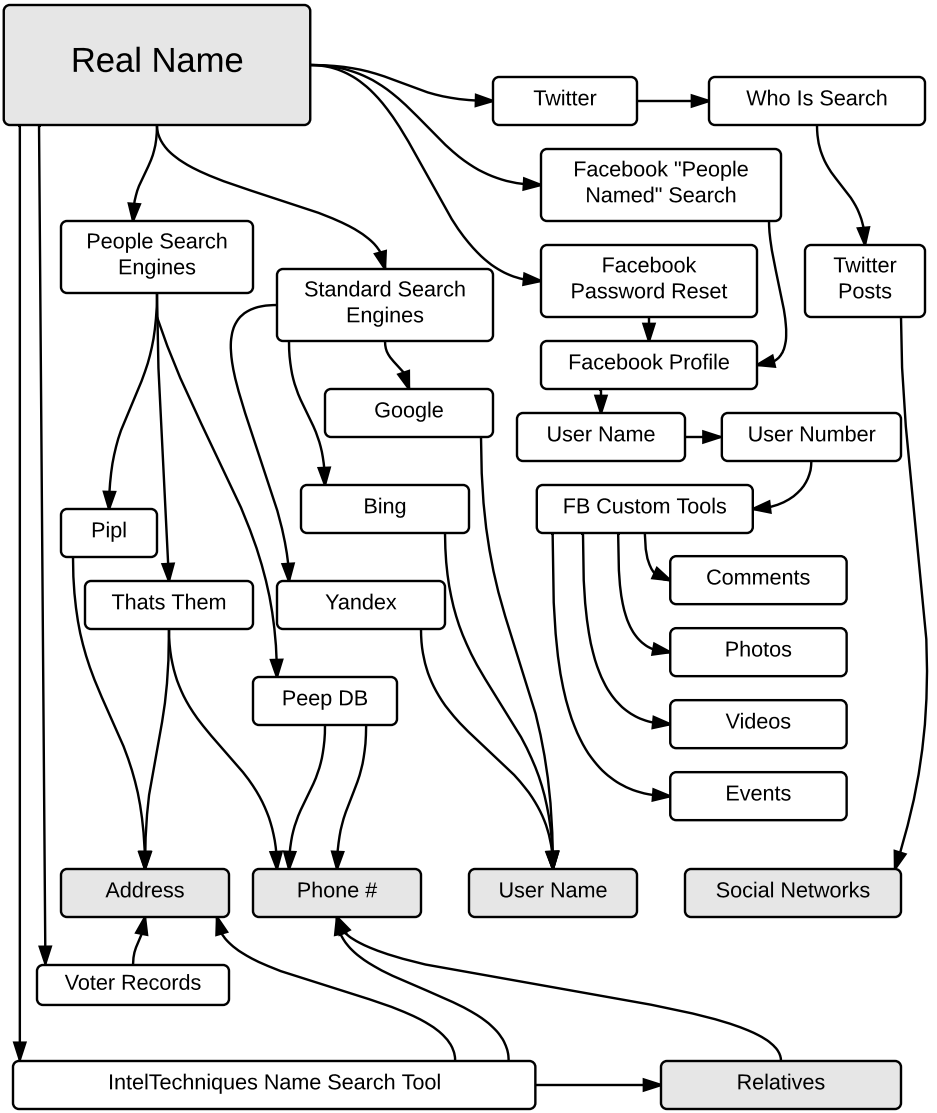
Total PO Amount 6700.00

******The above Purchase Order number must be included on all invoices to ensure accurate and timely payment.******

Official Approvals

I certify that all records regarding this procurement are on file	Approved as to availability of appropriation	
Deirdre Habershaw	Sally Glora	12/29/2015
Department Head/Purchasing Agent/BPS Business Manager	City Auditor/BPS Business Manager	

This is not a valid purchase order without the above signatures.



B818

IntelTechniques.com OSINT Workflow Chart: Real Name

Reverse Image Search

Tineye

Specializes in intellectual property violations and looks for exact duplicates of images

Google Images

Will show similar images.

