



IMT Intel:ID Appliance

Separating Knowledge From Noise in Intelligence-led Policing



No one said it would be easy...

IMT

IMT takes away the complexity...





Most Law Enforcement Records Management Systems which serve as the organization's Master Name Index have double digit error rates

Recent evaluations have shown that records with duplicate occurrence reports inside the records management system can potentially compromise as many as 1 in 4 active investigations.



Accurate record matching **REQUIRES** complete and consistent recording of data.

When data quality is low due to deception, errors, or missing values, it cannot provide sufficient and correct information for matching identities accurately without an effective entity resolution engine.

RESOLVE



The social identity of an individual usually cannot be easily altered or falsified because that information is embedded in the social context formed through the interactions of group members. The social contextual information is expected to provide additional information for distinguishing an individual from others

RELATE



By combining near real-time event analysis and event monitoring with identity and relationship resolution, Event Manager provides your organization with the ability to track business events and alert on suspicious events or events of interest, so that you can take the appropriate business action in a timely manner.

ALERT

What is Context Accumulation?



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Kate – Similar

Identity Resolution

- **Full Attribution** - Entities maintain full attribution
- **Perpetual Analytics** - Real-time perpetually updated, accurate, high fidelity identities
 - ✓ Automatic self-correcting
 - ✓ No data latency
 - ✓ No refreshes/reloads required
- **Physical/Digital Attributes**
- **More Data The Better** - Massive Scalability
 - ✓ Internal & external sources
 - ✓ Supports limitless data sources
- **Fuzzy Matching** - Seeing Through The Subtle
- **Cleans up identity network visualization**
“NODE DETECTION”

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Why names are difficult?



- There are no consistent standards for names. Some countries mandate certain standards but they differ from country to country, and most countries have no standards.
- Names can contain a variety of OPTIONAL information that can make the same name appear very differently.

Ben Al Haden

Bin Al-Hadin

Bint Ali Hadin

Chelin Fredo Haden

Juan Carlos Martinez Garcia = Juan Carlos Martinez <> Juan Carlos Garcia



Global Name Management

GNM's expertise lies in understanding, recognizing and matching multi-cultural names leveraging a unique knowledge-based approach of nearly 1 billion names from more than 30 years of linguistic research

- Name Variations,** *Andras, André, Andre, Drue, Ohndre*
- Nicknames.** *Drew, Manny, Cat*
- Shortened names,** *Andy, Eman*
- Prefixes,** *Abdul, Fitz, O', De La,*
- Name Order,** *Hussein, Mohammed Abu Ali*
- Titles,** *Dr., Rev, Haj, Sri., Col*
- Phonetics,** *Worcester, Wooster, "Worcester"*



Abdulmutallab, Umar Farouk

Summary

Culture	Arabic	More...
Gender	Male	More...
Order	Correct	More...
Countries or Regions	Pakistan Egypt Maldives Niger Burkina Faso Syria Nigeria Indonesia Algeria Saudi Arabia	More...

ABDULMUTALLAB	UMAR	FAROUK
MOTALEB	OMAR	FAROUK
ABDELMOTALEB	OMER	FAROUK
MOTALEB	AOMAR	FAROUK
ABDELMOTELEB	OMR	FAROUK
ABDELMOTELB	UMMA	ELFAROUK
ABDELMOTTALEB	OMAER	FAROQ
MOTTALEB	UOMAR	ALFAROUK
MOTALEB	OMAAR	FARROUK
ABDELMOTALEB	ABDULLAOMAR	FAROK
ABDULMUTALAB	ABDULLAOMER	FAROOK
ABDULMUTALEB	ABDULLOMAR	FARAUK
ELMOTALEB	ABUOMAR	FAROCK
MOTALB	ALAAOMAR	FAROWK
MOTTELEB	ALLAOMAR	FARUUK
ABDEL MOTELEB	AOMER	ELLFAROUK
ABDEL MOTTALEB	BEN OMAR	FAROKE
ABDELMOTALAB	OMAERE	FAROUCK
ABDELMOTALB	OMARR	FAROWC
ABDELMOTTELEB	OOMAR	FARUOK
ABDELMOUTELEB	UMR	FRAUQ
ABDULMOTALEB	WLOOMAR	FROOCK
ALMOTALEB	UMAR	PAROUK
MOTTELB	UMER	FARQ
MOUTALEB		FARUK
ABDULMUTALLAB		FARUQ

