

*Intelligently expand investigations with a complete, real time view of who - exactly - you are dealing with*



## **IBM Entity Analytic Solutions Mission Critical Technology for the Intelligence Community**



*IBM Entity Analytic Solutions gives you an accurate, real time understanding of the people you are dealing with, thus improving actionable intelligence and giving you the ability to recognize incidents before they occur.*

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### **Highlights**

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- ***Address Homeland Security requirements by enhancing existing and new systems with multi-cultural support***
- ***Reduce false positives, speeding investigations and reducing errors***
- ***Increase accuracy of name-searches within large database environments***
- ***Consolidate identities to truly understand who you are dealing with***
- ***Expand investigations intelligently by instantly recognizing individuals with multiple identities***
- ***Connect the dots to internal and external threats***
- ***Perpetual and preemptive alerting for Persons of Interest (POI) and their relationships***
- ***Help protect the anonymity and downstream dissemination of your data***
- ***Share data with organizations & intelligence agencies in a manner that addresses legal and privacy concerns***

### **The high stakes world of identity information in the Intelligence community**

The effectiveness of homeland security measures are directly related to the accuracy and timeliness of the intelligence upon which they are based. Knowing “Who is Who?” is the critical first step in recognizing potentially dangerous individuals, identifying them at ports of entry—borders, train stations, and airports—or when they hide behind corporations or intermediaries.

IBM Entity Analytic Solutions (EAS) brings a new level of accuracy, precision, and fidelity to the concept of identity recognition. EAS extends its groundbreaking identity recognition capabilities to encompass non-obvious relationships and to facilitate anonymous information sharing. Only a strong identity recognition platform delivers accurate alerts in real time, giving you the ability to take preventative measures before a potential threat becomes reality. When you add powerful Name Recognition capabilities, you can accurately and immediately identify people across the globe, either with names as a sole data point or with extensive identity information.

Together, the powerful entity resolution and name recognition capabilities delivered by the extensive Entity

Analytics portfolio mean that your agency will have a battle-hardened, mission-tested solution. The technology has been built and enhanced within the most demanding name recognition and entity resolution environments in the world.

### **IBM Global Name Recognition “When Every Name Counts”**

Names are often overlooked and disregarded as the rich source of knowledge that they are. In a global society, the ability to accurately recognize and manage the building blocks of an individual's name can provide the key to recognize identity across cultures, genders, and other areas of interest. This is where IBM's global name recognition technology can help.

*Unparalleled support for names from multiple cultures.* IBM Global Name Recognition technology provides automated support for many culture types out-of-the box, including Arabic, Anglo/European, Chinese, Hispanic, Japanese, Korean, Russian Slavic, West African cultures, and more.

Based upon a collection of almost 1 billion names in over 200 countries, IBM Global Name Recognition technology has been optimized for recognizing people throughout the world.

*Technology for the post 9/11 world.* Many systems rely upon Soundex, a phonetic name matching method created almost 100 years ago based

off of 1890 census data. This method, treating names like character strings, is completely inappropriate for multicultural name data. Studies have shown that this technology is not up to the demands of today's high stakes world. One study found that only 36.37% of Soundex returns were correct, while more than 60% of correct names were never returned by Soundex (A.J. Lait and B. Randell, 1996).

IBM provides a unique approach to Name Recognition. This approach is founded upon the principal that effective name recognition must be based on a detailed understanding of the cultural and linguistic properties associated with names.

IBM provides the only commercially available software for automatically processing personal names from multiple cultures. IBM offers a complete line of products that parse, store, search, match, and generate names intelligently. IBM has received the first patents in this area of research in almost 100 years!

### **IBM Identity Resolution Improve Intelligence When You Know “Who is Who?”**

Knowing “who is who” is more critical in today's intelligence climate than at any time in history. In the past, the driving force for creating a 360° view came from marketing departments working to reduce redundant direct

mailings to the same customer. In the post-9/11 world, this concern has migrated beyond duplicate credit card offers, and into the situation rooms of intelligence agencies in their battle against terrorists and others posing threats to the security of our nations. This war must be waged without violating individual privacy rights and civil liberties. Success depends on the ability to know who is who, and to update and manage identities as they evolve to meet the real-time demands of the intelligence community. Any system that benefits from having a more complete view of contact and other identity data across the enterprise, benefits from IBM Identity Resolution.

*Full attribution enables identity resolution beyond 360°.* IBM Identity Resolution enables the creation of identities that extend beyond 360°. Identity Resolution is the only identity resolution technology that maintains full attribution of each record, ensuring data is never lost and is always traceable back to its original source. IBM Identity Resolution retains and utilizes data that other technologies purge, ensuring that our customers have the ability to extract maximum intelligence. IBM enables you to build information on the most complete, timely, and dynamic identity repository available, whose accuracy is compounded with each data element added.

