

BusinessConnect

A New Era of Smart

5/22/2014

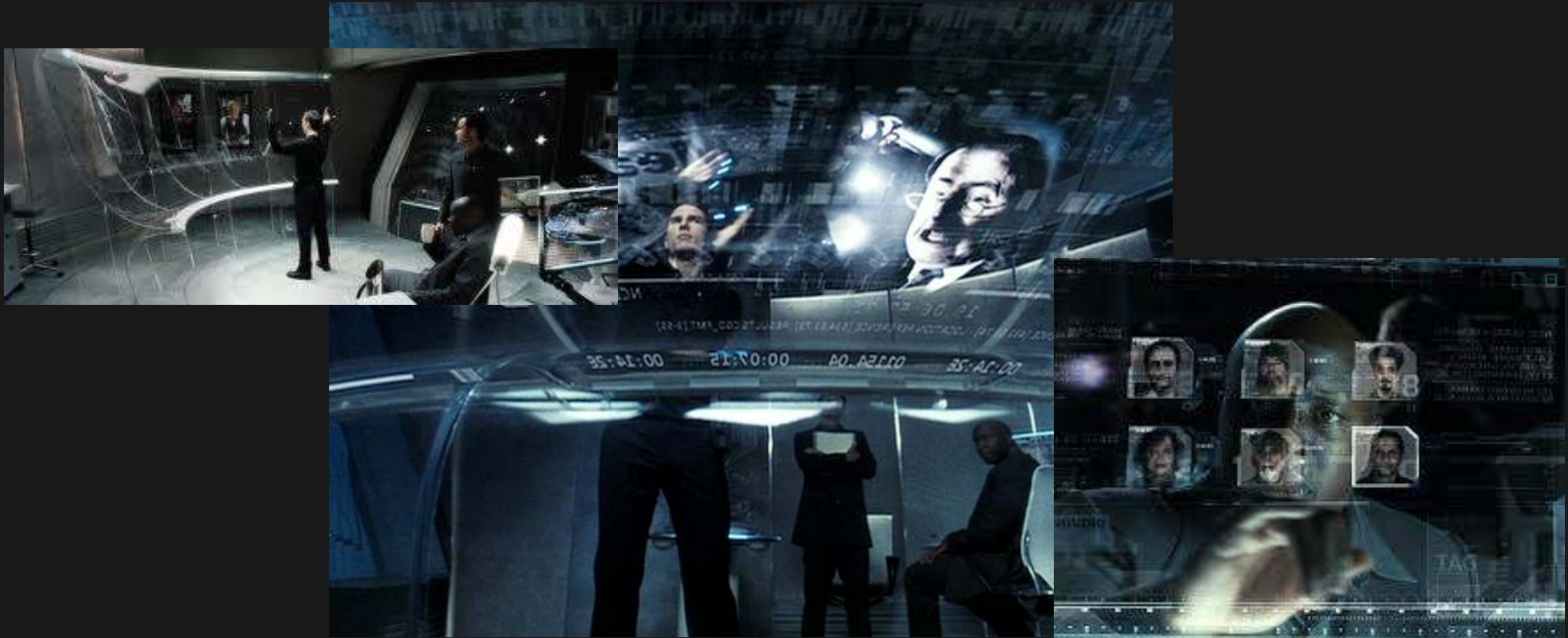
The Modern Intelligence Platform



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What would you expect?

Lots of arm waving?



Three dimensional holographic models?

