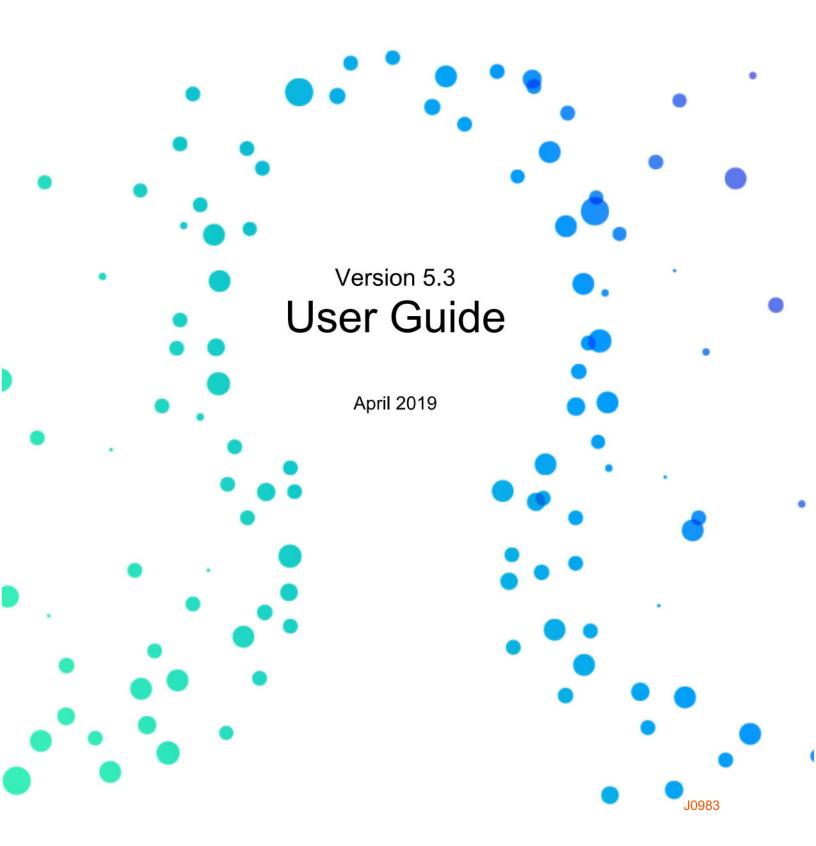
VoyagerAnalytics™



1. Query Types

A query is a collection of publicly accessible data that can be identified for a social media profile or topic, whether initiated from the New Search, the Full Coverage slider in the Real Time Display of a given profile, or the slider in the Queries tab for recollection of previously run queries. The collection process may take a few minutes to a few hours, depending on the amount of data available. The collected data is retained throughout the lifetime of the user license.

PROFILE QUERY

A profile query is a "full coverage" data collection on a social media profile from any one of the seven covered platforms (Facebook, Twitter, Google+, Instagram, VKontakte, or Tumblr). A profile query may be initiated via the New Search page or the Full Coverage ON/OFF slider that appears on the Real Time Display for a node within an existing collection.

When naming the query, the user is asked to assign a Profile Query Name. It is recommended that user follow a naming convention of CASE NUMBER: PROFILE NAME, e.g. "BANKS: John Smith."

In many cases a profile is collected in the system before its relevance to a given investigation is confirmed. In this version, we allow users to run profile query without an initial identification and to add it later as needed.

When running a profile query, a progress bar in the Status column of the Queries tab for that query displays an estimated completion expressed as a percentage of data in the collection process.

Users may initiate queries in excess of daily capacity to be processed during subsequent days. Queries not run on the day they were created will have a status of <Pending>.

This search uses up some amount of the data processing capacity allotted to the Client license and therefore counts against daily limits.

RESULTS

Executed Profile Queries are indexed in the left column of the Queries tab. A query can also be updated/recollected via the corresponding ON/OFF slider in the Queries tab. Note that when you update/recollect, new data will be added to the existing profile, but any deleted posts or friends will remain intact. Posted media (i.e. photos) are downloaded and stored

within the platform, even if the profile is deleted or removed.

FACEBOOK COMMUNITY QUERIES

Facebook Community Queries, initiated via the corresponding Community tab on the Profile Query portion of the New Search screen, allows collection and analysis of recently published content from Facebook Pages (e.g. Organizations, Businesses, Musicians/Bands, Products) and Facebook Groups, whether public or closed. Secret Facebook Groups are not available for collection.

