

TO: Officer Kathleen Owens (LAPD RACR)

FR: Jeff Long (Dataminr)

DT: Wednesday, May 4, 2016

RE: Response to RACR's questions about Dataminr

On March 3, 2016, LAPD's RACR division began a three month trial of Dataminr's real-time alerting and situational awareness platform.

This document addresses questions that were asked by RACR Officer Kathleen Owens.

About Dataminr

Dataminr provides real-time social media information discovery through algorithmic processing of the entire public Twitter data stream. This unique data access allows Dataminr to identify, classify, and determine the significance of over 500 million Tweets per day. Our proprietary algorithm, detects signals, clusters and patterns that are indicative of emergent events and alerts users to their occurrence via Dataminr Notifications. Once alerted, users leverage Dataminr's unique advanced analytic capabilities to build contextual understanding of events in both real time and retrospectively.

Key Differentiators

- *Data quality:* Dataminr is the only company that ingests the entire Twitter firehose into its technology; Dataminr is partially owned by Twitter, which gives Dataminr exclusive one-of-a-kind data access to the entire Twitter firehose of 500 million daily public tweets. While other companies say they have "access" to the firehose, this means they are buying specific keywords within specific geographic areas; Dataminr alerts are based off of an analysis of the entire firehose in real-time; no other company has this capability.
- *Geo-prediction:* Dataminr is the only company to provide non-geotagged data. Specifically, Dataminr predicts the location of up to around 60% of the Twitter firehose in addition to providing the 2-3% of geotagged data;
- *Guaranteed data access:* Dataminr has a long term strategic partnership with Twitter giving Dataminr guaranteed access to the Twitter firehose for a rolling 5-year basis. No other company has this and could be at risk of getting turned off without this level of commitment.
- *First of its kind data access:* Dataminr recently closed data partnerships with two major social media platforms; the deals include exclusive first of its kind access to their entire real-time public status firehoses (data is being tested now).
- *No noise:* Dataminr alerts are not noisy; when Dataminr sends users an alert, it's actionable. Dataminr has perfected removing the signal from all of the social media noise.

Geofeedia vs. Dataminr

- Limited ability to filter "noise" from search results (Dataminr users select broad topics NOT keywords)
 - Geofeedia users are required to apply manual filters, Block Users, and exclude words (this is manual and time-intensive).
- User-defined search vs. proactive alerting
 - Geofeedia users can set up rules-based alerts, but there's no way to be alerted to the "unknown unknown"
 - Dataminr offers content prioritization
- Limited access to Twitter, which is known to be the "real-time social media platform"

- Geofeedia does not have access the Twitter Firehose
- Limited to posts with embedded geo-tags
 - Excludes non-geotagged information (97 - 98% of Twitter content)
- Limited to 45 languages (Dataminr supports 76)
- Dataminr provides 365 days of Twitter data and metadata (Geofeedia provides “100 most recent results from each source” and only provides “analytics from Geofeedia’s historical database”).

Upcoming Features

NEW DATASETS:

Dataminr is in the process of adding 2 additional social media datasets to its platform. Dataminr will be making a public announcement in the coming months regarding these new datasets. Dataminr’s access to these additional social media datasets will be the first of its kind – no other company will have full access to these companies’ firehose of public posts.

UPCOMING FEATURES/ENHANCEMENTS:

Area Analysis application

- Indicate query association with message points in scrollable list view
- Incorporate Real-time Alerts
- Improve custom geoselection capability to include freeform and polygon selections
- Add ability to analyze multiple custom geofences simultaneously
- Increase the number of searchable terms per query (i.e. conduct more complex queries)
- Introduce advanced query editor
- Include ability to annotate map with custom map markers
- Add capability to add custom map layers (open source and client data)

Historical Reference application

- Incorporate real-time data
- Increase the number of searchable terms per query (i.e. conduct more complex queries)
- Increase number of tweets displayed in context section to show more raw messages
- Enable post-search filters and refining of results
- Add ability to filter by social platform
- Incorporate additional graph types for historical analysis