Almost 3,000 Legitimate Variants

Debbie Creston
STR/SAR List
VIN#222-222-356

Chad Smith
Employers File
ACCT#564-088-300



Non Obvious Relationship Awareness

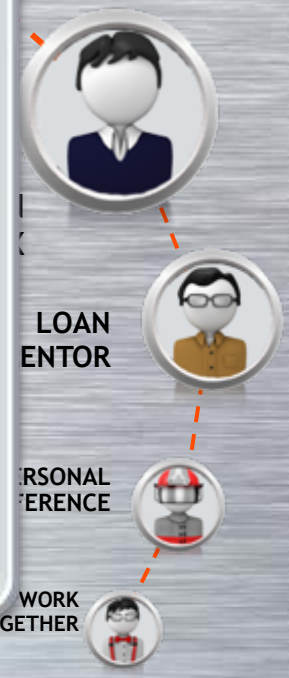
- Detects obvious & non-obvious relationships between people & organizations
- Enables instantaneous alerts
- Role Alerts
- Provides N° of separation
- Integrates thousands of different data sources
- Links people & groups
- Enables identity network visualization



LINK DETECTION

OFAC OFAC
EIN#667-009-008

TIPOFF List
P.O. Box 567



Average Amt
Transaction



Number of
Transactions

User Defin

Complex Event Processing

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Instant Alerts On Suspicious Events:

- Events & Transactions
- Complex Event Processing
- Criteria Based Alerting
- Quantify Identity Activities

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Alerts – Real time... As Data Accrues

