

Supporting Intelligence Analysts

EU Project SICH - Semantic Illegal Content Hunter

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E-Crime Workshop

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Expert System

Expert System is a leader in semantic technology, developing advanced solutions for companies and governments.

Expert System has made an “intelligent” knowledge management of unstructured information.

The company has a solid background in semantic NLP technologies for deep understanding of language and wide range of possible text mining applications, founded on grammar, syntax and semantic text analysis.

Founded and headquartered in Modena, Italy, Expert System has branch offices in Naples, Rome and Rovereto in Italy and other locations in the US and Europe.

www.expertsystem.com



Expert System



Award-winning,
patented semantic
technology



3 of the world's leading Oil & Gas
companies are our customers



90% of customers extend
their license to other domains



Global company
and listed on the
AIM exchange



Top US and European
federal agencies
work with us



Millions of global
banking customers
use our software

Proven Technology:

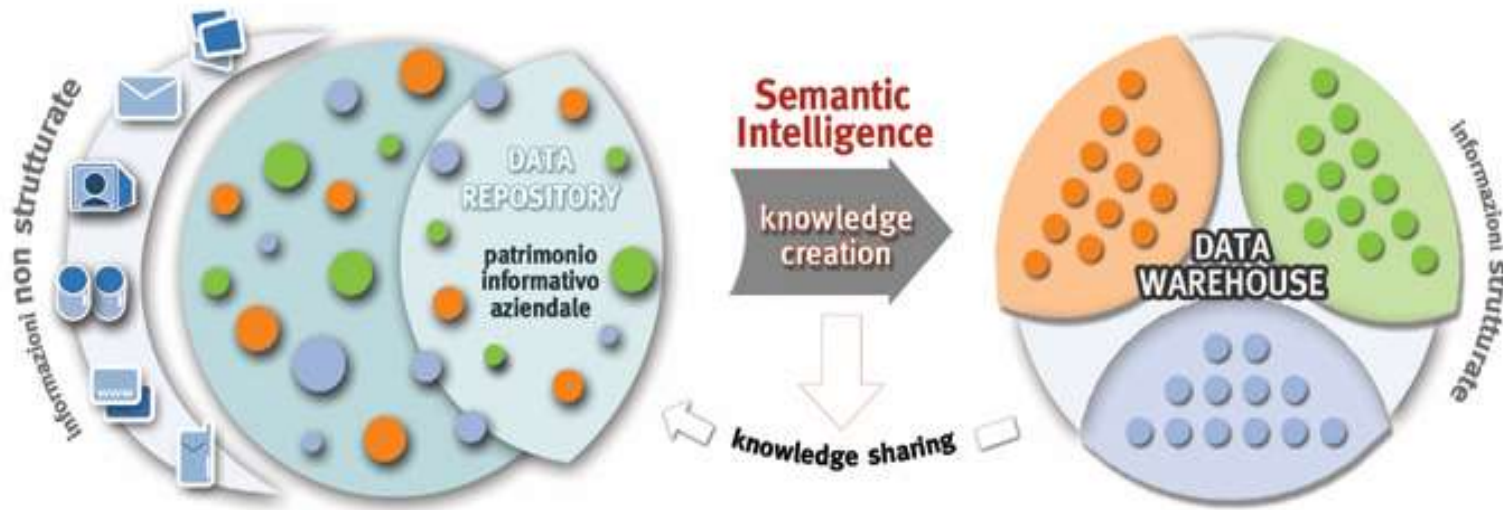


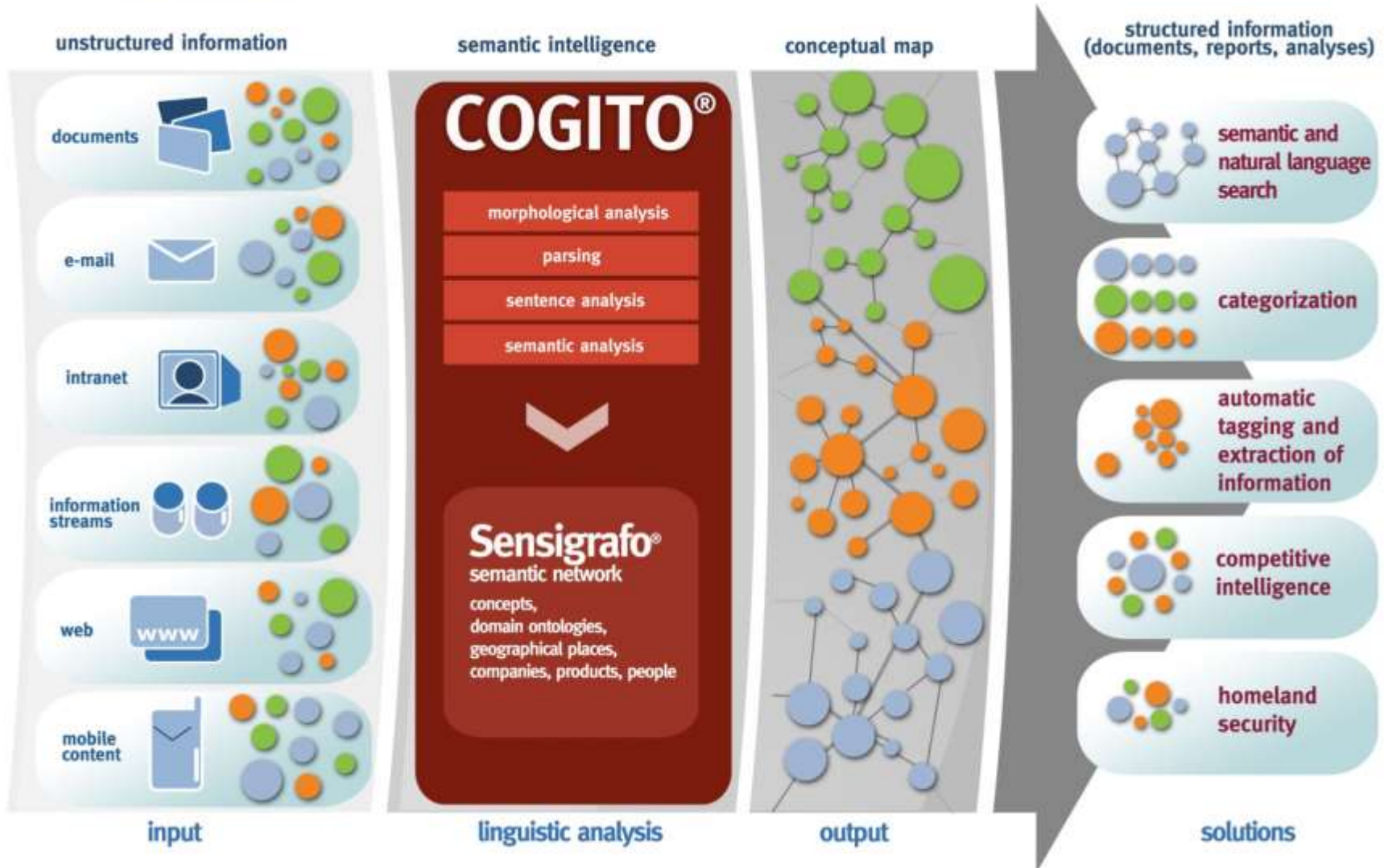
Information Management using Semantic Approach

The Cogito® semantic technology can be classified as a software for the understanding and automatic analysis of text.

Unlike other technologies, Cogito does not process content as a sequence of characters and does not guess at the meaning of words and concepts.