Analyst Application update

- New application to facilitate analyst workflows

Real-time Alerting Application update

- New application to real-time workflows

New Source Types

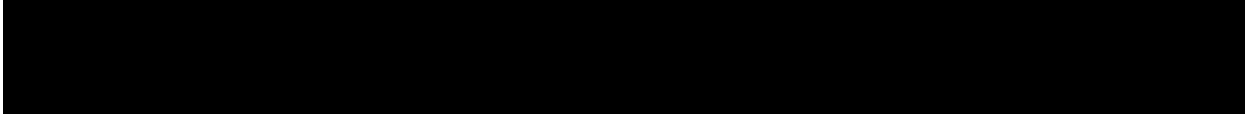
- Classifying Public Figures, Universities, Corporate Business handles

Custom Alerting

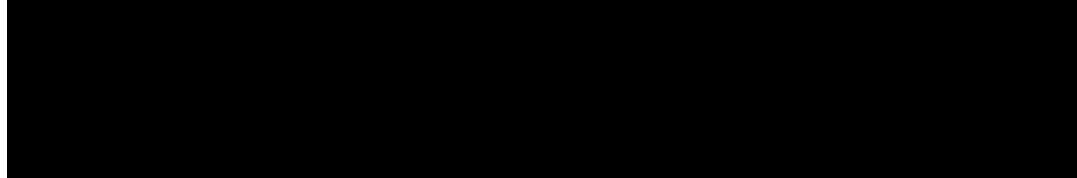
- Integrating custom alerts into mobile application

References and Partial List of Customers

Feel free to reach out to the following Dataminr users to discuss how they use Dataminr; they are aware someone from LAPD may reach out:



Partial list of government and law enforcement agencies using Dataminr*:



**This is in addition to Dataminr's work with over 75 news organizations (i.e. CNN, [redacted]) and dozens of financial institutions (i.e. [redacted]).*

Success Stories

Please see attached document for a list of recent success stories from around Los Angeles, state of California and world.

The document is labeled "Dataminr_LAPD Success Stories".

MayDay Support

Dataminr supported the RACR MayDay Command Center with social media monitoring on May 1, 2016 during the day shift.

The Dataminr representative and RACR Officer John Alipio (Social Media point person) uncovered several previously unknown items using Dataminr's custom alerts and advanced area analysis application.

Pre-organized Bike Rides/Tours Coinciding with May Day:

- **May Day Reggae Fun Ride:** The Area Analysis Application uncovered a tweet with a flyer of the event
- **DTLA Sunday Funday Bike Ride:** The Area Analysis Application uncovered a tweet from a bicyclist about a Sunday Funday bike ride in DTLA. Further analysis uncovered a Facebook page about the event

BLM Protest at the LAPD Detention Center

- By monitoring for "protest", "march", and "mayday" in the Area Analysis Application, Dataminr uncovered a tweet from the LA Black Lives Matter account at approximately 10:00am. This tweet was promoting a 2:30 gathering in front of the LAPD detention center.
- By continuing to monitor the downtown LA area through Custom Alerts and the Area Analysis Application, Dataminr uncovered the first images of people at the the protest in front of the detention center in the afternoon.

First Images of Anti-Trump Protest

- Dataminr uncovered the first images of people protesting at Olympic and Broadway with a giant blow-up statue of Trump. This tweet was uncovered before the street cam feed picked it up and transmitted to the command post. LAPD was able to zoom cameras into the exact location of the event based on a street sign and restaurant that was visible in the tweet.

Ongoing monitoring: Through Topic List Notifications and the Area Analysis Application, Dataminr provided ongoing situational awareness and monitoring of the event, using on-the-ground images to track the protests were peaceful.

Side-by-side training: Dataminr representative also assisted John Alipio, Erick Yopez, and Officer Garcia with configuring their Dataminr accounts and using the Geo App for event monitoring.