**Self correcting and real-time intelligence solutions.** IBM Identity Resolution powers the only identity repository that perpetually self corrects and enhances identities in real-time as data enters the system. Through IBM Identity Resolution, an agency can construct a central or operational identity repository as a platform for all of its knowledge-based applications. This provides a comprehensive, high performance publish/subscribe, remote query content service that distributes data and alerts across the enterprise. The software performs the entire identity resolution process in less than one second, ensuring real time, OnDemand access to critical information. Additionally, it scales to accommodate massive, multi-terabyte production environments, delivering intelligence directly to a point of contact in real time. And, it never needs to be reloaded or refreshed to maintain data accuracy.

**IBM Relationship Resolution  
Improve your actionable intelligence  
when you know “Who Knows Who?”**

Traditional citizen, employee, and contact data integration technologies employ a one dimensional approach to resolving identities. What you don't see are the non-obvious relationships, be they other contacts, known felons, vendors, employees - or worse, persons on watch lists, such as the Office of Foreign Asset Controls Specially Designated Nationals (SDN) List. The

key to effectively managing threat is your ability to see it.

**Look at both obvious and non-obvious relationships for a complete view.** IBM Relationship Resolution software takes identity recognition beyond the more obvious 360° view to the non-obvious. IBM Relationship Resolution begins where most solutions leave off, extending the baseline 360° contact view to identify and include the non-obvious relationships among individuals and organizations. This unique capability enables an agency to look beyond the bounds of data directly attributable to an individual, to see their “network threat”. IBM Relationship Resolution seeks out and integrates non-obvious relationships between individuals to better determine potential danger - even if an individual is trying to hide or disguise their identity.

**Extend actionable intelligence.** IBM Relationship Resolution enables investigators and analysts to perform sophisticated searches against an identity repository to determine every instance in the organization of that identity being recorded. Often, counter terrorism and crime prevention is not achieved by simply finding a single needle in a haystack. Instead, it occurs when analysts & investigators find additional related needles after they find the first one. Additionally, IBM Relationship Resolution provides

instantaneous, real-time alerts when suspect or positive criminal relationships are detected, providing immediately actionable information. Think of this as a smoke detector within intelligence applications that goes off when a person of interest is detected, or as an alarm triggered when a high-profile networked individual is encountered.

**Customizable sensitivity levels.** IBM Relationship Resolution can be configured to evaluate relationships through multiple degrees of separation, based on the specific application or mission. You can determine the degree of sensitivity with which to operate.

**IBM Anonymous Resolution  
Share and Compare Classified and Mission Critical Information When You Know  
“Who is Who and Who Knows Who...  
Anonymously?”**

Finding the needle in the haystack is next to impossible and looking for it can also be very complex and challenging. Adding to the complexity is the well deserved respect of protecting an individual's privacy rights. The releasing of clear text information outside the agency makes the downstream dissemination control a nightmare. These problems can now be addressed with IBM Anonymous Resolution.

IBM Anonymous Resolution software enables multiple intelligence agencies - across the street or across the globe

- to compare closely held data in a manner that never exposes sensitive data values or identities, while still identifying relationships. IBM Anonymous Resolution enables your agency to compare lists with other jurisdictions, and cross-reference identity records with watch lists - and to do so anonymously. This technology allows agencies to share only the data that is pertinent to the specific application. Information sharing in an anonymized form puts the control of knowledge discovery solely in the hands of the information owner, because the original, clear text data remains in their control.

***Selectively reveal data specific to the application.*** Privacy is enhanced with IBM Anonymous Resolution because the original holders of the information continue to own their clear text, source data. These information holders now operate as gatekeepers for specific “need to know” requests. Instead of software controlling who can see what, the original data holders control it. This extra protection drastically reduces the risk associated with “unintended disclosure.”

***Unprecedented collaboration abilities for intelligence agencies.*** Automatic, preemptive de-confliction of cross-agency activity or contact can be identified without third party involvement. The ability to share data among multiple agencies will allow for the needles in the haystack to surface while privacy rights of the individual are respected.

## **IBM Entity Analytic Solutions - Battle tested in the Intelligence Community**

IBM Entity Analytic Solution's reputation for credibility and reliability stems from our long association with the intelligence and security community. IBM products have been tested against the best-known algorithms and methodologies in the world. IBM products are consistently chosen to complement or replace these systems for enhanced precision, the ability to resolve identities and relationships, and to reduce false positives. Also, because of our unique technology and superior performance, IBM has a long history of qualifying for Sole Source Justification for government procurements.

### ***Designed to meet the mission-critical needs of the intelligence community.***

IBM Entity Analytic Solutions technology was originally built based upon the specifications of the intelligence community, and is designed to work on a myriad of platform configurations utilized in agencies across the globe. The full suite of global name recognition software products are designed as APIs and IP-servers to quickly and easily integrate with your existing and new systems. IBM has an impressive track record for rapid deployment of EAS in critical environments.

### **For more information**

To learn more about IBM Entity Analytic Solutions products, please visit: **[ibm.com/db2/eas](http://ibm.com/db2/eas)** or contact your IBM sales representative.



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