

Case Study



SiD in Drug Intelligence

Abstract

SiD is used by New Zealand Police for nationwide management of major investigations. Of these 32% are drug operations. In an average 6 months period, approximately 30 drug operations will be conducted.

The Secure Intelligence database, SiD provides comprehensive support for both detailed investigation and a strategic intelligence view. SiD has been successfully employed in hundreds of major drug operations. SiD provides an operational security model that absolutely protects information that could potentially compromise an undercover operation – at the same time provides a strategic intelligence view that will identify organised criminal activity patterns. SiD also significantly reduces the prosecution delivery phase of any operation – because at closure, all the relevant documentation is fully collated and cross-referenced.

In this case study the impact of this strategic intelligence view provided by SiD is clearly illustrated. The information gathered in a number of operations was analysed to provide national drug intelligence including key factors such as: organised crime involvement, drug market trends, repeat perpetrators and regional geographic trends. This resulted in the identification of an organised drug gang, and a management business case for the strategic targeting of gang involvement in drugs.



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Table of Contents

Abstract	1
The Issues	1
Intelligence Collection	1
Information versus Intelligence.....	1
Presentation Clarity	1
Information Pockets.....	1
The Approach.....	2
Investigation to build Intelligence	2
The Solution	2
SiD.....	2
The Tools.....	2
The Security Model	3
Intelligence Analysis.....	3
The Results.....	3
Successful Prosecution	3
Commodity Flow.....	3
Identification of Organised Crime Activity	3
Case Study	4
The Payback.....	6

The Issues

Intelligence Collection

Intelligence collected in drug investigations is often heavily based on telecom call record analysis. Typical initial phases of drug operations will load in the order of 10,000 call records.

Most of the other intelligence gained is via standard professional police work – and the resulting documentation in terms of job sheets, statements, interview notes.

Information versus Intelligence

Bulk information – such as that collected by bulk telephone call record capture rapidly grows to a level of volume where the information becomes rapidly meaningless in a tabular form.

Where call intercepts are authorized and transcripts of individual calls are available – the volume of information again can rapidly expand to levels requiring large scale analysis effort. In this case tools which provide rapid content analysis and topic targeted analysis can provide significant saving in the analytical resource.

Intelligence is identifying the signals and meaning in the stocks and flows of content that are relevant to us. This is not just single statements that stand out for their uniqueness or relevance to our pursuits, but also patterns over entire collections.

Extracting intelligence from content is the process of Information Extraction and includes:

- Entity Extraction – identifying the entities in a statement, and
 - Fact Extraction – identifying what the statement is saying about the entities.
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Presentation Clarity

Having gathered information, the analysis process needs models of presentation that can expose patterns with succinct clarity. Analysis tools must have the ability to manage the volumes of raw information and to provide indicators to possible risks from that volume. Delivery of output must be in forms that can clearly illustrate the risks in nature, method and timing.

Information Pockets

Information clarity can be masked by collection in geographic or operational isolation, creating isolated “information pockets”. Whereas a security model is a necessity for example in the case where under-cover operatives lives are at risk, this very security can also hide key patterns on a national basis.

The Approach

Investigation to build Intelligence

Driven by the National Crime Centre – the approach was to combine the information gathered in individual drug investigations into a secure national repository. Two key objectives were set – to provide a complete investigation support capability plus a national drug intelligence capability. The individual drug investigations became a collection mechanism in the national intelligence gathering plan – with the capability of identifying common identities, trends, organised crime patterns and focus for effective enforcement targeting.

One over-arching principle was one of security – to the level of providing absolute protection over operational information that may endanger the life of an undercover operative.

The Solution

SiD

The solution to this was a product development, proposed by Superstructure to fully support the drug investigation and intelligence requirements of New Zealand Police. This development drew on a large pool of specialist international resources to refine the system model. The result was a nationwide investigation and intelligence database with security certified to military Top Secret level.

Using SiD as the core intelligence repository the focus in enforcement could be directed to the intelligence – lead focus.