FACEBOOK PAGES

A Page Query collects recent content posted to public pages (whether by the page administrator or the page followers) and generates topologies of the most active users—whether individuals or other pages—creating and interacting with this content.

FACEBOOK GROUPS

For public Facebook Groups, the system collects recent content and creates a topology of the most significant and active group members based on their interactions with the page content. Group admins, when identified, are highlighted in the topology.

FACEBOOK EVENTS

This feature enables collection and analysis of public Facebook Events. This feature identifies key contributors and event hosts and allows users to analyze discussions on the Event's timeline. The query collects up to 5,000 prioritized profiles affiliated with the Event. Relationship strength of each constituent profile is based on the affiliation status (interested/going and the level of activity on the Event timeline).

Similar to other Community queries in VoyagerAnalytics, the Facebook Event query enables users to analyze Real-Time Display (displays the event page and a set of general aggregated data about the Event, including the number of people interested/going; Posts (lists all related posts and their calculated level of impact, including Media and Map displays); and Topology Discovery (graphic display of direct connections and related organizations).

Community queries use the data processing capacity allotted to the Client license and therefore count against daily limits.

FACEBOOK SEARCH WARRANT RETURNS

This feature enables upload, parsing, and analysis of Facebook Search Warrant data received from Facebook in the form of a PDF in response to a search warrant or subpoena.

Initiating a Warrant Upload

Initiate the warrant file upload via the New Search tab, selecting the File button from the blue horizontal navigation bar on the Profile Query page. This will permit you to choose the file from its stored location.

The results will be displayed in the same format and accessible to the same analytic tools as open source collections, with the addition of a new left-side Conversations tab and topology containing the content of private messages exchanged via Messenger and a visualization of the friends exchanging these private messages with the target individual. As with Posts, important private messages can be flagged by the user and filtered by "flagged only." These flags will only be visible within the user's specific user group. Non-analytically valuable messages, such as "session activity"-type messages, can be filtered out using the Post Type filter.

Source File ID is a mandatory field for a warrant upload. Source File ID is applied to all posts and messages populated from the relevant warrant to enable easy tracing of post or message content back to its source in the event that evidence comes from multiple, interconnected warrants.

If a conversation or post is duplicated several times through the warrant (typically due to multiple preservation requests prior to the warrant), the system displays the content only one time in the results pane, but the list of all the relevant page numbers is displayed for each post/message. Page numbers are displayed in [square brackets] following the Source file ID. Again, to use this feature for a warrant previously loaded in the system, it must be reloaded.

Analyzing Warrant Data

Warrant message content can be analyzed in two locations, the Conversations tab and the Posts tab:

In the Conversations tab, messages are grouped by conversations – some conversations may only consist of one message, while others may contain thousands. Within the

Conversations tab, you can search messages for keywords, for profiles participating in the conversations, and filter conversations by date or oldest to newest, and vice versa.

In the Posts tab, you can view a profile's warrant messages and publicly available Posts simultaneously. Many users find this view of the warrant messages valuable, because the private messages can be viewed in the context of publicly available content as well. Moreover, messages can be searched using Lexicons (lists of keywords) in the Posts tab, but not in the Conversations tab. To include warrant messages in Posts, go to the Post Type drop down menu, and check the box for "Conversations." If you would like to review the warrant message data without any of the publicly available Posts, check only the "Conversations" box.

Exporting Warrant Messages

In the Conversations tab, warrant conversations, including all of the messages contained in that conversation, can be individually exported to PDF.

In the Posts tab, after including Conversations in the Post Type filter, messages can be exported to CSV.

Messages Topology

A profile's warrant messages can also be viewed in a topology, similar to the 1st sphere topology that shows a profile's connections to other profiles. In a messages topology, the thickness of the links represents the volume of messages between the seed profile and their contacts. The Relationship Strength slider at the top of the screen can be used to quickly isolate profiles which the seed profile is communicating with most frequently.

Note: Facebook Search Warrant uploads use some of the data processing capacity allotted to the Client license and therefore count against daily limits.

TOPIC QUERY

Topic queries are collections of all available, recent social media chatter (data availability parameters vary by platform) associated with keywords, hashtags and/or geographical locations on any of the above-mentioned social media platforms covered under your VoyagerAnalytics license, and four additional content-focused platforms: YouTube, Pinterest, Vimeo, and Medium. Current results are automatically integrated with any relevant content previously collected in association with a profile or topic query.

This action uses some of the data processing capacity allotted to the Client license and therefore counts against daily limits.