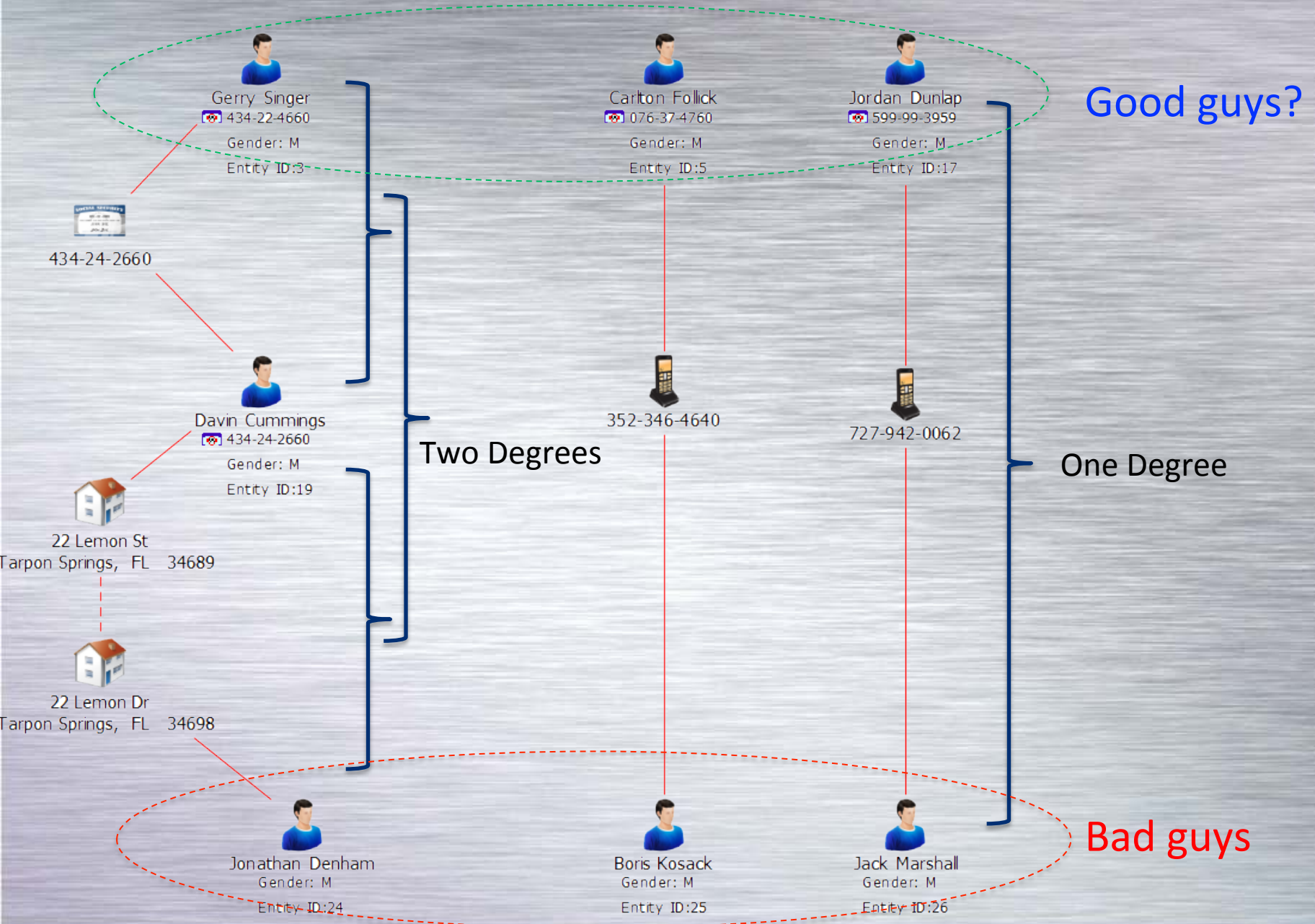


- Attribute Alerts
 - a.k.a. ‘Persistent Search’.
 - Attribute Alerts are raised when data arrives that satisfies a persisted search.

- Role Alerts
 - Think of Roles as ‘labels’
 - Entities can have many ‘labels’.
 - An Entity can be a ‘Victim’, ‘Suspect’, ‘Officer’, and a ‘Witness’ at the same time
 - Analysis at the ‘label’ level can provide more insight into the entities
 - Role Alerts are raised when roles (labels) of interest collide
 - e.g. Let me know as soon as a ‘Officer’ is (or is related to) a ‘Occurrence’

- Event Alerts
 - Based on business rules that act on Events
 - Events can be thought of as observations or occurrences
 - These observations are grouped by Resolved EntityID
 - Event Alerts are raised when business rules are met or exceeded
 - e.g. If a Entity (could be made up of > 1 Jacket) has been field interviewed > 4 times in a 7 day period.

Role Alerts Examined



What is Identity Insight All About?



Simply put, II establishes 'true' identity and the links between those identities

Physical ID Attributes

- Address
- Social security number
- Parcel Number
- Account Numbers
- Phone numbers ...

Non-Obvious Relationships

- Calling same phone number
- Using Similar (Inexact) Addresses
- Same Real Estate Agent

Roles

- Property Owner
- Loan Broker
- Real Estate Agent



Transactions / Events

- People linked by time, locations, or events
- Geospatial/Proximity

Obvious Relationship

- Emergency contact
- Loan Co-Signer
- Employment Reference

Digital Data Attributes

- Email address
- Cookie
- IP address
- Audio
- Video

Problem: Law enforcement information exchange

Record Management Systems (RMS) do not possess sophisticated internal identity matching resolution capabilities and are prone to significant errors.

- *Duplicate records impede investigations by not presenting the most complete and accurate information about a suspect or an offender for pretrial and post trial activities.*
- *Police forces need to share intelligence, observations, reports and suspicions. This requires a sophisticated matching & linking solution that can span multiple systems.*

IMT's Intel:ID Solution

The IMT Intel:ID Solution is built on IBM's InfoSphere Identity Insight infrastructure which forms the foundation for many of the most sensitive and confidential entity resolution systems in the world.

Problem: Lack of interoperability across agencies and departments

Better information sharing enhances public & police safety, improves accessibility and responsiveness, and reduces inefficiencies and delays.