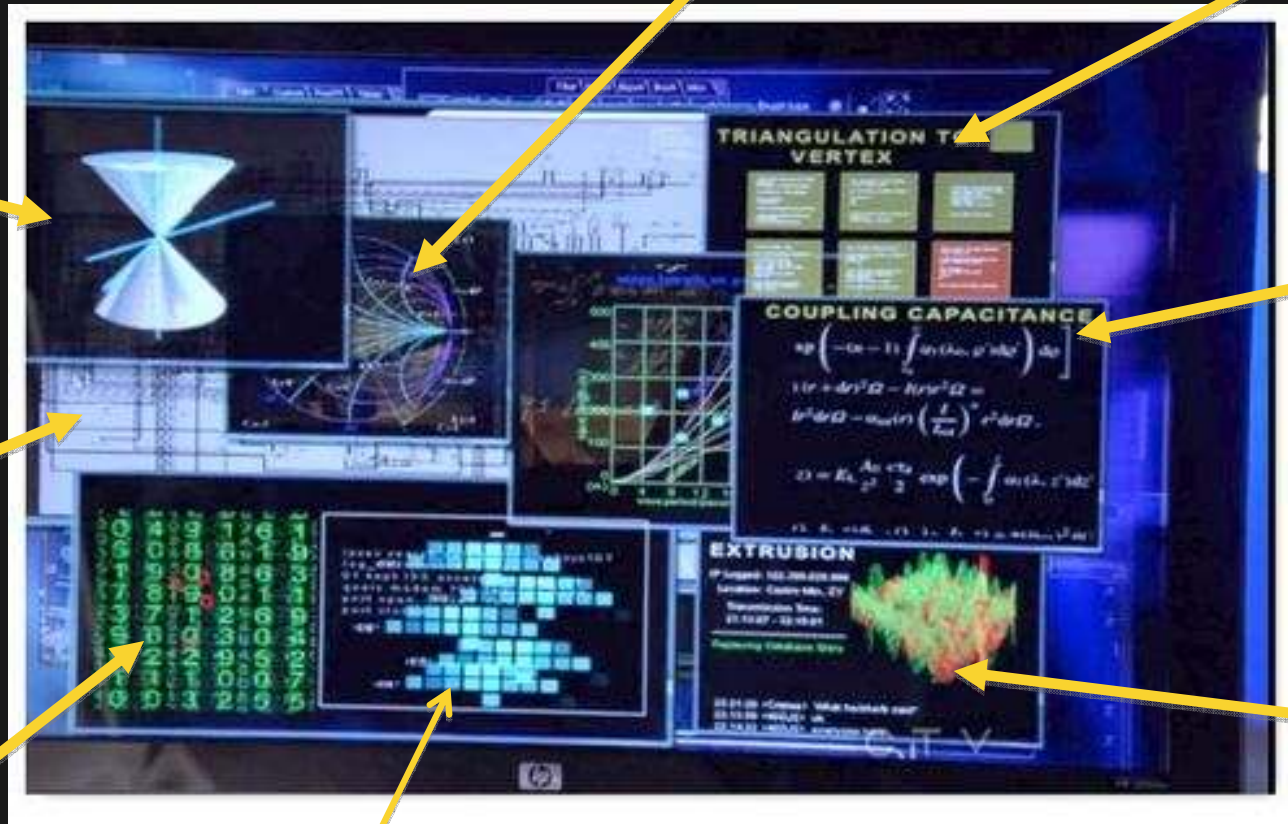


Errr?

Spin shape spin, as fast as you can....

Flux Capacitor?

I didn't realise I needed my Vertex triangulated?



Circuit diagram for a microwave oven?

The Matrix

Tetris?

Coupling Capacitance?

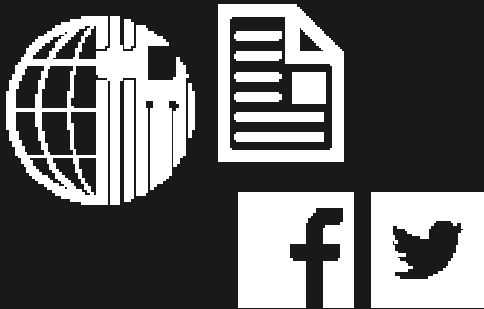
Exactly what are we Extruding?

And then back to pen, paper and a whiteboard to understand it all.....



Imagine the Challenges

Vast Amounts of Information



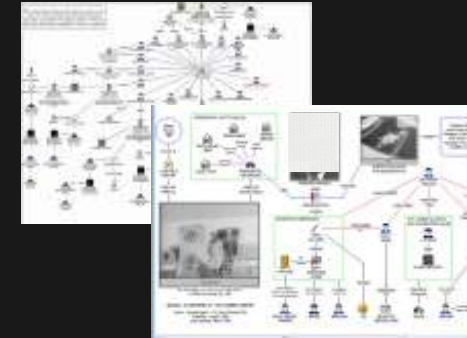
- Siloed Repositories
- Structured and Unstructured Data
- Security Restrictions
- Social Media
- Biometric
- Big Data

Multiple Applications



- Web Based
- Thick Clients
- Multiple Searches
- Manual Data Entry
- Data Duplication

Intelligence Asset Creation



- Entities and Relationships
- Provenance
- Temporal Analysis
- Social Network Analysis
- Geospatial
- Relationship Detection

Now Imagine the solution

Federated Search



- Single search
- Specify Source(s)
- Analyse Results

Geospatial



- Plot items
- Query based on region or path
- Additional data sets

Relationship Detection



- Non obvious relationship Detection
- 32 degrees of separation

Unstructured



- Natural Language Processing
- Entity and Relationship extraction

Social Media



- Relationship identification

Facial Recognition



- Recognition from photos on social, phones, cameras, hard disks, etc.

Single User Interface

Intelligence Repository

Capabilities Are Used by Clients In Multiple Sectors



National Security

- Counter Terrorism
- Counter Intelligence
- Intelligence Analysis
- Border Security
- Cyber Risk

Defense

- Establishing Civilian Structures
- Counter Intelligence
- Intelligence Analysis
- Target Analysis and Defense
- Peacekeeping
- Force Protection
- Pattern of Life Analysis
- Human Terrain Mapping

Law Enforcement

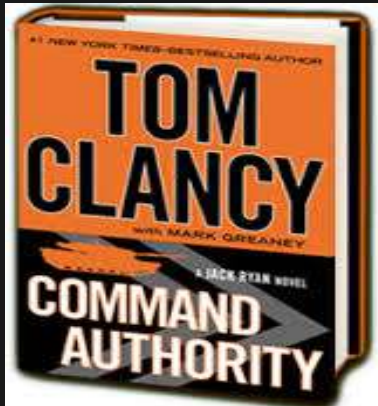
- Tactical Lead Generation
- Counter Terrorism
- Major Investigations
- Organized Crime
- Neighborhood/Community Policing
- Public Order/Major Event Management
- Volume Crime
- Fusion Centers

Private Sector

- Security Investigations
- Industry Oversight & Compliance
- Cybercrime
- Risk Management
- Anti-Money Laundering
- Fraud

Government

- Industry Oversight & Compliance
- Cybercrime
- Securities Investigations
- Anti-Money Laundering
- Fraud