BASIC SEARCH

Enter keywords into the Topic Search field to search for publicly available posts referencing one or more of these words. Note that this field does not accept Boolean operators, map points, or exact phrases.

ADVANCED SEARCH

To execute complex searches and/or search for posts referencing an exact phrase or location, click on the settings wheel to the right of the basic Topic Search bar. This opens an Advanced Search screen with separate fields for searching 'All of these words' as if they were connected by the Boolean operator AND; 'Any of these words' as if they were connected by OR; and 'None of these words' as if they were connected to the terms above with NOT.

Exact phrases marked within quotation marks can be entered in any of these fields as well, but no commas or Boolean operators may be used.

Note that these fields can be used in combination with each other, and that the "#" symbol is not necessary to search for hashtags.

The Voyager Expansion smart search capabilities allow users to enhance their searches based on words, phrases, and hashtags associated with the terms they have already defined.

- Within the Advanced Topic Query pane, users can select the Automated radio button to automatically enrich a Topic Query with relevant, trending hashtags. This feature is useful when conducting queries related to real-time news events such as protests or natural disasters, or to gauge sentiment regarding brand launches or other company news.
- To cut down on the 'noise' of potentially unrelated results, users can select the Interactive radio button to review and approve or remove suggested hashtags before the expanded query is run.

For either option, the list of the hashtags added to your search will be displayed in the topic search details in the Queries list. The returned results will include "related" posts generated by the added hashtags but not necessarily referencing the originally specified search terms. Queries can be further limited to specific time periods and/or networks via the applicable

search field.

This action uses some of the data processing capacity allotted to the Client license and therefore counts against daily limits.

TOPIC QUERY RESULTS

Executed Topic Queries are indexed in the right of the Queries tab. Click 'View' to open the results.

Content Tab:

The number of posts referencing the desired keywords, hashtags, and/or locations returned by the search is tallied in the bottom left corner of the viewing pane.

Posts can be viewed in two Display categories: **Media** (including text, pictures, and videos in a paneled view), and **Map** (displaying the location of all geotagged posts or check-ins).

A **Sort By** drop down defaults to Impact (a calculation of how widely that post was disseminated across social networks, including the number of followers the original poster had as well as the number and size of individual networks it was shared with) but also permits chronological or reverse chronological sorting.

Clicking on any post expands its pane and permits review of the date and time the post was made, its impact score, and number of likes, comments, or shares. A drop-down menu on the top right corner allows users to get a translation, summary, or Word document export of the post, and forward and back arrows permit easy browsing of adjacent posts. There is also a link to view the original post on the open web.

If you would like to learn more about the social media user who posted this content, click on the profile name or picture and a new Profile Query tab will open displaying all data collected about this user to date and permitting you to execute a full Profile Query if you wish.

Select the settings wheel directly underneath the Content tab to filter posts by relevant keywords or lexicons via the free text **Search field**, or by **Social Network**, **Location**, or **Time**.

Top Accounts:

The Top Accounts view ranks the Top Influencers, Top Contributors, and Top Mentioned accounts responsive to the Topic Query search criteria. Top Influencers are accounts with the highest Impact calculations for this Topic. Top Contributors are accounts that published the greatest number of posts within this collection. Top Mentioned accounts are those accounts referenced the most by the Twitter posts returned for this query.

Top Stories:

Top Stories provides automated analysis to identify prominent or trending sub-narratives within Topic Query results. These insights can be accessed one of two ways:

- The bright blue Top Stories toolbar at the top of the Content tab contains a button for each identified sub-narrative so that you can zoom in on just the query results that are relevant to the specific topic of your interest.
- The corresponding Top Stories tab presents these sub-narratives in a graphic display showing their relative weight within the overall result set.

Note that the Top Stories algorithm is currently optimized for English-language posts.

SYSTEM SEARCH

The System Search function, accessed via the default Search for profiles in system search field on the default landing and New Search screen, permits users to type in the names of social media users and search across all existing data in their system for a match. Full or partial matches appear in the drop down as you type, or in the Results pane if you hit enter, with the most recently accessed or collected profiles at the top.

The 'Go to Advanced Search' link permits access to a whole dropdown of filters for identifying profiles in the existing data by collection attributes such as Identification, Collection Date, and social media platform, as well as by the target's reported Location, Education, Workplace, and/or Description.

Multiple search terms should be entered into attribute fields without Boolean operators, quotation marks, or other punctuation. Define an exact phrase by typing the whole phrase (e.g. New York) before hitting 'enter.' Multiple terms and/or phrases entered into a single attribute field will be treated as though separated by 'OR,' while an implicit 'AND' operator will connect the attribute fields.

