Cellebrite Digital intelligence for a safer world

SOLUTION OVERVIEW

Cellebrite Community Shield

A Viral Outbreak Investigation and Contact Tracing Solution

The Coronavirus (COVID-19) outbreak is posing unprecedented challenges for epidemiological investigation efforts necessary to contain & analyze its pandemic spread. Infected subjects today undergo a process of "Contact tracing," an interview process for collecting information about contacts and places an infected person may have visited, to contain the spread of the virus and identify potentially infected subjects.

Cellebrite, the digital intelligence market leader, is proposing a solution to help public health officials with one of the most challenging phases of an epidemiological investigation – reconstructing a subject's movement timeline to detect people he may have come in contact with. The solution is based on collection of location data stored on a subject's mobile device and presenting the findings in a geographical timeline. The Cellebrite technology has been adapted to ensure that the data collection process is derived in a non-intrusive manner and only provides access to location data in a specific timeframe.

The Cellebrite Community Shield Solution

Cellebrite, the global leader and provider of Digital Intelligence solutions, is leveraging its field proven mobile device extraction and analysis technology, used daily by more than 6000 law enforcement agencies across the globe, to help public-health authorities investigate and identify movement of people who may be potential transmitters of the infection. Since time is vital in bringing an outbreak under control, frontline health officials need to rethink the way epidemics are tackled.

Cellebrite Community Shield provides a holistic end-to-end contact tracing solution comprised of award-winning and field-proven tools from Cellebrite. The solution brings together unique data extraction capabilities from the broadest range of mobile devices, combined with cloud data review and advanced analytics.

Fast-Tracking Contact Information with Location Data

Location data, accessible through mobile phones, may offer an innovative means of gaining visibility to the geographic timeline of an infected subject's activities and contacts. Today, health officials are required to interview patients in an attempt to reconstruct where that person has been and with whom they may have had contact with during the window of potential contagion. The logged information is later collated and uploaded to a central system. This is a time-consuming process and there may be reluctance on the patient's part to share location information. In addition, the patient may not recall all details concerning their exact whereabouts over the time period in question, leaving out critical pieces of information.

Securing Contact Information Safely

Today, almost everyone has a mobile device. With Cellebrite's contact-tracing technology, public-health investigators can derive granular location data from a subject's personal mobile device, attained under user consent. The technology is designed to only gather location data from the device. Personal information and media are kept totally secure, making it less likely that health officials will encounter resistance from the community. This data is derived selectively from the device by specifying a window timeframe relevant to the epidemiological investigation.

The combination of device location data, personal cloud data, and Wi-Fi connections found on a mobile device, and the use of unique data access capabilities, enables health officials to surface valuable insights about a subject's whereabouts, ensuring no data is left behind.

Mapping Locations to Highlight Outbreak Areas

The retrieved location data is geographically visualized on a map. This visualization may be used to stimulate the subject's recollection of their past activities and contribute to the notification process and guide potential quarantine requirements for specific locations.

Anonymized subject journey data can be uploaded to a health authority's case management system or reviewed on Cellebrite Analytics, a cutting-edge analysis platform, which can cross-reference data from multiple investigations to assist in highlighting infection cluster zones.

To learn more about the Cellebrite Community Shield Solution visit: www.cellebrite.com