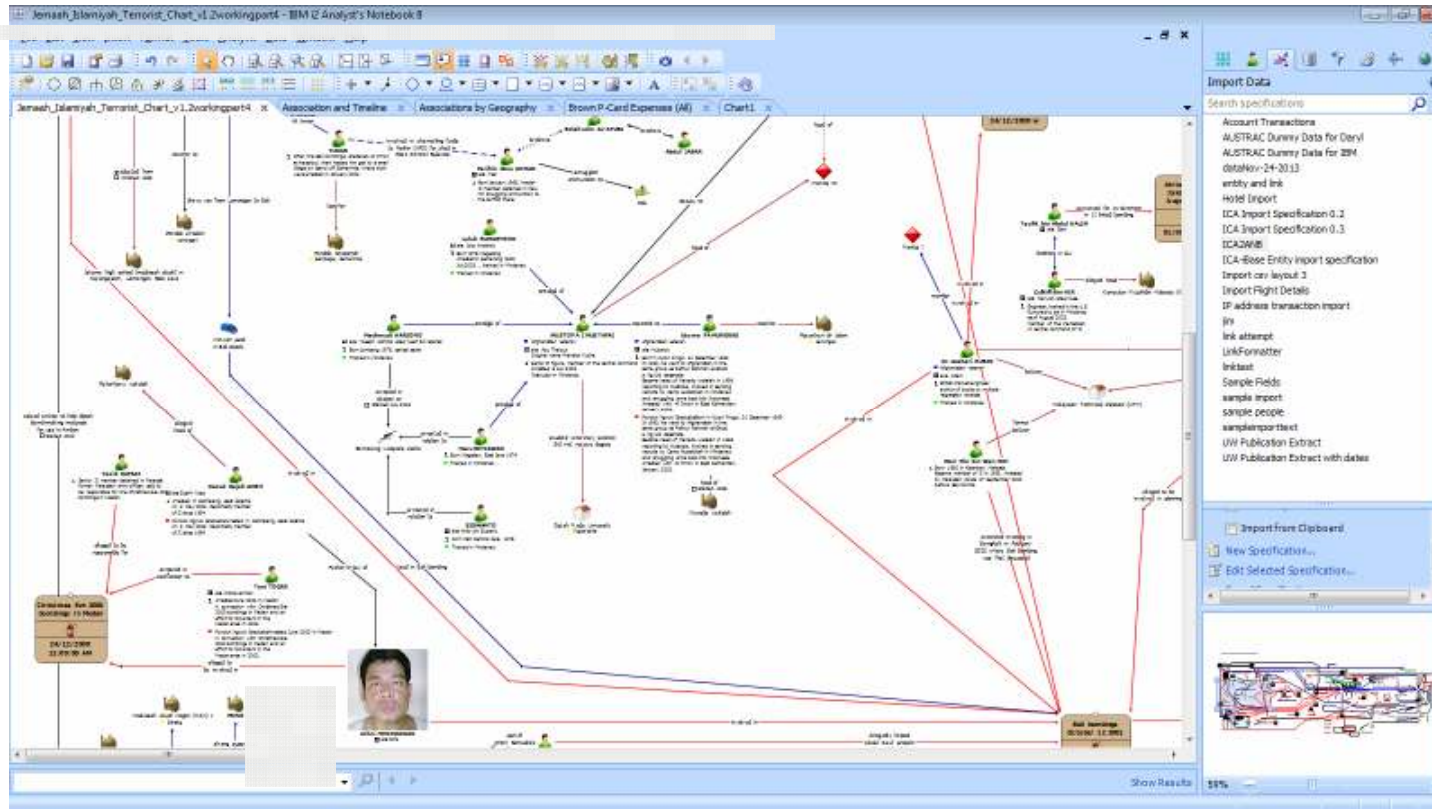
He (Jack) soldiered on, and through his work on the theft of Galbraith's company he discovered that Gazprom had purchased the pieces of the Scottish-owned gas firm from a series of small foreign companies that sprang up out of nowhere to bid in the auction...To unravel it all, Ryan had a few weapons he could call on...Another tool Jack made use of was **IBM i2 Analyst's Notebook**. It was a data analysis tool that allowed him to put in all manner of different data sets, and then generate quick visual representations via graphs and charts that he could manipulate to track trends, see relationships between people in a target network, and allow himself a more dynamic way of interpreting whichever environment he was studying...Jack knew good data organized effectively was the most important commodity for any analyst.

Example Scenario

- Bomb detonated damaging a main rail network
- Need to identify and capture individuals responsible
- A group has claimed responsibility