Users can also click on the blue + sign on the right side of a given attribute field to select a predefined lexicon, but note that only one lexicon in a single search field can be supported at a time ping a term (e.g. New York) into the Free Text field will return all existing profiles referencing that term, regardless of attribute field (e.g. a New York Magazine Instagram page as well as a FB user reporting that she studied at Columbia University in New York).

This capability accesses existing data only and does not count against daily data collection capacity limits.

EXTENDED SEARCH (New in 5.3): The existing system search has been upgraded, and now supports extended system search. Users can now choose between two search options:

Profiles - including auto complete and Advance Search

- Extended Search aggregated display of three result types:
 - Profiles
 - Queries
 - Posts and comments

Extended Search runs on pre-collected data in VA from all social networks together. Search attributes are specific for each searched entity:

- Profile: full name, identification, user name, education, workplace, description, current city, hometown, full address, country name
- · Query: query name
- Post: country name, location, post content, post comments

(Note: Extended Search in VA 5.3 supports exact match only)

Results:

Search results includes data from all social networks in one display. Results are displayed over 3 columns: Profiles, Queries, Posts. For each matched entity, descriptive information is displayed, with an option to open the full profile / query result in a new VA tab.

FRIENDSHIP REPORT

Accessed via the "Show Friendship" link in the Node Analysis sidebar that appears on the right when you click on any Facebook connection (or two-way Instagram connection) in the seed's 1st sphere topology, a Friendship Report is a fully exportable "deep dive" on the relationship between the seed and that friend. The report includes a summary of who their mutual friends are, the frequency of their interactions, and links to these specific interactions. A Friendship Report for individuals connected on Facebook will typically also record the date that their connection was established.

Because Friendship Reports involve the collection of additional data on a relationship of interest, this search does count against daily collection capacity limits.

APOLLO

Apollo queries, initiated from the New Searches page, show indirect connections (secondary and tertiary) between individuals or groups.

Because the data is drawn from previously executed searches, Apollo queries do not count against the daily collection capacity limits.

GROUPS

Group Queries, which aggregate all of the available post and network data for a group of individuals, can be initiated on the New Searches page or via the Create Group button available on 1st sphere topologies for individual or group queries (right-click to select nodes that you'd like include as seeds of the Group).

The Edit Group capability permits users to subsequently add or remove group members, and/or edit the group name or identification, if desired, by clicking on the yellow Edit Group button on the left side of the dark blue toolbar at the top of the query results.

Because the data is drawn from previously executed searches only, Group Queries do not count against daily capacity limits.

PROFILE FINDER

A new feature in 5.3 to help convert of phone numbers, email addresses, name and picture into a Social ID which can be collected in Voyager Analytics.

Input whatever details are available, and a similarity score will be assigned to each matching result. To initiate a profile query, select a matching result, provide any identification details, and click "Collect." The resulting Profile Query will join the list in the Queries Tab.

Topology Discovery

A topology is a visualization of the connections of a target individual, or <u>seed</u>. For Facebook profiles, which have the richest network data, five topologies—1st sphere, Organizations, Internal Connections, 2nd sphere, and TNT—are accessed from a vertical sidebar appearing on the left side of the Topology Discovery View. Two others, Apollo and Groups, simultaneously plot the network data of multiple, user-selected profiles and, once initiated, appear in the left-side Profile Queries column on the Queries tab. All topologies permit keyword or lexicon searching via the <u>Free Text</u> search bar.

1ST SPHERE

An individual's 1st sphere topology is a visualization of that person's direct connections on a given social media platform. The seed is represented by a central node surrounded by smaller nodes, each one representing the profile of a connection or friend. Clicking on any node highlights it and causes a summary of the associated self-reported profile information to appear in the Node Analysis sidebar to the right.

Connections between nodes are called Nexuses. A counter in the bottom left corner tallies the total number of nodes and nexuses shown on each topology view.

Facebook is the only platform requiring that these connections be two-way. For Twitter and Instagram topologies, checkboxes on the top right side permit the user to distinguish between Followers of the seed and those profiles that the seed is Following.

For individuals whose Facebook friends lists are closed, a network of inferred friends based on publicly available information is displayed.

INTERNAL CONNECTIONS

This topology displays relationships between the seed individual's friends. The default view identifies the main subgroups of friends, with each individual assigned to the cluster where s/he has the greatest number of friends in common with the seed individual.

