

Single View of Subject-of-Interest (SVS)

“Anything that decreases the effort of obtaining information automatically increases the value.” Commander Charles Heal, LAPD



Enabling Intelligence-Led Detection

Our unique solution is available both as Software-as-a-Service and in-house. It provides intelligence, policing and border agencies with a secure, intelligence-led service that doesn't just provide data, but also the capability to “connect-the-dots” and filter patterns automatically. It enables agencies to anticipate threats and supports targeted threat and crime prevention strategies. It decreases the effort, resources and cost of obtaining information that would otherwise be hidden in data. Entity SVS goes much further than traditional analytical tools, traversing across massive data sets to get to single versions of the truth that enable evidence gathering much earlier in the investigative process.

On 17th December 2003, at the Old Bailey in London, Ian Huntley was sentenced to life imprisonment for the murder of schoolgirls Jessica Chapman and Holly Wells. The Richard Inquiry, conducted after his trial, concluded that there were a number of errors and omissions across Police, Education and Social Services, where the data had simply not been connected, in spite of multiple allegations against him and known aliases in other parts of the country. This inquiry resulted in the creation of the Police National Database (PND). At the heart of PND is the data matching capability, which was implemented by a team now within Entity.

On the morning of July 22, 2005, Brazilian born John Charles De Menezes left an apartment block in Stockwell, London, where a suspected terrorist, Hussain Osman was known to live. Surveillance officers, unable to positively or negatively identify him, followed him to Stockwell tube station where Firearms officers shot and killed him. John Charles De Menezes' fault was that his face did not confirm his innocence, and so he remained a possible target, until officers adopted the first and only use of the Kratos 'shoot to kill to protect' policy. John Charles De Menezes' death highlights a 'false positive' case where the correct analysis of the data would have never seen him targeted in the first place.

What does Entity SVS do?

Entity SVS creates a single view of Subjects-of-Interest by aggregating existing data, potentially in real time, across multiple operational systems and identifies and links records for the same Subject-of-Interest together. It creates a central index where you can find data about any Subjects-of-Interest and determine which source systems their data reside in. Entity SVS keeps existing systems in place with no need to change, remove, or replace anything.

Entity SVS uses sophisticated matching algorithms to link records for the same person. It incorporates various fuzzy matching and searching techniques to determine whether Ruairi O'Dell at 52 Irwin Rd and Rory Odell at 52 Erwin Rd are the same person. In addition to determining whether records refer to the same person, Entity SVS also determines where multiple records refer to the same address, so that you can establish a single view of a household, criminal gang or terrorist cell. Entity SVS turns information into actionable intelligence, thereby enabling the identification of links between people, objects, locations and events and a single-view of an individual, group or network (e.g. phone, vehicle, website, person etc).



Furthermore, using Entity SVS's near real-time pattern-matching technology, you can distil Patterns-Of-Interest, such as a terrorist cell's or a criminal gang's calling behaviour. You are able to identify, in the same or other systems, across sensitive or open source data, for the same, or unrelated investigations, where that pattern has appeared, or is occurring, in near real-time.

How Entity SVS Does It

Entity SVS creates and delivers trusted views of entities (persons, objects, locations and events) and their relationships to one another to share with other systems. Using statistically advanced methods to match and link entities and to identify relationships among entities, Entity SVS can create accurate views of entity information and enables sharing of this information across organizations.

Furthermore, Entity SVS visualises data and relationships, finds paths between data entities and timed events. It also monitors behaviour patterns that are often hidden in the mass of data that most organisations now have to handle. It efficiently scales over cloud-based computing resources, permitting complex queries to run through massive data sets in dramatically shortened time periods and alerts users, dependent on access levels to the data, of matching patterns in real-time.

Notification

- Proactively alerts the right individuals immediately – as a result of new information, individual “dots” that existed in the past are now forming a picture worthy of attention
- Pattern-of-Interest notification to the right individuals as they occur

Analysis

- Delivers new intelligence to downstream systems in formats that allow analysts to consume information and conduct further queries in a manner in which they are accustomed
- Dynamically and automatically re-associates existing information with new feeds and data elements to create composite profiles in real-time
- Searches for person/entities based on known information
- Visualises relationships through expanding multiple degrees of separation

Information is fast becoming the foundation of the intelligence, policing and border security agencies and thus Entity SVS is able to strengthen capabilities across the board, whether you are investigating individuals, cross-border fraud, terrorist cells, criminal gangs or high-risk Visa applicants.

- Compares individual records that form into entities
- Finds multiple paths between Subjects-of-Interest or entities, limits/increases number of steps in path, includes/excludes entities
- Statistical weighting and data sensitivity controls

Aggregation

- Via Pattern Watch, determines and monitors networked groups and Patterns-of-Interest in near real-time
- Correlates massive amounts of information (i.e. potentially billions of records) at one time and on a continuous basis
- Leverages disparate information sources that catalogue data in different formats and structures with varying degrees of completeness and accuracy
- Overcomes misspellings, typographical and other errors resident in large, distributed data sets
- Consumes new data in real time as it becomes available
- Scales to handle new sources of data

Experience

Our team of SVS consultants has been involved in Subject-of-Interest implementations in policing, intelligence and major government departments.

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