

# Using IBM Case Manager for Investigations to Address Real-World Challenges in Law Enforcement

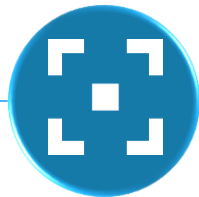
Michael Green, Product Manager,  
ECM Solutions

December 4, 2014



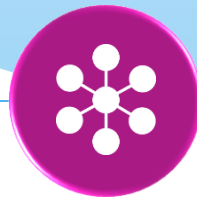
# Investigators require different capabilities to drive better outcomes...

Managing investigations requires knowledge-based decisions that are driven by the specifics of the case – not a defined process – which puts an added emphasis on context and informed collaboration



## Capturing relevant Information

- Understanding
- Evaluating
- Analyzing



## Collaborating

- Internally
- Externally
- Communicating

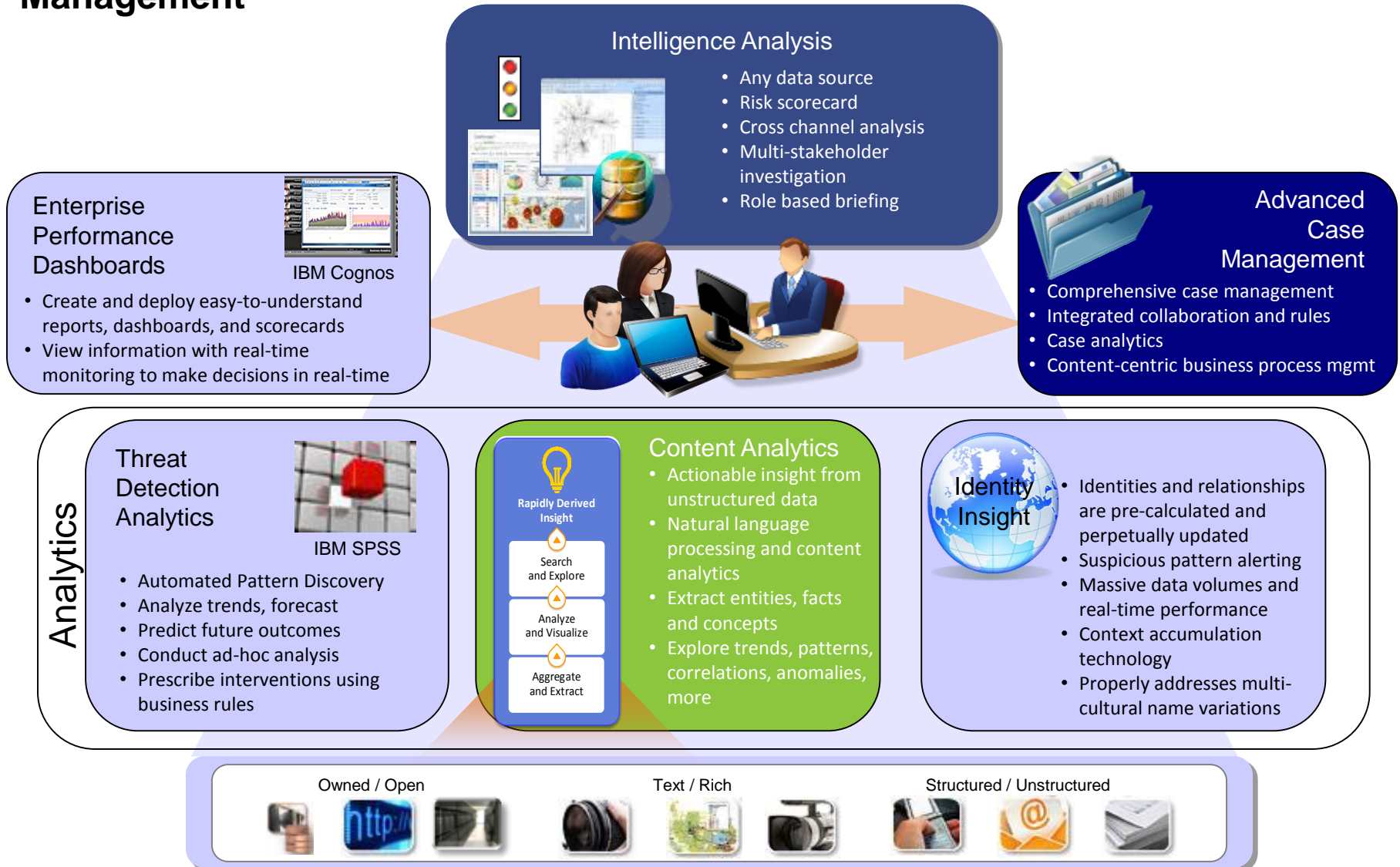


## Decision making

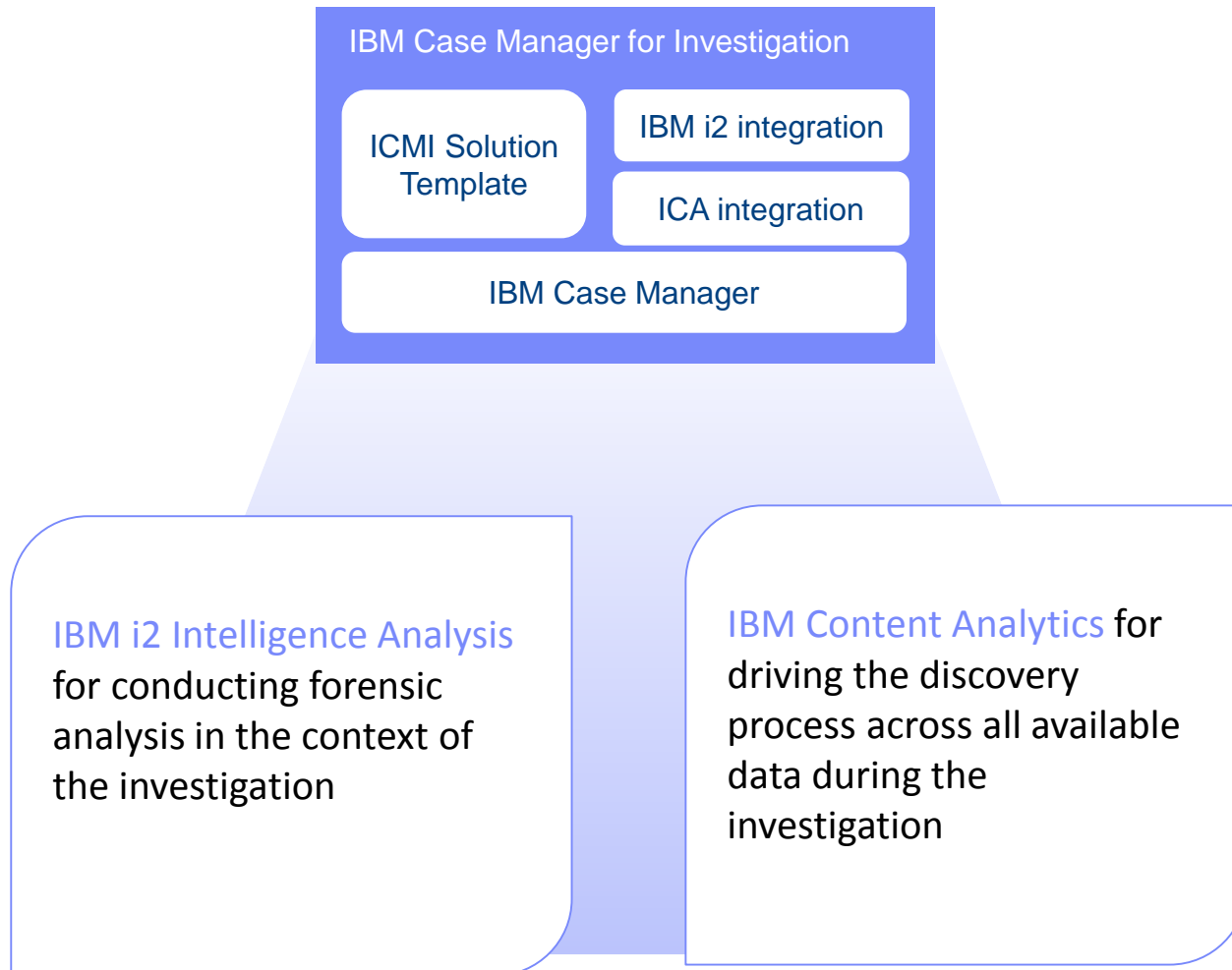
- Taking action
- Resolving
- Recording and reporting