Hovering over any one of these clusters will cause a Community Insights bubble to appear

in the top left corner displaying some of the key commonalities among the group, as reported by the individual friends (for example, workplace, hometown or educational details). These individuals are assigned to a dominant subgroup cluster (e.g. hometown or workplace).

Activating the Relationship Essence button displays a color-coded, algorithmic assessment of the likely nature of each node's friendship with the seed (e.g. business, shared educational background, family) based on an analysis of these clusters of friends.

Clicking on the Clusters button does away with the dominant clusters displayed in the default view, showing all of the interconnections among the seed individual's friends, regardless of each person's dominant subgroup. Clicking on any individual node within this view will display all of the mutual friends shared by that person and the seed.

ORGANIZATIONS

The Organizations topology displays a topology of current or prior workplaces reported by the seed's friends. This topology defaults to show workplaces that are strongly related to the seed, but the relationship strength slider at the top of the page can be moved down to display other workplaces reported by a smaller number of friends and/or by friends who are not as strongly related to the seed.

2ND SPHERE

An individual's 2nd sphere topology is a visualization of that person's direct connections plus any indirect connections who have a significant number of friends in common with the seed. The default threshold for the number of mutual friends the indirect connections share with the seed is 4 and is controlled via the Mutual Friends slider at the top of this topology view.

TNT

An acronym for "Target > Nontarget > Target," TNT displays any indirect relationships (or friends in common) between the individual you are analyzing and any other previously identified individuals. (Note that direct connections to identified individuals are already highlighted on 1st sphere topologies.) It is useful for identifying previously unknown

"middlemen" connecting individuals of interest, and/or for mapping the seed's position within a broader network.

TNT capabilities have been extended to Group Topologies. Open the corresponding topology tab within a Group to view any identified profiles that share mutual friends with two or more of the Group's seeds.

2. Analytic Tools and Exports: Posts

The following is a list of some key analytic tools, filters, and export capabilities available for posts.

DISPLAY

Posts can be viewed in three Display categories: Content (including status updates and other written posts), Media (including pictures, and videos in a paneled view), and Map (displaying the location of all geotagged posts or check ins). Within each category, a list of posts appears in the left column, while clicking on any of these posts highlights it in the pane on the right. Posts in fifty-three recognized foreign languages can be translated and long posts can be summarized via the drop-down menu and buttons located at the top of this pane.

INTERACTIONS

The Interactions counter that appears to the right of each listed post tallies the number of Likes. Comments, or Shares.

SEARCH KEYWORDS AND LEXICONS

Posts have a Search bar available to find keywords across all posts, whether entered singly, with Boolean operators, or as elements of a Lexicon (search string).

To search for references to exact phrases, enter the phrase in quotation marks in the Search bar (e.g. "Bank of America"). If the phrase is listed without the quotation marks, profiles that contain all of the words regardless of their order will be returned.

To search a whole string of terms across Post content at once, create a Lexicon by clicking on the Settings tab that appears in the top left-hand of the screen. Next, click on Add New, give the Lexicon a title, and enter an unlimited number of search terms, one to a line, in the pane on the right before saving it. Search terms with two or more words must be entered within quotation marks. To use a Lexicon search string, simply type the name of the Lexicon in the Search field.

The following Boolean operations are also supported by the Find Keywords search bar:

 "Santa Barbara" OR "San Diego" will return all profiles referencing Santa Barbara or San Diego.

- (San OR Santa) AND (Barbara OR Clara OR Diego OR Bernardino): will return all profiles referencing San Diego, San Bernardino, Santa Clara, or Santa Barbara
- New AND (York OR Jersey): will return all profiles referencing New York or New Jersey
- New AND (York NOT Jersey): will return all profiles referencing New York but not any that (also) reference New Jersey
- Root Expander: Use and asterisk (*) to search for a partial word. For example, Agen* will return all profiles referencing a word beginning with this letter sequence, e.g. Agent, Agency, Agencia.

FILTERS

Posts can be filtered by Profile Name (in Group queries only), Location (provided this data is publicly available), or Date via the corresponding filters in the top blue toolbar. Important posts can be flagged by the user and subsequently filtered by a checkbox for Flagged Only. The flags are visible only within the same user group. A Sort By filter in the same row permits users to display posts in chronological or reverse chronological order, or Impact – a measure of the interactions and 'buzz' generated by posts among the individual or group's connections.

FACEBOOK POST EXPANSION

This feature expands the collected content of a Facebook profile. It enables collection and analysis of different types of posts additional to the posts from the seed's timeline which were collected in previous versions.