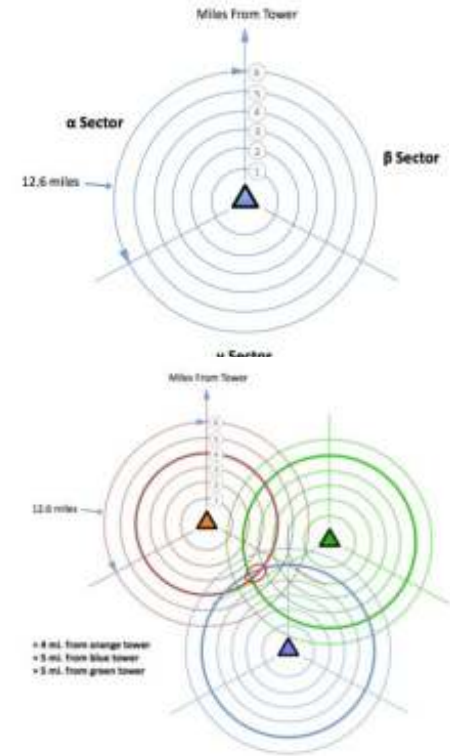
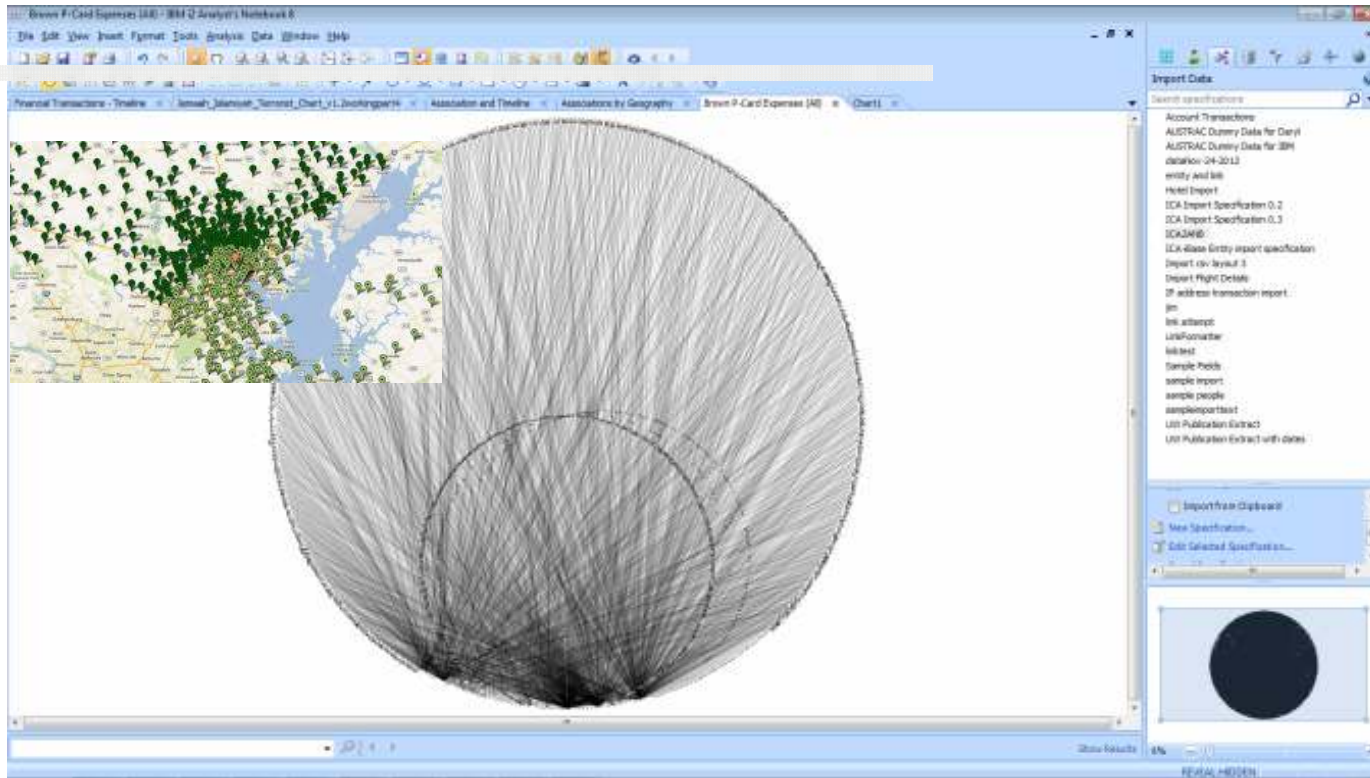
What do we know about the group network



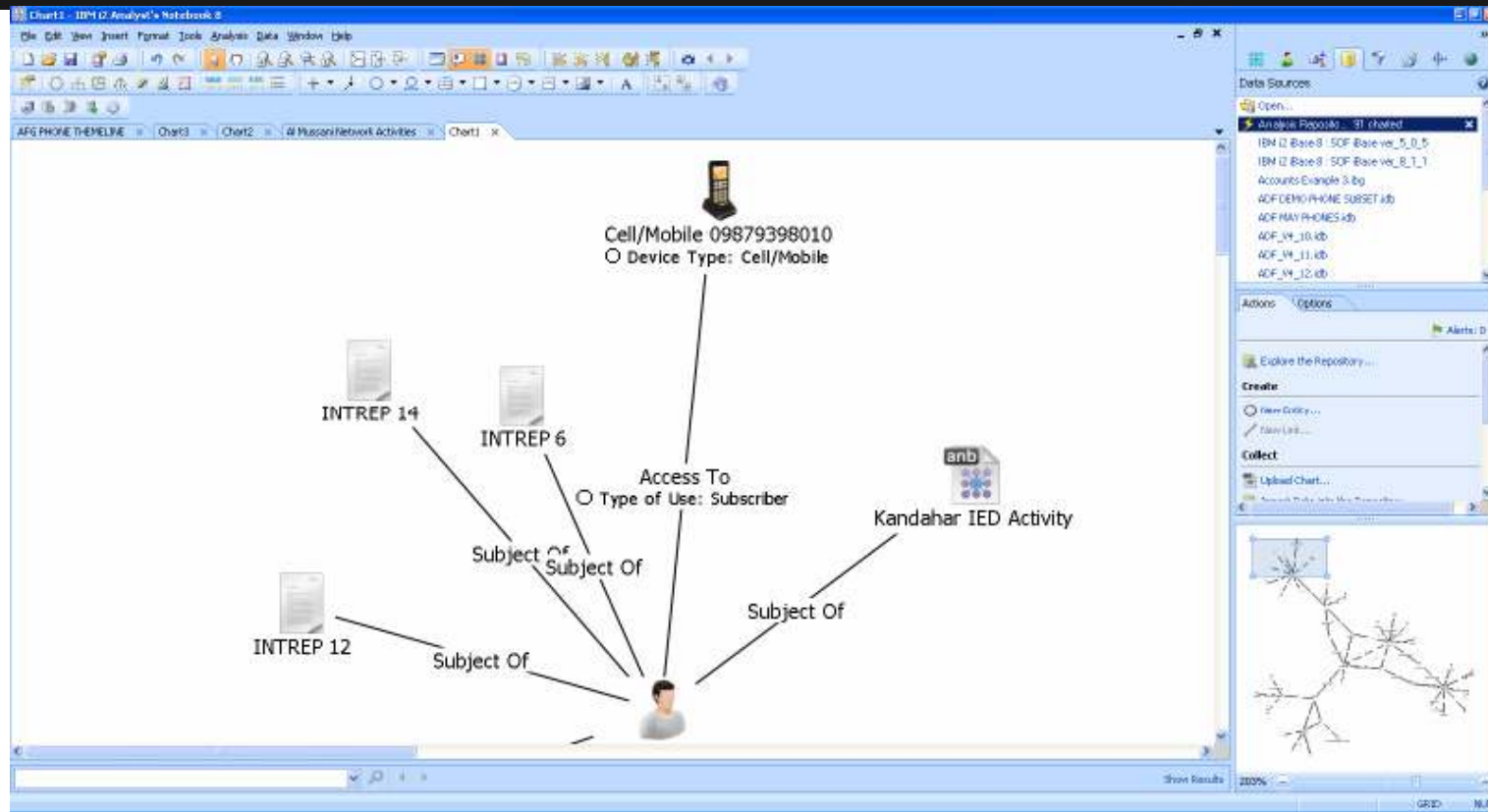
What do we know about the scene – Read through the location reports – other reports