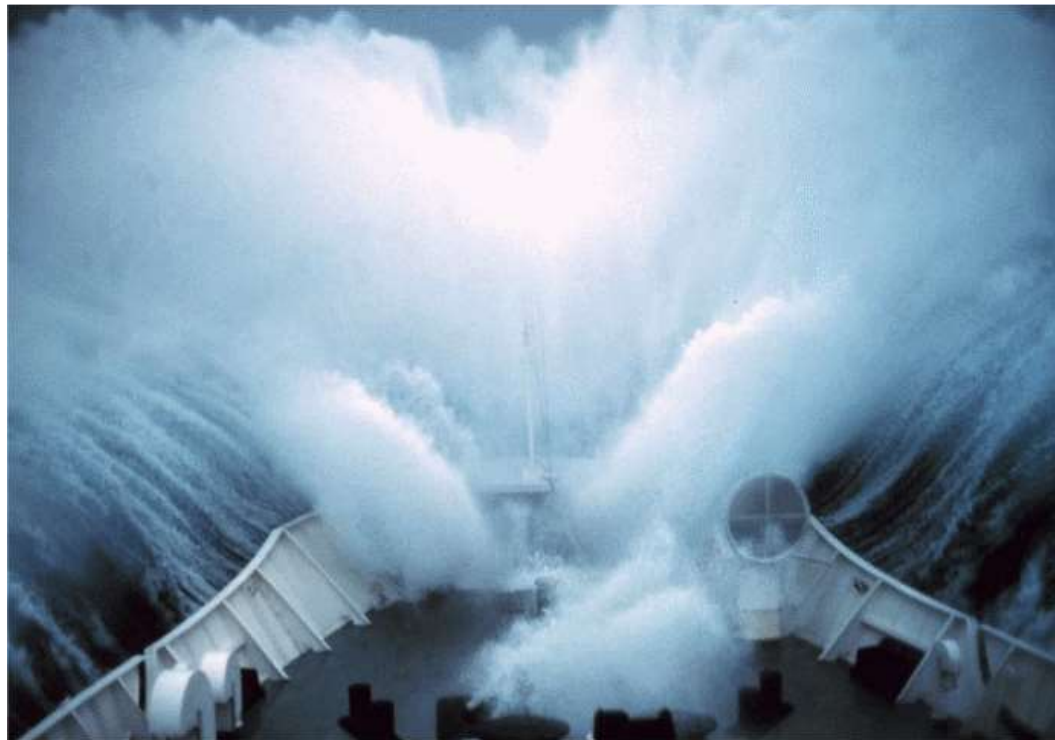
Instead, Cogito is a real semantic software that relies on a deep semantic analysis and a rich semantic network to ensure a complete understanding of a text as a person would.





A Flood of Unstructured Data & Information

More than 80% of the knowledge on which our daily jobs are based is unstructured (emails, documents, web pages, articles, information from social media, etc.).



The Essence of the Matter

We believe that at the present time and in the future, **the information we need is already available (or at least, attainable)**. And that among this data, there is information that we have not yet perceived as useful.

Searching is just a small part of the problem. **The essence of the matter is finding and exploring.**

A new paradigm of use

Therefore, we have created software solutions which allow analysts to find and explore details within their domains with a new paradigm of use.

Our “semantic engine” organizes data from the analyst’s standpoint and **proactively suggests several perspectives of analyses as the data emerges, thus providing immediate and visual representations of the content.**