The extended collection includes the following post types:

- Timeline posts public posts the seed published on his Timeline.
- Posts to others' timelines— posted by the seed on the publicly available Timelines of other users.
- Tagged public posts published by others in which the seed was tagged.
- Interactions public posts the seed liked or commented on.
- Check-ins public posts published by or tagging the seed which were geo-located or the location was explicitly indicated via the Facebook" check-in" function.

Life Events – public posts published by the seed using Facebook's "life event" feature.

POST NOTES AND FLAGS

To facilitate collaboration, users can flag important posts by clicking to highlight the flag icon on the right side of its entry on the Posts List pane, or beneath the Impact score on the Full Post Display pane.

Users can also click on the 'Add Note' button on the top of the Full Post Display pane to attach their own contextual notes and/or translations to specific posts. Different users can add multiple notes to the same post and all the notes can be viewed together. For each note, user name and creation date are displayed. Only the note creator may edit or delete his/her note; other users may only view it. The notes are only visible within the creator's original user group.

EXPORT TO PDF

The download symbol within the Full Post Display pane will export an individual post to a PDF document. The export features the date and time of the post, post text, post media and/or notes (if any), and all likes and comments.

EXPORT TO CSV

The download symbol in the upper right corner of the Post screen will export all posts from the collection or Group to a .csv file. The .csv file contains for each post the date and time, caption, text of post content, and a link to the original post.

If a user wishes to export selected posts, s/he can filter them by dates/keywords or flag them and check <Flagged Only> option before exporting. In that case, only the displayed posts are exported to csv.

EMOJI SEARCH (New in 5.3)

VA collects emojis from profile posts and comments and allows to search for emojis in the profile posts tab. Emojis can be searched either by selecting the emojis in the emojis drop down list or by entering the emoji-text in the search text box.

The posts results are filtered to display only posts that contain at least one of the selected

emojis in the post itself or in the collected comments. Emojis collection and search is supported for all social media that are supported for profile queries.

3. Analytic Tools and Exports: Topologies

The following is a list of some key analytic tools available for profile queries. Any tool that is activated by clicking on a button is toggled off in the same manner.

NODE ANALYSIS

Clicking on a node will activate a Node Analysis sidebar to the right, including the individual's profile picture, biographical information disclosed by that person (e.g. hometown, workplace, and/or educational details), and any identification for that profile entered by a system user. If more than one node is selected (via a keyword search or manual right-click selection), histograms compiling and summarizing the listed data for all of the selected individuals will appear in the Node Analysis sidebar.

RELATIONSHIP STRENGTH

Available as a slider at the top of all profile query topologies, Relationship Strength activates VoyagerAnalytics' proprietary algorithms to weigh a variety of social media platform-specific relationship indicators and assess the strength of each displayed connection (or 'nexus').

CLIQUES

The Cliques tool allows you to discover individuals connected to a network you define. To use it in any network topology (that is, beyond the 1st sphere, which only shows connections relative to a seed, and not any mutual friendships), first select up to ten individuals of interest by right-clicking on these nodes. Next, activate the Cliques button to display a 1-10 scale slider and use it to display nodes that are connected to at least that number of the selected individuals. For instance, if you've selected a group of 8 individuals, moving the Cliques slider to 3 will display nodes that are connected to at least three of the group, while moving it to 8, its logical maximum in that scenario, will display only those nodes that are connected to all eight members of the selected group.

SEARCH KEYWORDS AND LEXICONS

Like posts, topologies have a Search available to search across all text. This search box supports all of the exact search capabilities and Boolean operators detailed in the Posts section above. A keyword search looks across all the details available within the social media profiles of the displayed network. Search for organization names, individual names (and even their handles) as well as schools or locations.

To search a whole string of terms within a Profile, Topic, or Group query at once, create a Lexicon by clicking on the Settings tab that appears in the top left-hand of the screen. Next, click on Add New, give the Lexicon a title, and enter an unlimited number of search terms, one to a line, in the pane on the right. Search terms with two or more words must be entered within quotation marks.

To apply a Lexicon search string, simply type the name of the Lexicon in the Search field. The Boolean operators described above with respect to Posts are also available to search across Topologies.

NAVIGATION AND TABS

All filters and manipulations applied to any topology tab -- including keywords search, relationship strength, selecting and dragging nodes, displaying identified only or showing labels – will be retained when returning to the topology tab after navigating to another tab. Similarly, clicking on <Go to Profile> on any node in a given topology will open a new tab but preserve the state of the original topology on return.