- *Adult and youth criminal cases need to be tracked and processed from initial police arrests and charge assessments through to court judgement.*
- *Need to measure crown/DA and police charging practices, the use of stays, withdrawals and dismissals, the distribution of offences, and the efficacy of various forms of alternative measures programs*

IMT's Intel:ID Solution

The IMT Intel:ID Solution has been built with a robust integration layer that acknowledges and addresses the legacy data and disparate systems issues.

Real Time Alerting – Enhanced Investigative Efficiency



Scenario:

Gang task force wants to debrief all Gang members when arrested.
Alert Gang taskforce when an arrest is made

Current State:

- Generally based on flagging individual
- Often set on search as opposed to actual arrest
- Often relies on processing officer to make call

IMT Intel:ID

- Create a data source for people you want to track
- Use IDI alerting with COGNOS Event studio to send alert.
- Can even be used to alert when a gang associate is arrested even if they were previously unknown

Real Time Alerting – Enhanced Standards of Conduct



Scenario:

Detecting inappropriate or high risk member relationships.
Alert professional standards when detected.

Current State:

- Done when member initially hired
- Quarterly, annual or random checks
- Often relies on processing officer to make call

IMT Intel:ID

- Create a data source with HR data
- Use IDI alerting with COGNOS Event studio to send alert.
- When a record from the HR data source conflicts with an at risk source generate alert

Real Time Alerting – Continuous Vetting



Scenario:

Complete a Criminal Record Check or Police Vulnerable Sector Check (PVSC) for applicants who are seeking volunteer, student placement or employment in a position of authority or trust with vulnerable persons

Current State:

- PVSC are valid as of the date they were conducted. Results are provided with the date of completion rather than an expiration date.
- It is up to the requesting organization to determine their own thresholds for how long a check will be considered "valid".

IMT Intel:ID

- Create a data source with PVSC and Police Check data
- Use IDI alerting with COGNOS Event studio to send alert.

Real Time Alerting – Persisted Search



Scenario:

Current investigation surfaces a Person of Interest. Investigators search local RMS and other sources of data.

Current State:

- Search for Person of Interest
- If no records are found, log as part of investigation
- No structured data retained for future use – no investigative value

IMT Intel:ID

- Perform a search through API
- If no record is found, use the search criteria to create a persisted record.
- Generate alert for originating officer and agency when a record that matches the search criteria is entered into one of the agency contributing data sources

Complete Police Reports



Scenario:

IDC study suggests a "mammoth waste of law enforcement resources trying to transfer information with the provincial Crowns and the judiciary

Current State:

- Police report is delivered to Prosecution for court appearances
- Duplicate records in the RMS would mean that incomplete information is being used to determine whether evidence meets the charging standard

IMT Intel:ID

- A complete dossier can be accessed with all relevant occurrences and non-obvious relationships
- Gang Intel and other external sources can be accessed id role based security permits.



IMT
IDENTITY
SOLUTIONS
EXPERTS

Missing, inaccurate or conflicting data can compromise investigations and place officers at risk.

IMT Intel:ID™

An appliance-based entity and non-obvious relationship resolution solution for Law Enforcement and Integrated Justice



Gain insights and offer actionable intelligence by linking identities and establishing non-obvious relationships



RESOLVE

IMT Intel:ID™ leverages the Identity Resolution process to determine whether multiple records that appear to describe different individuals – even with different identity variations – are actually records for a single person or entity.

RELATE

Intel:ID uses the identity data from structured and unstructured sources to establish the nature of relationships between different individuals. By providing non-obvious relationship awareness you can determine whether people are (or were) related in any way at multiple degrees of separation.

ALERT

Having established "who is who" and "who knows who", we can then generate real-time alerts on contact with high value targets, relationships of interest, overuse of identity information, and thresholds exceeded for occurrences of events.

Scan the QR code to learn more ►



www.imt.ca/intelid

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A Complete and Managed Appliance

IMT offers a complete, purpose built appliance for Law Enforcement and Integrated Justice. All you add is data from your RMS and other stored documents to quickly create real-time actionable intelligence and alerting.

What is the cost of doing nothing?



