Beyond the Basics: The Association Matrix
by Eugene Matthews

The Association Matrix has been the workhorse in analytical investigations for years. The following are some suggestions as to how it can be taken to the next level and provide the analyst with even more relevant data to support their recommendations. The first set of numbers in the blocks references the information that supports the association assessments between entities of interest. For example the associations (links) between A1 Auto Salvage, ANDERSON, MICHAELS, PERRY and WHITE might be supported as follows:

1 - According to the Business Incorporation Title at the County Records, A1 Auto Salvage is owned by Matthew ANDERSON and Paul MICHAELS. (14 Jun 10)

2 - Confidential Informant reported Mark PERRY aided Eugene WHITE in the theft of stolen auto parts, which the source believes they sell to A1 Auto Salvage. (15 Jun 10)

A reference number could aid the analyst by providing a means for tracking the associations and recalling the information used to support the link assessment. If during the course of the investigation a link is upgraded from weak to strong, a notation could be added to explain the update, but a separate chart should be generated to reflect the new information. In this manner the links between the entities of interest in the association matrix act as a reference file and additional documentation for the investigation.

Supervisors and others responsible for ensuring investigations have sufficient evidence with which to proceed would likely find this feature extremely useful. In the event the investigation was transferred to someone not familiar with its initiation, bringing them up to date would be a simple matter of reviewing the associations and corresponding information. Moreover efforts to verify and thus strengthen investigations become easier, since the association matrix provides a summary of the information known, or at least reflected in the matrix thus far.

Weighing Associations

During the course of an investigation it would be natural to accept that proof of property ownership and validation as to the whereabouts of an individual, are considered significantly
more reliable than hearsay or inferences. Similarly by assigning a numeric value to the association symbol in order of importance provides another tool which can be used to determine which entity of interest should be targeted by investigative resources.

An example of a table of weights that could be used; weak or suspected association (open circle) = 1 point; strong or confirmed association (closed circle) = 2 points; and key individual (plus sign) = 3 points. Modifications and additions can be created as needed, as long as the table of weights remains consistent throughout the investigation.

The preceding suggestions are some simple ways in which analysts and investigators can take the Association Matrix beyond the basics.

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