MUTUAL FRIENDS

The Mutual Friends slider appears on an individual's 2nd sphere topology and defaults to 4, augmenting the target individual's 1st sphere connections with profiles of individuals who are not directly connected to but who have at least four friends in common with the seed. Sliding it up will increase that threshold and decrease the number of connections displayed, while sliding it down will decrease the threshold and increase the number of connections displayed, up to a maximum of 5,000 connections. If an individual's profile is queried in isolation and proves to be unrelated to any previously collected profile, no data on mutual friends will exist. This feature is particularly valuable for analysis of a personal or professional network, gang, or group.

INSIGHTS

Insights are analytic predictions derived from VoyagerAnalytics' proprietary algorithms and displayed as color-coded nodes on the 1st sphere topology of a profile, page, or group query. These include the following:

GHOSTS (GREEN)

(Individual Profile Queries only) The overall structure of the ghost's social network overlaps significantly with that of the target individual (or "seed") in a way that is suggestive of a very close relationship or even an alternate screen identity/alias. Note that the algorithm takes both profile characteristics and use patterns into account, so that while a connection may appear as a Ghost in one individual's topology, the inverse relationship may not always be true. Putting both individuals under full coverage may reduce the likelihood of this discrepancy, but it may also reflect a true difference in the way they use social media.

(IDENTIFIED (ORANGE)

(Individual Profile, Page, and Group Queries) The profiles of individuals who have been identified (or "tagged") by a user—whether as part of the process of putting them under full coverage, or as the result of entering and saving descriptions of their relevance in the field appearing beneath their screen name—are retained with these identifications in the platform. Identifying key individuals builds an internal database that leverages and preserves the user group's collective knowledge and can integrate key findings or data points from sources other than social media; extends the platform's analytic capabilities; and provides immediate, added context and insights to future investigations involving these individuals.

MEDIATORS (YELLOW)

(Individual Profile Queries only) Mediators are connections who participate in more than one of the target individual's friendship clusters as displayed on the Internal Connections topography. These individuals tend to be strongly related to the seed, and due to their mutual friendships with people from different facets of the seed's life (e.g. family members and high school friends, or college friends and work friends) are positioned to serve as go-betweens, sources of introduction, and/or persons of influence within the target individual's network.

TOP CONNECTIONS (PINK)

(Individual Profile, Page, and Group Queries) Displayed by clicking on the node of the target individual in the 1st sphere topology or on any node in the Internal Connections topology, these hot-pink nodes correspond to that individual's strongest relationships as calculated by VoyagerAnalytics' proprietary algorithm. This calculation weighs a variety of data patterns indicative of strong connection, such as the duration and frequency of the individuals' interactions on the platform and/or their mutual connections to other key individuals in the seed's network.

NOTED (LIGHT BLUE)

Users can add Notes to any profile via the Notes tab on the Real Time Display. Profiles with attached Notes are highlighted in relevant 1st sphere topologies with a light blue "Noted" insight. A Notes link in the Node Analysis pane opens the corresponding Notes tab for that profile. To filter on and view only Noted profiles in a given topology, first uncheck the 'Show Insights' box near the Relationship Strength bar, then click on the Noted button in the rightside toolbar dropdown. Notes are not included in data exports from the system.

STRONGLY CONNECTED MEMBERS (MAGENTA)

(Group Queries only) A shortcut to a common function of the Cliques tool, the Strongly Connected Members Insight highlights profiles directly connected to at least 80% of the group's seeds.

EXPORT SCREENSHOT

Use the Export button in the vertical toolbar to the right of all topologies to generate a screenshot in .png format that can be saved as a PDF. To limit the display to a select group of nodes, first right click on each node you'd like to retain to select it. Next, click Invert Selection followed by Remove Nodes so that only the desired nodes remain. Use the Show Labels checkbox at the top of the screen to display each person's name.

EXPORT TO CSV

The Export to CSV button, available on 1st sphere, Group, and Apollo topologies, downloads all available information about the seed's connections into a spreadsheet, including each person's unique profile ID, relationship strength, and any information provided by the user, including Workplace, Education, Current City, Hometown, and Date of Birth. This download can be restricted to selected nodes, or nodes that remain after a filter has been applied.

If a user wishes to export selected nodes only, s/he can first filter for them (for example, by using the Relationship Strength or through a keyword or Lexicon search, or by flagging them and checking <Flagged Only> option before exporting. Whichever method is used to isolate certain nodes, only the nodes displayed on the screen will be exported to csv. However, if no nodes are selected, the whole topology will be exported.