Specializes in identifying well-known people in photographs, finding the source of images that have been shared quite a bit online, determining the name and creator of a piece of art, and so on. However, if you want to locate images that are not close to an exact copy of the one you are researching, you may be disappointed.

Yandex

Caution: Russian site

Draws heavily upon user-generated content, such as tourist review sites (FourSquare and TripAdvisor) and social networks (dating sites), for remarkably accurate results with facial and landscape recognition queries.

Bing

Similar to Google but has additional features (cropping, take a photo)

Source: https://www.bellingcat.com/resources/how-tos/2019/12/26/guide-to-using-reverse-image-search-for-investigations/

OEM Equipment and Supply Pre-Requisition Form

Requestor Information

Name	David Carabin	**Discipline**	508 Law Enforcement
Phone	617-343-4388	***If other, please indicate***	
Email (below)		**Department/City/Town Name**	211100 Boston Police
david.carabin@pd.boston.gov		***If other, please indicate***	

Item Description	AEL # (required)	Quantity	Unit Price	Extended Price
Geofeedia service through 5/31/16	N/A	1	$ 6,700.00	$ 6,700.00
				$ -
				$ -
				$ -
				$ -
				$ -
Total				$ 6,700.00

Specifications

Manufacturer		**Make**		**Model #**	
Part #		**Style**		**Color**	
Size		**Useful life**		**Licensing Required?**	N
Suggested Vendor		SHI International			
Other Information					

Ship To

Name	See Above	**Department/City/Town Name**	211100 Boston Police
Phone		***If other, please indicate***	
Street	Schroeder Plaza	**City/State/Zip**	Roxbury, MA

Jurisdiction Pont of Contact Signature & Date

Signature _____ **Date** 11/12/14

City of Boston Use Only

Request: Appr / Rej: _____ **Date:** _____

Header Defaults/PO Comments

GL Unit	BOSTN	Account Code	52907	**Project/Grant**	UASI 15 (HLS16002)
Fund	200	**Dept ID**	211100 Boston P	**Program (discipline)**	508 Law Enforcement
Location	4480	**OEM Planner**	A. Murphy	**Program (equip type)**	F Logistical Support
CFDA #	97.067	**Bud Ref**	0	**Class (category)**	23 Equipment
PJ #	U15-3.3	AEL #	N/A	**Class (project)**	04 Intelligence Capacity

OEM Equipment and Supply Pre-Requisition Form

Requestor Information

Name	David Carabin	**Discipline**	508 Law Enforcement
Phone	617-343-2748	***If other, please indicate***	
Email (below)		**Department/City/Town Name**	211100 Boston Police
david.carabin@pd.boston.gov		***If other, please indicate***	

[

Item Description	AEL # (required)	Quantity	Unit Price	Extended Price
Geofeedia Social Media Situational Awareness Service	N/A	1	$ 9,999.00	$ 9,999.00
				$ -
				$ -
				$ -
				$ -
				$ -
Total				$ 9,999.00

Specifications

Manufacturer		**Make**		**Model #**	
Part #		**Style**		**Color**	
Size		**Useful life**		**Licensing Required?**	N
Suggested Vendor		Geofeedia			
Other Information					

Ship To

Name	See above	**Department/City/Town Name**	211100 Boston Police
Phone		***If other, please indicate***	
Street	1 Schroeder Plaza	**City/State/Zip**	Roxbury, MA