Gain information from local cell towers



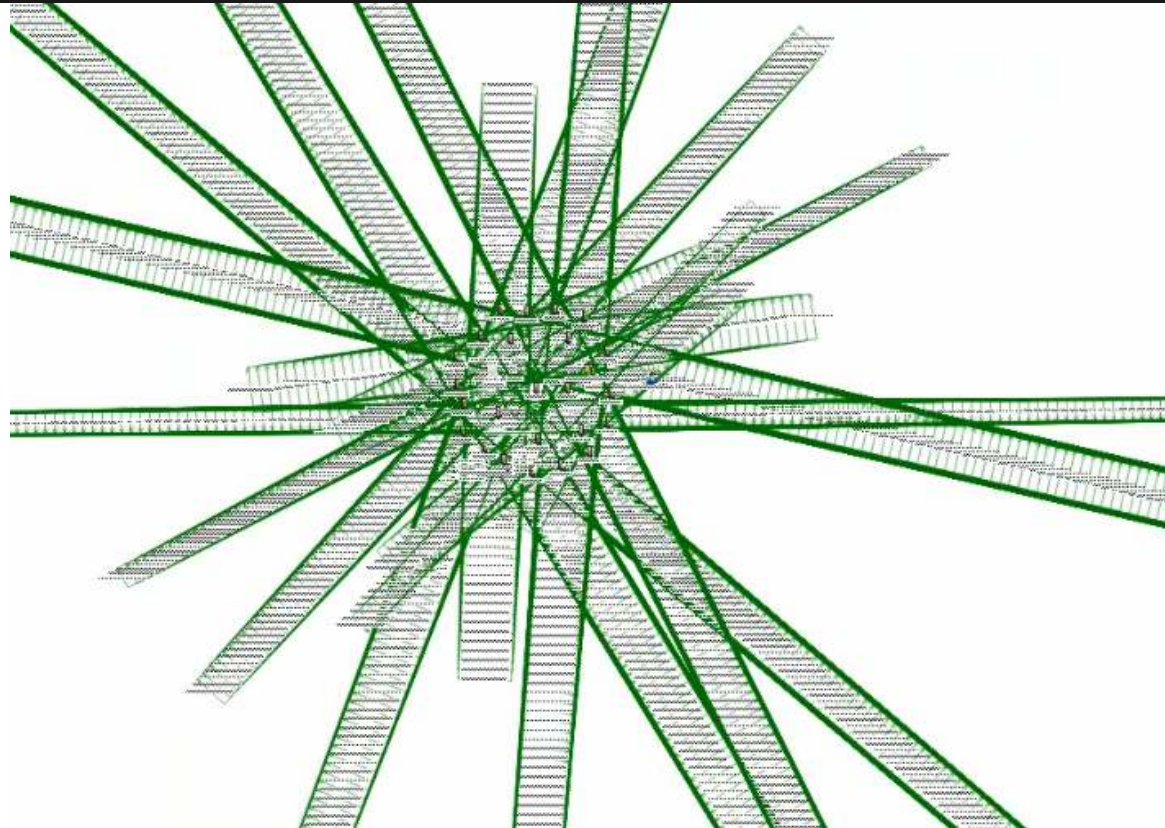
Do we recognise any of the numbers



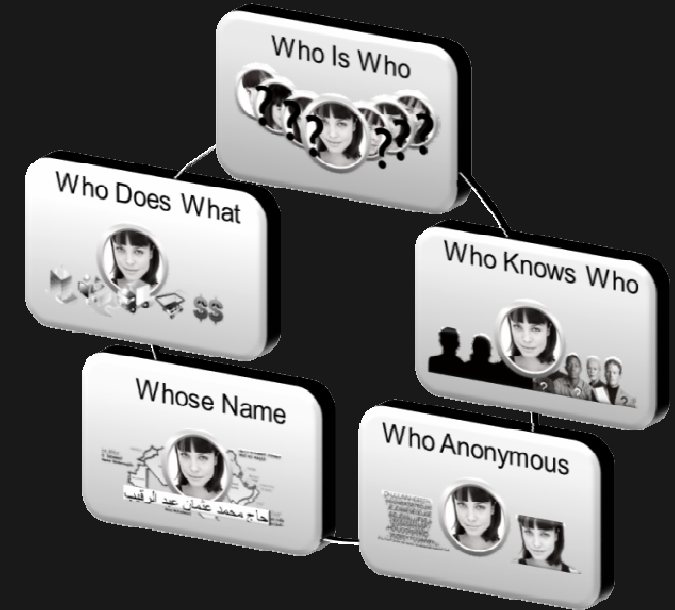
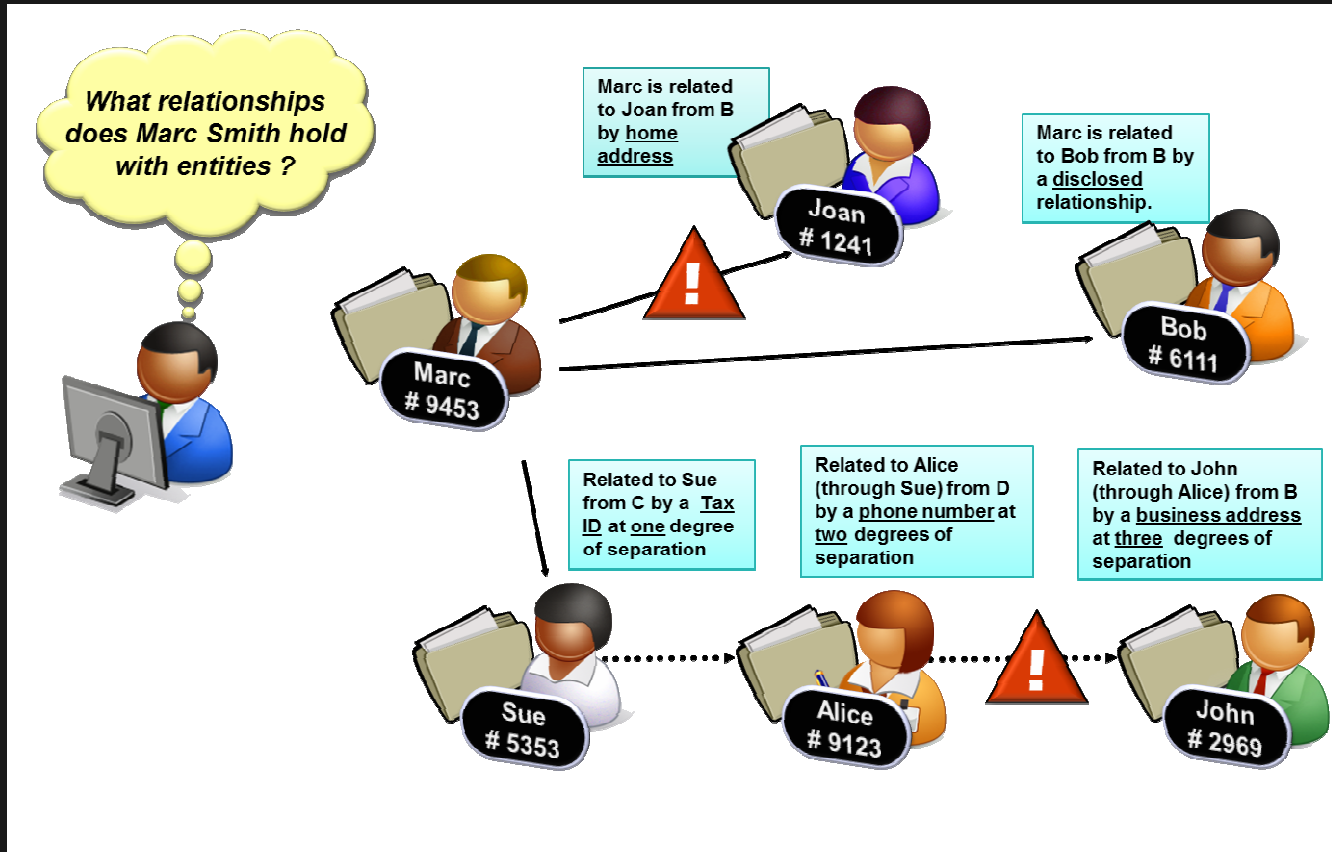