The Tools

It was recognised the investigation capability of SiD required a number of key tools – these included

- Sophisticated identity recognition (is this the same name?)
 - Alias resolution and profile combination
 - Comprehensive document registry and management (statements, job sheets, drug usage reports, interview notes and other documents)
 - Powerful telephone call record analysis and import
 - Visualisation for both ANACAPA Link Chart and Event Flows – with interface to i2 Analyst Notebook®.
 - Directive task management – and investigation tracking
 - Detailed profiling on individuals, organisations, drugs or any other entities of interest
-

The Security Model

To counter the effect of information pockets described above - a level of global security access can be implemented to allow trusted senior analysts. Such global access enables an across-the-board view.

On closure of an operation a security downgrade can be selectively applied to remove the effect of this necessary security isolation effect.

The security model was audited to ensure SiD provided the level of protection necessary to protect the life of an undercover operative.

Intelligence Analysis

Using link analysis on the raw data can often provide key targets for subsequent collection and detailed investigation. The visual representation will immediately highlight node or intersection points within the data. Information about the names associated with the node points becomes interesting from a specific investigation point of view.

The Results

Successful Prosecution

SiD has been instrumental in the successful prosecution of hundreds of drug cases. Major investigations have resulted in prosecution of major organised networks delivering drugs into the New Zealand market. Combined operations with Police and Customs and overseas agencies have allowed termination of the entire delivery chain – seizing millions of dollars worth of drugs – but more importantly providing a significant reduction in the drug trade.

Commodity Flow

SiD provided the ability to track the commodity flow from the manufacturer or importer to the end user market on the street. Often such networks are well shielded in organised criminal gangs and invariably inter-linked with other illegal activity. The intelligence analysis power of SiD coupled with the visual analysis capability of i2 Analyst Notebook® allowed such networks to be uncovered.

Sophisticated criminal activity can be matched by understanding the full model of an organized criminal process. Although that understanding takes a lot of hard grind investigative effort, the end result allows an attack on the pivotal points of the process. The result is a prosecution that maximizes the value for the investigation dollar.

Identification of Organised Crime Activity

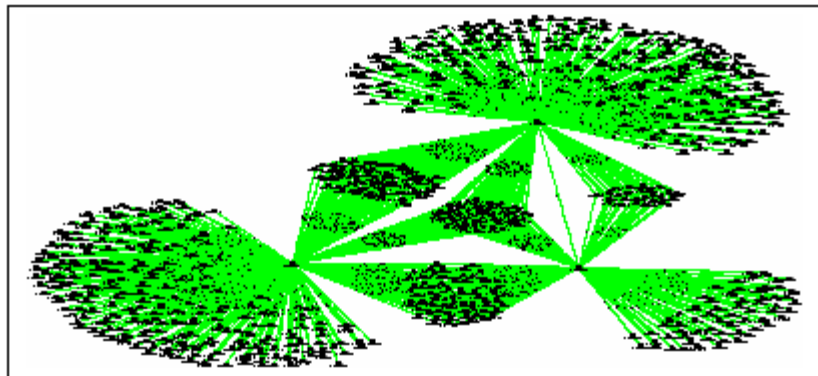
One of the key benefits of the approach and the use of SiD in implementing this approach – was that organised crime activity patterns were identified as described in the case study detail below. This led to strategic targeting initiatives and intelligence sharing to significantly speed up individual investigations.

Case Study

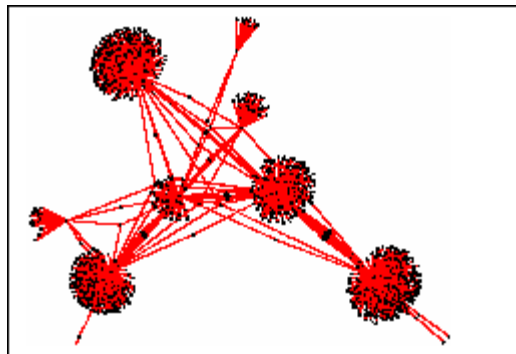
A series of drug operations were conducted nationally. The individual operations each produced successful individual results. However the operations were conducted in geographic and operational isolation, creating the information “pocket” effect described above.