Jurisdiction Pont of Contact Signature & Date

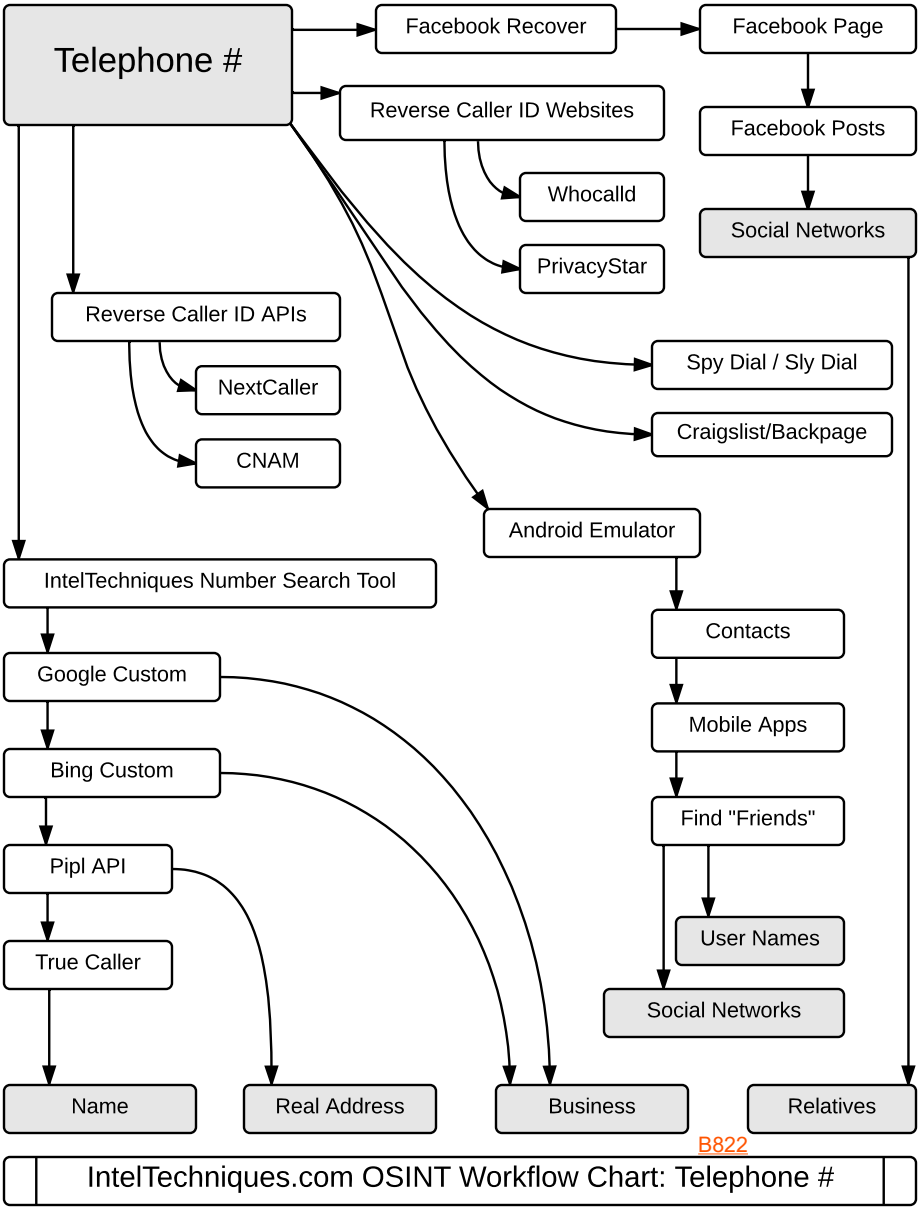
Signature _____ **Date** 6/4/15

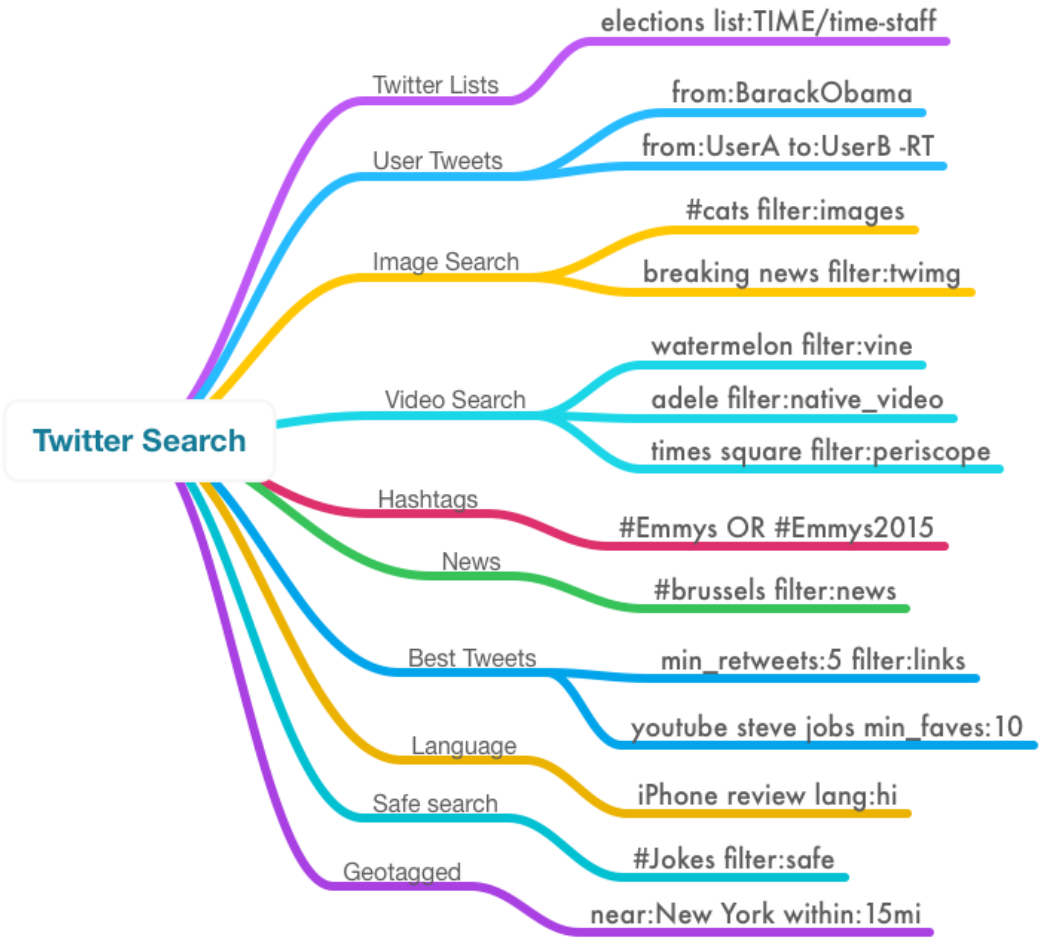
City of Boston Use Only

Request: Appr / Rej: _____ **Date:** _____

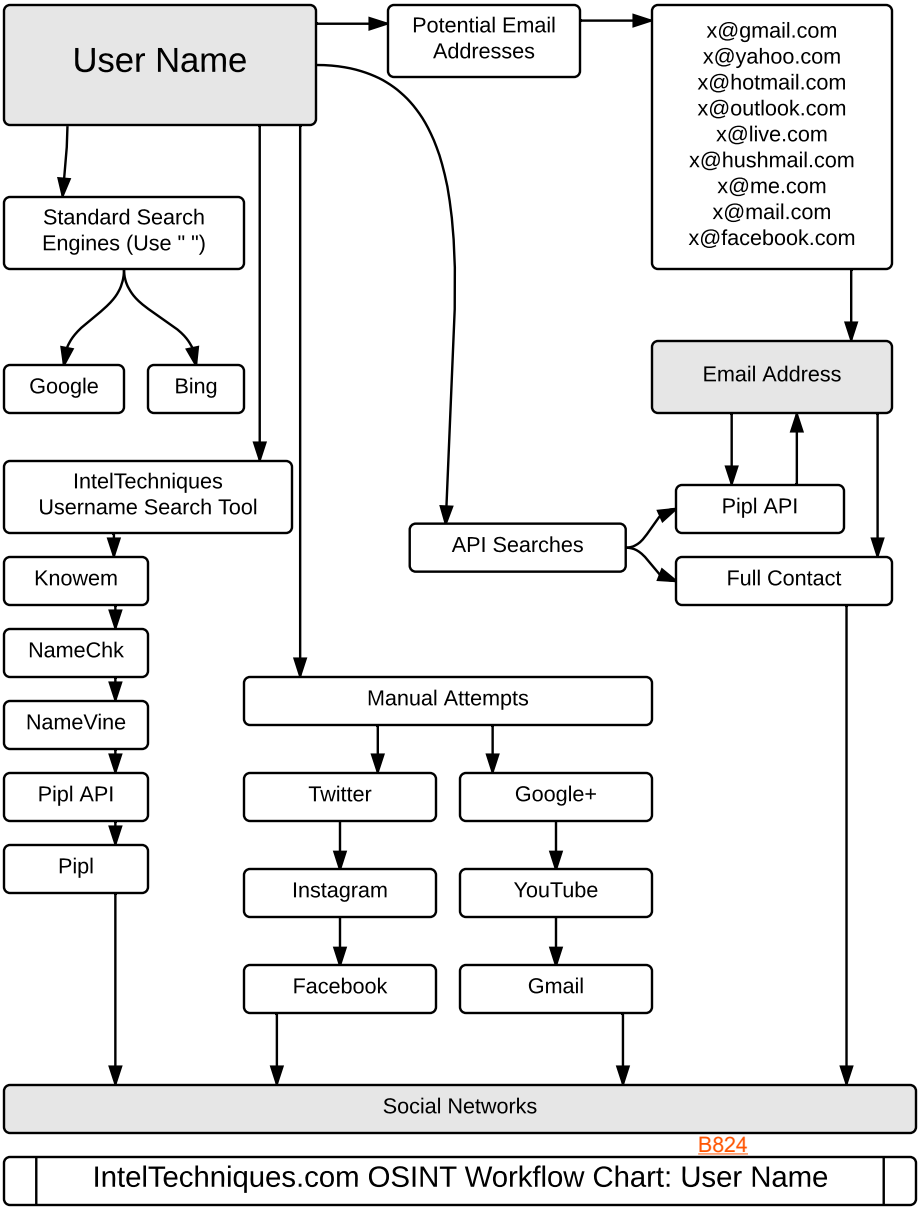
Header Defaults/PO Comments

GL Unit	BOSTN	Account Code	52907	**Project/Grant**	UASI 13 (HLS14002)
Fund	200	**Dept ID**	211100 Boston P	**Program (discipline)**	508 Law Enforcement
Location	4480	**OEM Planner**	A. Murphy	**Program (equip type)**	F Logistical Support