Request call logs for relevant numbers and owners from cell companies



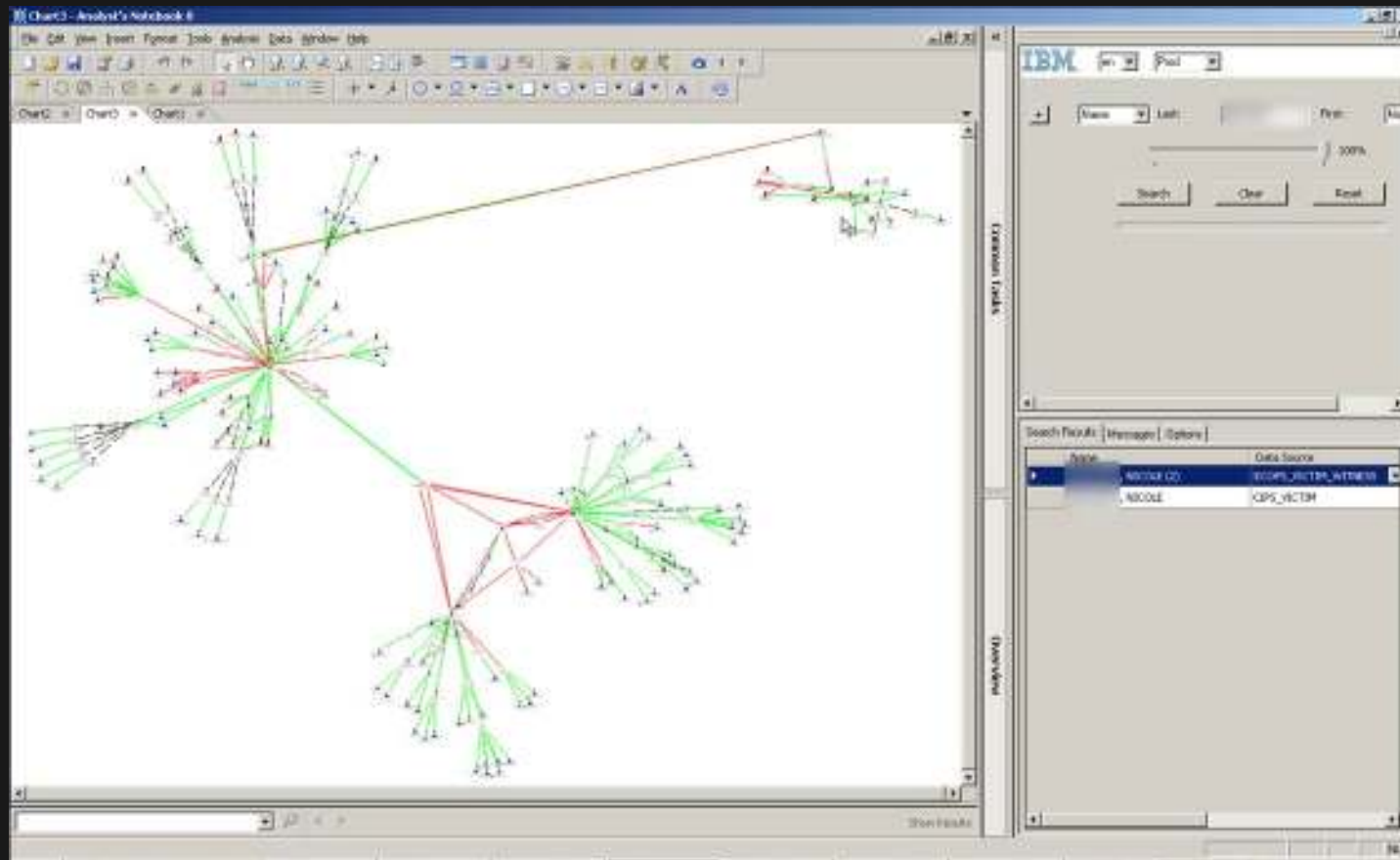
Any calls between these numbers, or known numbers