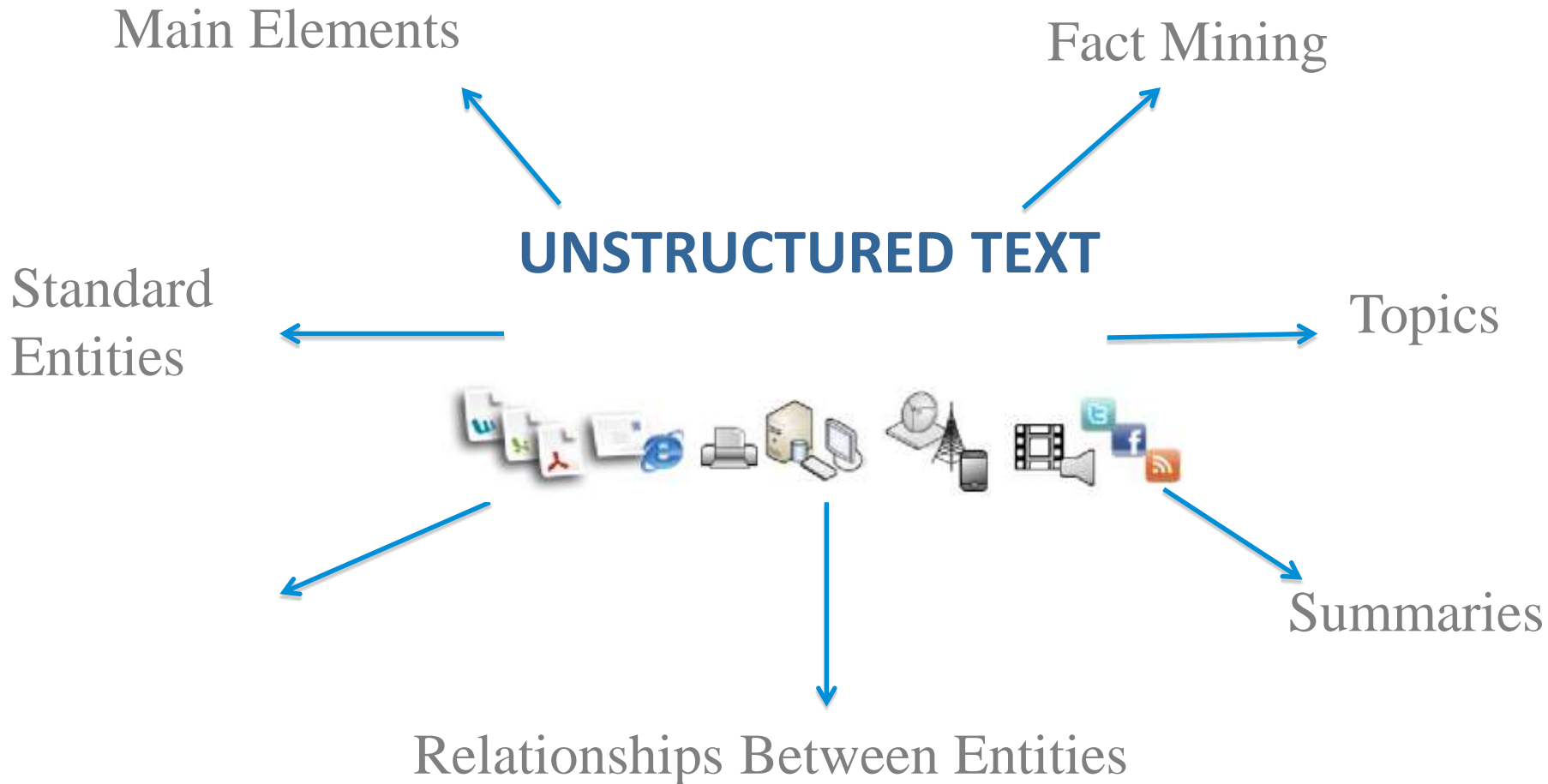
A technological revolution of traditional "search engines"..

Entities List




Addresses, Airports , Amounts of money, Biological agents, Buildings, Chemical agents, Criminal Organisations, Critical Infrastructures, Currency, Cyber Threats, Dates, e-mail , geography , Intelligence Agencies, Leading Companies, Measurements, Medical Conditions, Medical, Treatment, Military Facilities , Military Forces , Natural Disasters , NGOs, Organizations, People Percentages, Places , Points of Interest, Terrorist Organisations , Units of Measure, URLs , WMD, World Leaders,
and MANY MORE...

What Can Be Mined from Unstructured Text?



Stressful Metadata Assignment

Islamist bombers kill 20 in Niger attacks

(AFP) – May 23, 2013 

NIAMEY — Islamist militants staged twin suicide car bombings on an army base and a French-run uranium mine in Niger on Thursday, killing at least 20 people in retaliation for the country's military involvement in neighbouring Mali.

Niger's Defence Minister Mahamadou Karidjo said the last Islamist was neutralised at the army base and denied early reports that a suicide attacker had held young army recruits hostage.