CFDA #	97.067	**Bud Ref**	0	**Class (category)**	23 Equipment
PJ #	U14-3.3	AEL #	N/A	**Class (project)**	04 Intelligence Capacity


Telephone #
Facebook Recover
Facebook Page
Facebook Posts
Social Networks
Reverse Caller ID Websites
Whocalld
PrivacyStar
Reverse Caller ID APIs
NextCaller
CNAM
Spy Dial / Sly Dial
Craigslist/Backpage
Android Emulator
IntelTechniques Number Search Tool
Contacts
Google Custom
Mobile Apps
Bing Custom
Find "Friends"
Pipl API
User Names
True Caller
Social Networks
Name
Real Address
Business
Relatives
B822
IntelTechniques.com OSINT Workflow Chart: Telephone #



Source: https://www.labnol.org/internet/twitter-search-tricks/13693/


User Name
Potential Email Addresses
x@gmail.com
x@yahoo.com
x@hotmail.com
x@outlook.com
x@live.com
x@hushmail.com
x@me.com
x@mail.com
x@facebook.com
Standard Search Engines (Use " ")
Google
Bing
Email Address
IntelTechniques Username Search Tool
Pipl API
API Searches
Full Contact
Knowem
NameChk
NameVine
Pipl API
Pipl
Manual Attempts
Twitter
Google+
Instagram
YouTube
Facebook
Gmail
Social Networks
B824
IntelTechniques.com OSINT Workflow Chart: User Name