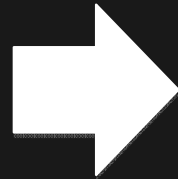
Non-obvious relationship detection



Non-obvious relationship detection

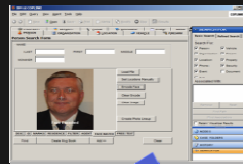
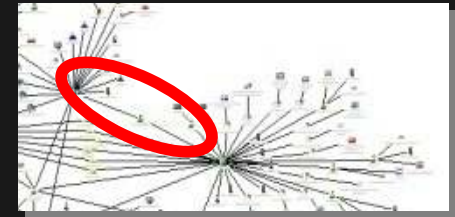
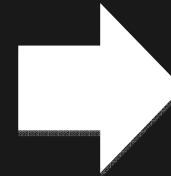
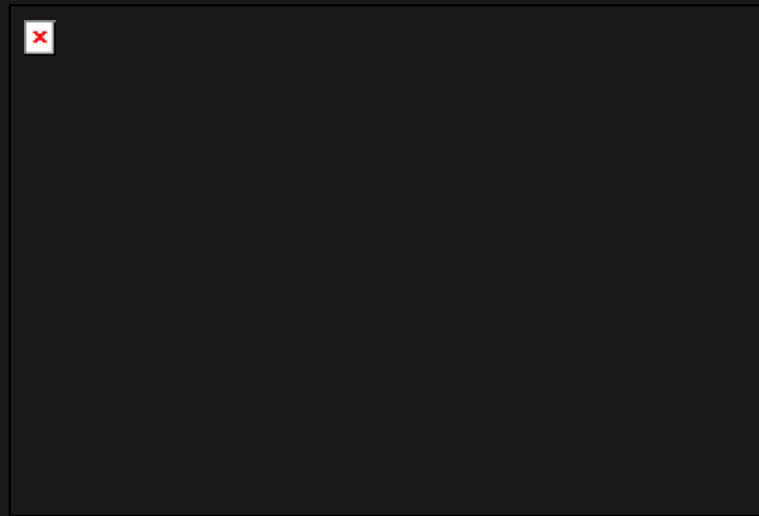


Pull in suspects – seize mobile phone – Rip off information and photographs



ID	Name	Semantic Type	Representation	Date	Time	Label Value	Location	New Attribute
101 0033	01191900124700 0033	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
101 0036	01191900140200 0036	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
101 0041	01191900140200 0041	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
14 10014	0119190014024 10014	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
152 0000	0119190014020 0000	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1621700	011919001604021700	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1600200	01191900177000200	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
01191900	011919001770001900	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1300091	01191900173000091	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
14 10000	0119190014024 10000	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1624732	011919001604024732	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1607403	011919001232007403	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
14 10043	0119190014024 10043	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1602270	011919001402002270	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1244477	011919001242204477	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
101 0000	01191900140200 0000	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
15 170 10	0119190010195 170 10	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1000010	011919001402000010	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1203 000	01191900124203 000	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1294420	011919001604294420	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1634726	011919001604024726	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1602702	011919001402002702	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
101 0001	01191900140200 0001	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1117000	011919001402117000	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
0040000	0119190010190040000	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1502 000	011919001402002 000	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
104 000	011919001402004 000	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1602204	011919001019002204	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1205 100	01191900124205 100	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
162 100	01191900124202 100	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1600200	011919001402000200	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
111 000	01191900140211 000	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
131 000	01191900140213 000	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1600000	011919001019000000	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
167047	011919001402007047	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
111774	01191900140211774	Telecom	Text file			1.100000100	Mace e Share	Alphonstia
1000000	011919001019000000	Telecom	Text file			1.100000100	Mace e Share	Alphonstia