All grown in complexity, urgency and customer expectation

# IBM Case Manager is the hub of a holistic approach to Counter Fraud Management



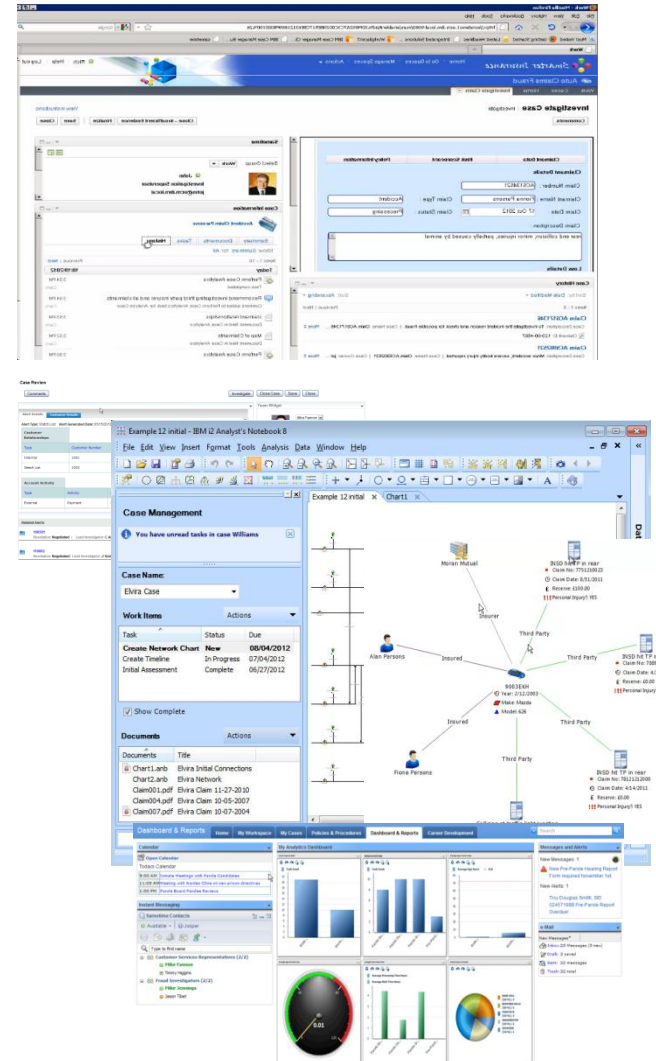
# IBM Case Manager for Investigation components



# Introducing IBM Case Manager for CF Investigations

## A new solution for optimizing investigations

- Leverages capabilities of IBM Case Manager, IBM i2 Fraud Intelligence Analysis and Watson Content Analytics
- Efficiently **process** cases and **coordinate** activity across the investigative team
- **Conduct forensic analysis**, generate leads, **visualize** the scope of the fraud and **gather evidence**. Capture results **directly into the case**.
- Discover new entities, patterns and insights by **searching through structured and unstructured content**
- Facilitate the management of the case including the **handoff** to supervisors, litigators or other authorities
- Provide transparency into the effectiveness of the investigative process using integrated **KPI reporting and analytics**
- Use pre-configured capabilities to **quickly and easily tailor** the solution to your specific requirements



**Review Incident** | Triage

[View Instructions](#)

Comments Actions Check List

Incident Data Persons Vehicles Enriched Data

### Offense Incident Report

Agency Report Number  
**LPD-140623-00076**

L.E. Exempt
  Domestic Violence
  Gang Related
  Juv in Report
  Juv Warn/dismis

EVENT DATA

Case Name	Original Reported Date	Time Dispatd	Time Arrived	Time Completed	
GAS-X MURDER	SUNDAY, 06/22/2014 10:12	10:14:17	10:16:25	11:47:07	
Incident From	Incident To	Signal	Classification		
SUNDAY, 06/23/2014 10:10	SUNDAY, 06/22/2014 11:45:28	39	PENAL CODE VIOLATION		
Incident Location	City	Zip	District	Grid	Area
3512 NW 74TH AVENUE	MIAMI	33186	K	1986	2
Business Name/Area Identifier	Location Type	Forced Entry	#Perm Ent.	Occupancy	
GAS-X STATION	CONVENIENCE STORE/GAS STATION				