Dataminr Power Users at RACR

As RACR solicits feedback from users regarding their experience with Dataminr, please consider reaching out to the following “power users”:

FIRST NAME	LAST NAME	EMAIL
John	Alipio	39190@lapd.lacity.org
Luis	Garcia	38182@lapd.lacity.org
Ray	Rodriguez	33076@lapd.lacity.org
Adan	Urena	37460@lapd.lacity.org
RACR	Watchfloor	racr@lapd.lacity.org*
Tuyet	Nguyen	
Sean	Murray	35945@lapd.lacity.org

**This is a general account Dataminr created and is accessed by a number of RACR officers. Please inquire within the RACR organization who has been using this account to get their feedback.*

Twitter vs. Facebook vs. Instagram

It is important to note that a vast majority of Facebook data is private; and no company has access to Facebook's private data; and many companies have seen their access to Facebook's public data go away in recent months.

The majority of Twitter data, however, is public. Twitter is also widely considered the “[go to](#)” social media platform for real-time information. [Journalists](#), [law enforcement](#) and [emergency managers](#) all depend on turn to Twitter for real time information, not Facebook or other social media platforms.

Dataminr Pricing and Products

████████████████████ depending on which of the 3 products purchased. Dataminr's customers are able to select multiple types of products or just one product. In other words, customers do not have to buy only the "Limited" product or only the "Standard" product. Dataminr does not meter data or charge for any additional services; the per user per year cost is the only fee.

Dataminr's 3 product offering is described below (LAPD RACR is mostly using features in the "Standard" product category but some power users have been trained on the "Advanced" product features)

LIMITED

The Limited product includes the following features:

- Discovery and Analytics applied to all public tweets
- Push Alerts and Indications and Warnings across up to 1 geographic area, 1 priority level, and all Topics for **one** Topic List
- Customizable signal delivery through desktop application, email, and pop-up
- Real-time Context Dashboard, with basic Geo Mapping, Image, and Analytics Modules with access to 30-day archive
- Geo-prediction, User Graph Analysis, Content Summarization
- User Analysis and Source Categorization for Alerts

Limited can be purchased with Alerts being delivered at the Local, National, and Global Priority Levels across one of four different geographic coverage areas: City, Regional, National, and Global.

STANDARD

The Dataminr Standard product includes the following features:

- Discovery and Analytics applied to all public tweets
- Push Alerts and Indications and Warnings for all Topics and all Geographies with up to **10** user-defined Topic Lists
- Customizable signal delivery through desktop application, email, and pop-up
- Real-time Context Dashboard, with basic Geo Mapping, Image, and Analytics Modules with access to 30-day archive
- Geo-prediction, User Graph Analysis, Content Summarization
- User Analysis and Source Categorization for Alerts
- Custom Alert Watch-lists for any keyword or Boolean combination
- iOS or Android Mobile Application access for each Unique User
- Advanced Area Reference Module
- Saved and Shared Searches
- Influencer Identification

ADVANCED

- Discovery and Analytics applied to all public tweets
- Push Alerts and Indications and Warnings for all Topics and all Geographies with up to 10 user-defined Topic Lists
- Customizable signal delivery through desktop application, email, and pop-up
- Real-time Context Dashboard, with basic Geo Mapping, Image, and Analytics Modules with access to 30-day archive
- Geo-prediction, User Graph Analysis, Content Summarization
- User Analysis and Source Categorization for Alerts
- Keyword Lists for any keyword or Boolean combination
- iOS or Android Mobile Application access for each Unique User
- Advanced Area Reference Module
- Saved and Shared Searches
- Influencer Identification
- Dataminr's Advanced Historical Module with access to one year archive and suite of complex querying, search, and analysis functions (including comparative long-term analytics metrics, Influencer Identification per query and region, regional historical volume dispersion, per query advanced filtering)
- Custom Signal Detection and Delivery: Unlimited Custom Alerts (criteria including User Groups, Geography, Media Type, Terms & Boolean Combinations, Publication Client, User Influence, Language, Social Platform), Custom keyword Watch-lists
- Full Suite of Collaboration and Account Management Tools including Admin Capability, Shared Tagging, broad and flexible Export Functionalities across CSV and JSON, and Gnip Query Creator