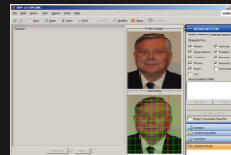
Facial Recognition



Ingest



Search



Phone whereabouts – waypoint tracking



Pull in data from CCTV and run analysis



Motion Detection

Triggers on any motion that fits size/duration constraints



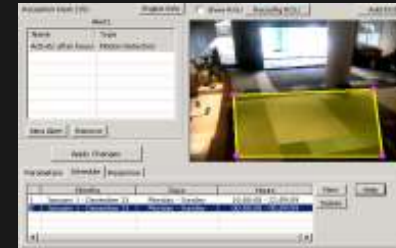
Tripwire

Triggers when object center passes over a virtual line



Directional Motion

Triggers when object moves in a certain of directions



Abandoned Object

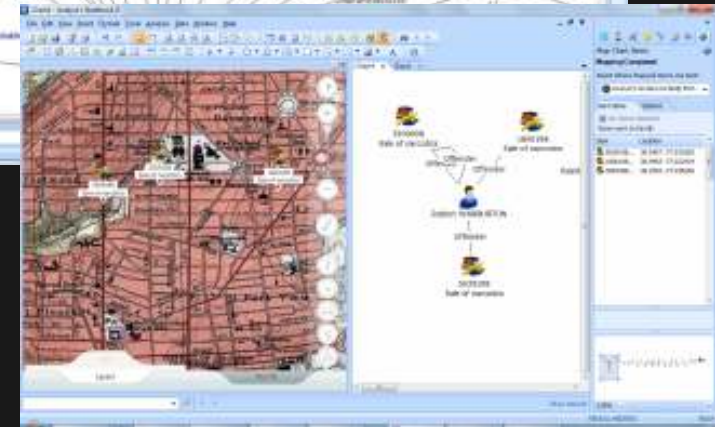
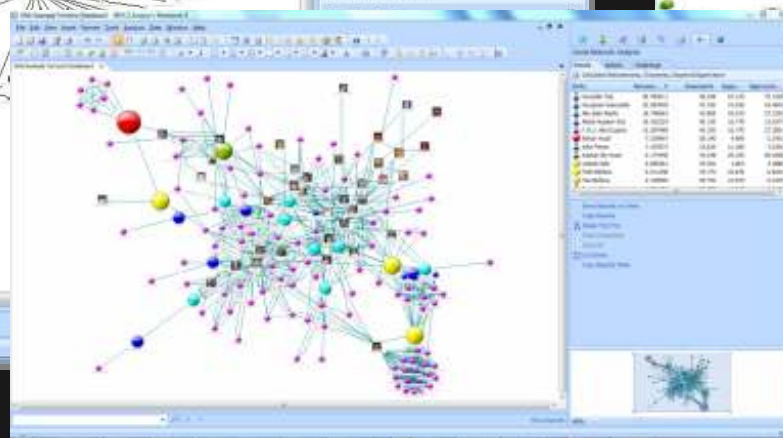
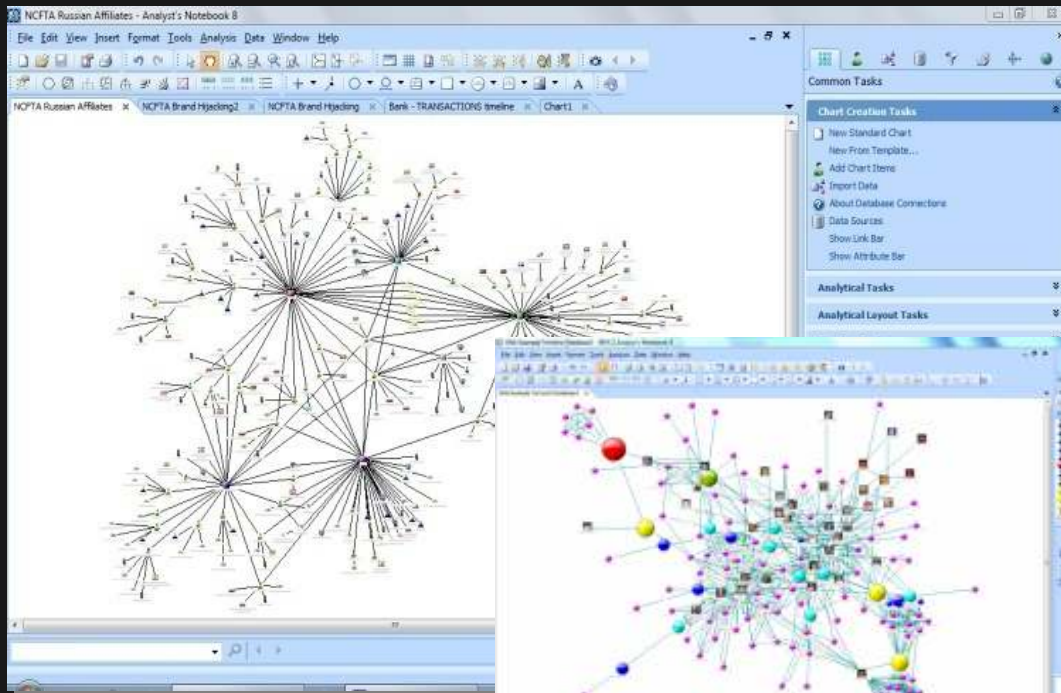
Triggers when object appears in region, stops and remains still for period of time.



Object Removal

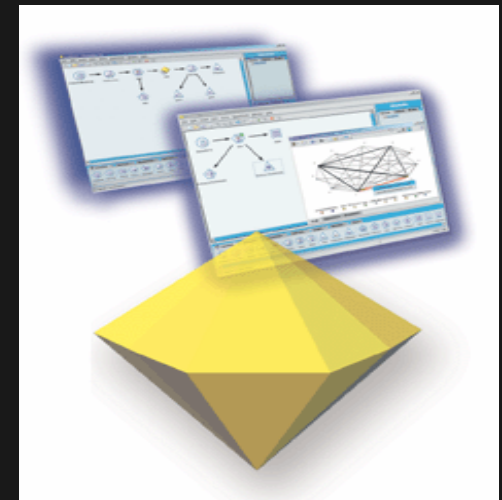
Triggers when object which has been still in image for long time starts to move.

Identifies Individuals, Groups, Events, Locations, Commodities, Communications, etc. and build relationships



In Summary

- Accessing VAST amounts of information
- Improve productivity during investigations
- Quickly identifying non obvious relationships
- Turning Information into Intelligence
- Reduce the Analysis time cycle through to enforceable actions





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