Output from two sample operations is illustrated in the link diagrams below.

Operation A

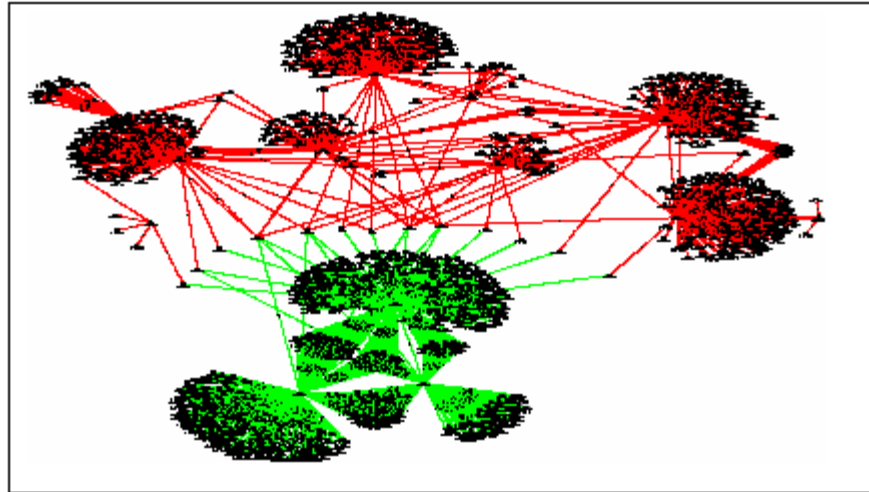


Operation B



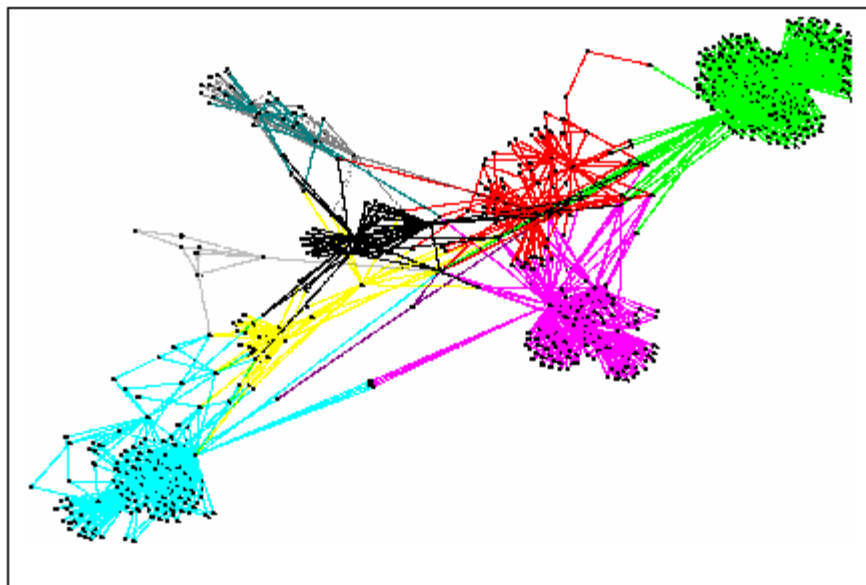
Operation A + B

Analysis of the two operations above produced some interesting results. A clear overlap existed between the two operations concerned. Interestingly the Officers in charge of these operations were operating in the same building – one floor apart. Immediately the need for improved communication was highlighted.



National Analysis

The initial results from the analysis across the A and B operations above prompted extension of the view across all operations in the sample. The resulting analysis produced some even more interesting correlation across all drug operations across the country.



The Payback Organised Crime Involvement

The net result of some further analysis and investigative work identified the involvement of an organized criminal gang across all the drug operations concerned. In turn this gave a management business case for strategic targeting of gang involvement in drugs.