The attacks come just four months after Al Qaeda-linked militants seized a desert gas plant in neighbouring Algeria in a siege that left 38 hostages dead, also in retaliation against the intervention in Mali.

"Everybody has been subdued, the operation is over," Karidjo told AFP late Thursday, several hours after the attacks, the first of their kind in the impoverished former French colony.

The Movement for Oneness and Jihad in West Africa (MUJAO), one of the Islamist groups which seized control of northern Mali last year before being driven out by French-led troops, claimed the near simultaneous bombings at the Agadez army base and a uranium mine in northern Arlit.

"Thanks to Allah, we have carried out two operations against the enemies of Islam in Niger "

2 Pages,
29 Sentences,
765 Words

> 10 Topics

(Homicide, Kidnapping, Mining, Critical Infrastructure, etc.)

> 30 Entities

(3 People, 6 Organizations, 8 Places, 4 Dates, 3 Critical Infrastructure, 2 Terrorist Organizations, 1 Public Company, 2 World Leaders)

> 30 Relationships (People <-> Organizations <-> Places)

Assign Metadata

(extract, transform and load):

20—30 minutes per document

Manually vs Automatically

Assign Metadata Manually

20—30 minutes per doc (1,000 words)

Precision for managing large volumes of information is almost never 100%, and the work is rigorous and demanding.



Cogito Full Extraction

0.04 min per doc

Precision > 90%

Cogito Intelligence Platform (CIP) brings the ability to read and reason to understand and identify virtually anything in all the content acquired.

With CIP, you can start with 500,000 or more sources and in as few as three clicks, you'll have the clustering you need.

CIP brings semantic reasoning and an understanding of language to categorize content from any source and info, in any volume of unstructured content.

SICH- Drill down Big Data using specific taxonomy

FILTER Results by

Semantic Illegal Content Hunter Taxonomy

- [-] **Novel psychoactive substances** (815)
 - NPS sale (342)
 - [-] **NPS properties** (133)
 - Stimulant (75)
 - Hallucinogen (72)
 - Depressants and tranquilizers (6)
 - Narcotic or opioid (1)
 - Weight loss (1)
 - [-] **NPS effects** (39)
 - Neurological (14)
 - Other (10)
 - Gastrointestinal (8)
 - Circulatory system (5)
 - Mental (5)
 - Respiratory (4)
- [-] **Racism and xenophobia** (12)
 - Disablist hate crime (3)
 - Sexual orientation (2)
 - Race-oriented hate crime (1)
 - Racism,media,history (1)

Jargon Index Taxonomy (classifivn)

MDMA

keyword

Did you mean..

- MDMA as keyword
- MDMA as lemma
- MDMA as noun

sostanza stimolante ed eccitante dagli effetti entactogeni, appartenente alla classe delle feniletilamina ed amfetamine. Composto

[Find](#) [Clear](#) [More ▾](#)

Results

1-10

Zoom

(2,063 seconds)

Google Earth

Network

Tree Map

10 results per page

NULLSell 4mec Pv8 Big Crystal Methylone Mdpv MdmanULL

from MDPV [ITA Search NPS]

acquired on 15 Jan 2015 06:42:47 - created on 15 Jan 2015 06:42:47

mdma

Periodo di vendita:

Semantic Illegal Content Hunter Taxonomy: **Novel psychoactive substances** (40%)

Jargon Index Taxonomy: **Jargon Index Low** (60%)

People (1), Countries (1), Hot Topics (7), Synthetic Canabinoids (7), Synthetic Cathinones (2), Cardiocirculatory system (2), Gastrointestinal (2), Mental (2), Neurological (2), Other (2), Respira (2), Tranquilizer (2), Illegal (2)

Best matches:

People: Crystal Methylone Mdpv

Countries: Australia

Hot Topics: Jwh 018, Mam, dicembre, gennaio, mercato, qualità, vendita

Synthetic Canabinoids: AKB48, AM-2201, AM-2233, JWH-018, JWH-307, UR-144, URB597

Synthetic Cathinones: 4-MEC, Ivory wave

Cardiocirculatory system: AKB48, JWH-018

Gastrointestinal: AKB48, JWH-018

Alerts

Filter by Time Range

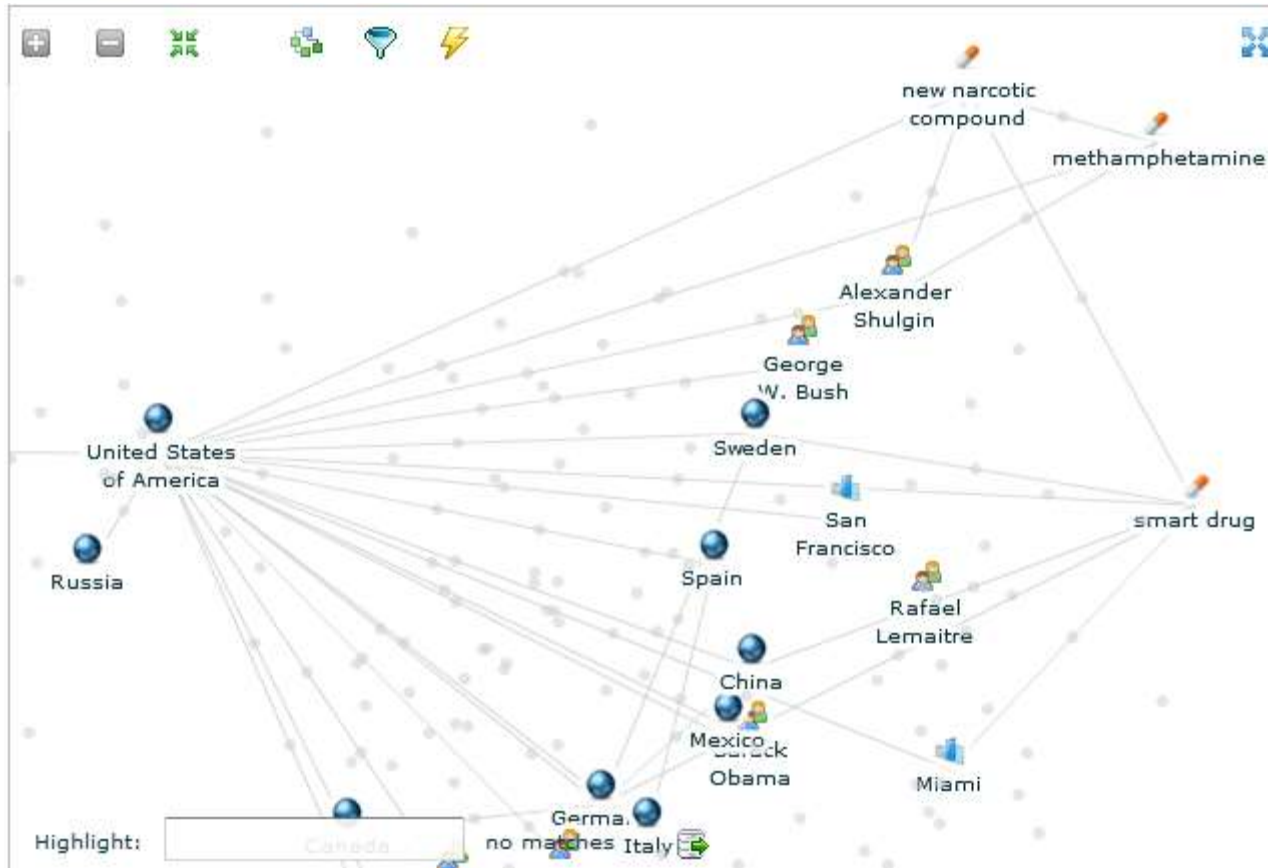
- Today
- Yesterday
- This Month
- This Year
- Custom Range...

Available languages

Filter by Data

Filter by Sources

SICH – Entity-Relationship Map



Contacts



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