**Event Description**

SUSPECT ENTERED THE STORE DEMANDING CASH FROM THE CASH REGISTER. WHEN LEAVING THE SCENE THE SUSPECT SHOT AND KILLED A MINOR WHO WAS HIDING BEHIND THE COUNTER NEAR THE CASH REGISTER

OFFENSES

Description	Type	Action	Statute	Subsection	Ordinance	NCIC/UCR	Weapons
HARRASING WITNESS/VICTIM INFORMANT	FELONY	COMMITTED	034.22(3)(D)	3D			HANDGUN
WEAR MASK TO INTIMIDATE	MISDEMEANOR	COMMITTED	876.2				HANDGUN
MURDER	FELONY	COMMITTED	034.01(1)(A)	1A			HANDGUN

Investigate Close - Insufficient Evidence Save Close

**Documents**

Tasks History

Add Open Actions

Home

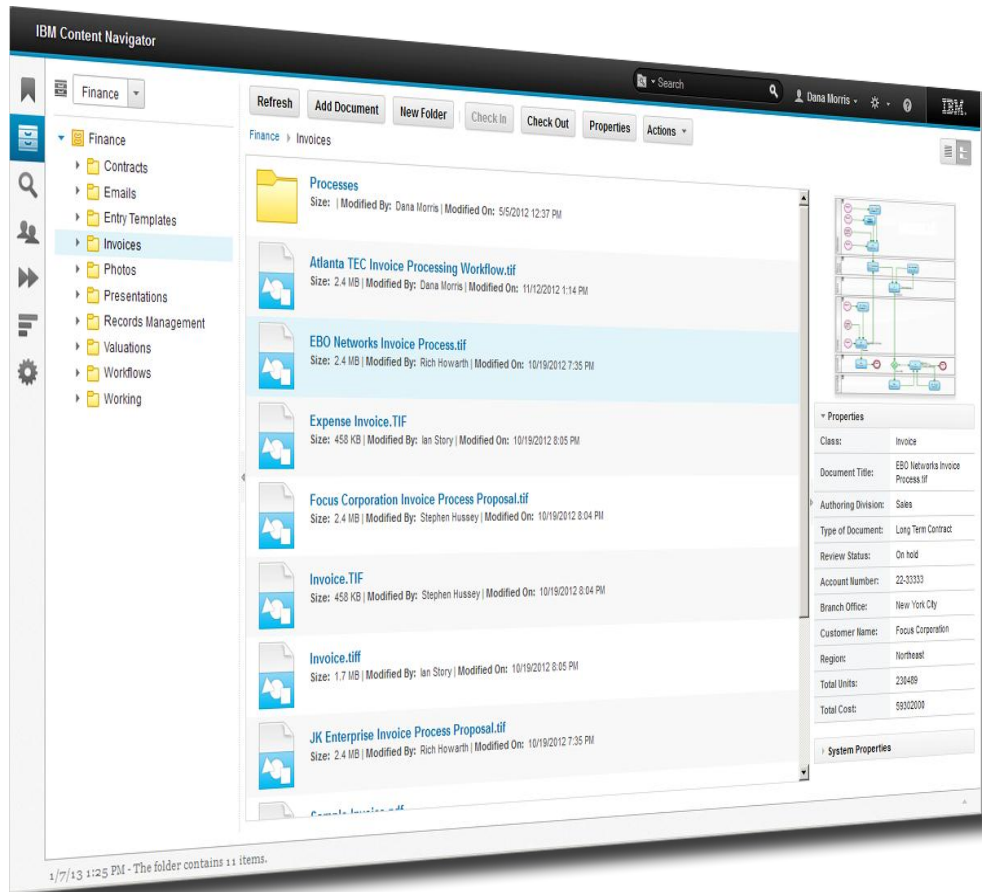
- ▶ Section 1
- ▶ Section 2
- ▶ Section 3 - Subject Information
- ▶ Section 4
- ▶ Section 5 - Crime Scene
- ▶ Section 6 - Miscellaneous

Related Cases

Add Delete

Case ID	Case Type	Creation Date	Created By
CCM_CasInves	Case Investigation	Sat Jun 14	P8Admin