SPOTLIGHT REPORT

A Spotlight Report is a comprehensive summary of an individual's profile information and key network data. It is generated by clicking on the button at the bottom of the far-left toolbar, and can be exported to a PDF via the corresponding button appearing to the right of the individual's name.

Spotlight reports display self-provided details regarding location, hometown, workplace, and education, as well as those details that can be inferred from the individual's network. Spotlight reports can also be customized by clicking on the setting wheel that appears in the top right corner of the screen and then clicking on the Spotlight Generator button in the left toolbar of the screen that appears.

Users can then create a Rules List (under the icon of a book with a checkmark on its cover) stipulating that the report list all of the seed's friends that have hits on a specific lexicon within a given profile field. For example, a Rule could state that the report list all friends/connections who reference an Ivy League school (from a lexicon of these schools) in their Education field.

Users can also create a Condition (under the icon of two interlocking circles) stipulating that the report display the names of friends who report the same Workplace, Education details, Hometown, or current Location as the seed individual.

Profile Attributes (New in 5.3)

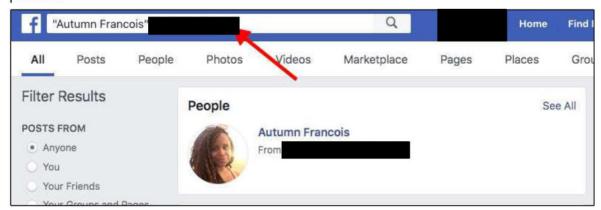
Profile attributes are now displayed in the 'Social Profile' section:

- Social network name
- Username
- User's ID

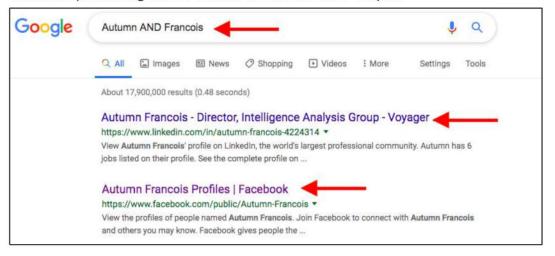
In order to facilitate our training session next week, each user should provide 2-5 URLs of active social media profiles from Facebook, Twitter, Instagram, or VK that we can preload to your trial system. These can be profiles that are relevant for current or prior work.

If you have any questions or need any guidance regarding how to find relevant profiles, please don't hesitate to reach out. Recent changes to the Facebook Graph Search and a number of online free open source search sites has made identifying profiles a bit of a challenge (luckily we'll be sharing our Profile Finder tool during training which will enable you to find profiles using email & phone number!). Here are a few open source search methodologies we recommend:

- If you have access to a CLEAR/Accurint/TLO report, sometimes social URLa associated with that individual are listed.
- Within the Facebook graph search, you can still search by: "Firstname Lastname" Current/Prior Location (i.e. "Autumn Francois"
 by: "Firstname" to find profiles:



 Leveraging Boolean searching in Google (particularly if your subject has name variations). Limiting with a known location is also helpful.



Here are a few examples of where to copy & paste profile URLs from various networks:

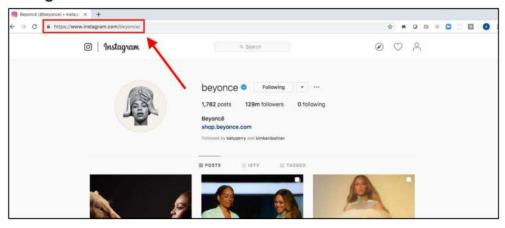
Facebook



Twitter



Instagram



Please feel free to reach out if you have any questions. The Voyager Labs team is looking forward to meeting you all next week!



LAPD/Voyager Labs Contact information:

Amit Gavish Executive Vice President, Sales - Americas

M: +1 O: + 1 212.404.2402 amitg@voyagerlabs.co

Scott McAndrews
Sales Director
Public & Private Sector
M: +1
scottm@voyagerlabs.co

Autumn Francois Director, Intelligence Analysis

M: +1 O: +1 212 404 2402 autumn@voyagerlabs.co

Jonathan Larkin Intelligence Analyst - Public Sector M: 1jonathanl@voyagerlabs.co

David Whitehead Director, Technical Account Management

davidw@voyagerlabs.co

Lawson Ferguson
Intelligence Analyst - Public Sector
M: 1-Lawson@voyagerlabs.co

CONFIDENTIAL



J1007