# Benefits of Content Navigator for ICM

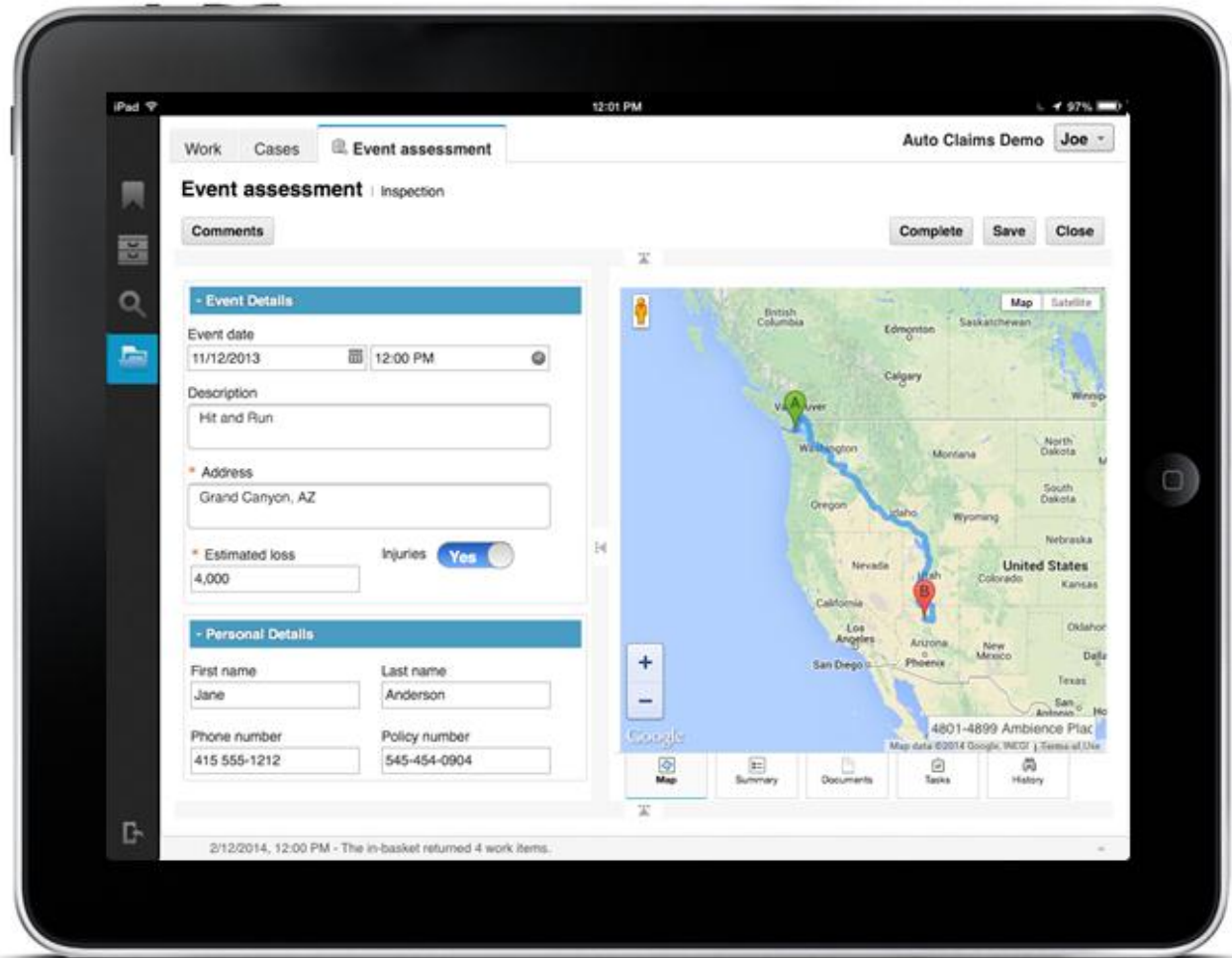


- Web-based case client that is ready to go with every new case solution deployed - built on the new **IBM Content Navigator Framework**
- Case client UI customization directly in Case Builder
- Case client can be configured to display other Content Navigator features to create a more integrated Case and Content environment
- More extensive customization using standard and well-accepted web development methods

*ICM clients to be built on Navigator framework*

## Case Mobile – Customized Work Details

- Part of the native Content Navigator iPad app
- Displays solution pages the way they were designed with mobile tweaks where appropriate
- No updates to app are required when case solutions are modified





# The Intelligent Investigation Template

- Pre-configured for investigative use cases
- Pre-defined roles, flows, user interfaces
- Integrations with i2 and ICA

The screenshot shows the 'Investigator Work Page' in IBM Case Manager. It features a navigation bar with 'Cases', 'Analytics', 'Intelligent Analysis', and 'Dashboard'. Below the navigation, there's a 'Filter' section with 'No filters applied' and a 'Reset' button. A table lists two 'Investigate Case' entries with columns for Step Name, Subject, Case Name, Value (USD), and Time Created. To the right, there are sections for 'Team Communication' and 'Notifications', which includes a table of notification items with columns for Subject, Sender, and Date.

Step Name	Subject	Case Name	Value (USD)	Time Created
Investigate Case	Investigate	FBK Banking & Financing		1/22/2014, 9:00 PM
Investigate Case	Investigate	Highland Ridge		1/22/2014, 9:00 PM

* #	Subject	Sender	Date
*	New task assigned to analyst role	System	1/22/2014, 9:00 PM
*	New task assigned to analyst role	System	1/22/2014, 9:00 PM
*	New task assigned to analyst role	System	1/16/2014, 8:10 PM
*	New task assigned to analyst role	System	1/15/2014, 10:14 PM

The screenshot shows the 'Case Detail View' for 'NH8 Pile Up' in IBM Case Manager. It includes a header with 'Cases', 'Work', 'Analytics', 'Intelligent Analysis', and 'Dashboard'. Below the header, there are buttons for 'Comments', 'Add Task', 'Add Custom Task', and 'Split Case'. The main content area is divided into 'Documents', 'Tasks', and 'History' tabs. On the right, there are input fields for Case Name, Case Description, Case Owner, and Case Status. At the bottom, there is a timeline view showing the case's history from Dec 25, 2013, 12:48:00 AM to Dec 25, 2013, 12:58:00 AM.

# Extensible Document Viewer

IBM Counter Fraud Management
John -

Work

Cases

Home

Review Claim

### Review Claim | Triage

[View Instructions](#)

**Comments**

Policy	Claim	Counts	Anal
<b>Item</b>	<b>Match</b>	<b>Value</b>	
Last name	✔	Batke	
Phone number	✔	780-700-06	
Existing record match	✔	Kristina Bat	

Meta-data	Claimant	Matched Ident
Entity ID	9001	34001
Alert Count	1	1
Watch List Ind	false	false
Alert ID	369	539

**IBM Case Manager - Viewer**

ISO x |

7/9/2013 Page: 000

ISO REPORT RESULTS Date of Order: 7/8/2013

Policy: 999-99-999876

Focus Insurance

Requestor: Insurance Claims Supervisor Ref. #. 000-1234-56

---

RECAP:                      Subject 1 – 1 Claim(s) Reported

                                  Vehicle 1 – 1 Claim(s) Reported

                                  Subject PRC – 1 Claim(s) Reported

-----MESSAGES-----

ISO'S GEOGRAPHIC UNDERWRITING SYSTEM: RESULTS REPORTED.

VERIFICATION AND REPORTS IN THE ADDITIONAL INFORMATION SECTION.

-----SEARCH REQUEST-----

Subject #1

Name: Chriztal Batke

Address: 15 Sanded St. Bawlf, AB TOB OJO

D.O.B: 6/9/81

D/L: 012 345 678

-----VEHICLES-----

2009 Toyota Camry JT2ST88POL2345678

-----REPORTED CLAIM HISTORY-----

Reported loss history with identification information that is underlined may not apply to this risk and should be verified prior to use. This report is not a recommendation. Subscriber should independently determine what action, if any, to take.

**Investigation Details and Progress**

Documents
Tasks
History

Add
View
More Actions

- **Case Analytics**  
Modified: P8admin | 7/8/2013 6:08 PM
- **Correspondence**  
Modified: P8admin | 7/8/2013 6:08 PM
- **Evidence**  
Modified: P8admin | 7/8/2013 6:08 PM
- **Alert Summary for claim number 999-99-999876**  
Modified: P8admin | 7/8/2013 6:08 PM
- **ISO**  
Modified: P8admin | 7/8/2013 6:08 PM
- **Witness Statements**  
Modified: P8admin | 7/8/2013 6:08 PM

**Insufficient Evidence**

---

**Investigation**

Carly

Social Network An

---

Bill

Customer Service

Insufficient Evidence

Investigation

Carly

Social Network An

Bill

Customer Service

# Ad Hoc, Flexible Tasks

Caseworkers can view and start new tasks for a case, changing how that case is handled on the fly.

# Capabilities to optimize investigations

- Out of the box support for:
  - Tracking related cases
  - Collaboration within the investigative team
  - Checklists
  - Conducting meetings and interviews
  - Creating case summaries

**Related Cases**

Add Delete

Title	Created
CaseB	11/7/2014
CaseC	11/21/2014

CaseA

Summary History

Show: Summary for: All

**Today**

- Related item: CmAsa- The claimant is same, hence relating these cases. 5:28 PM P8Admin
- Triage Task started 5:08 PM P8Admin
- Triage Task ready 5:08 PM P8Admin

**Dynamic Properties**

Add Delete

Save Close

Property	Comments
Total number of employees	
Bank registered year	

Supervisor Checklist Manage Checklist

Description : Supervisor things to check

Status : Working

Required : false

Due Date : 01/31/2014

Item	Description
Fraud Analysis	Risk score review
Case Review	Review with Fraud team
Investigation Meeting	Meeting with case investigators
Case Packaging	Generate Case Report

## Overview Comments

## Table of Content

- Case Properties . . . . . 1
- Related Cases . . . . . 1
- Custom Properties . . . . . 1
- Case Information . . . . . 1
- Case Documents . . . . . 1
- Case Comments . . . . . 1
- History of Actions . . . . . 1
- Case Events . . . . . 1
  - Triage . . . . . 1
  - Investigate . . . . . 2
  - Perform Case Analytics . . . . . 2

# Complete case context is critical for Analysts

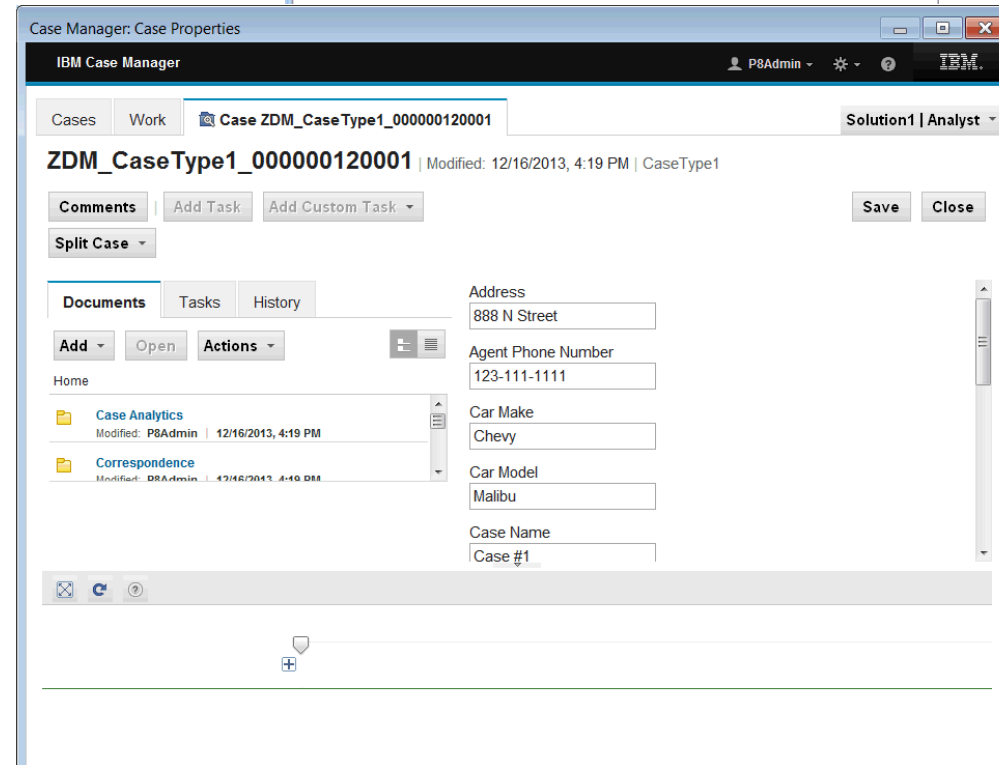
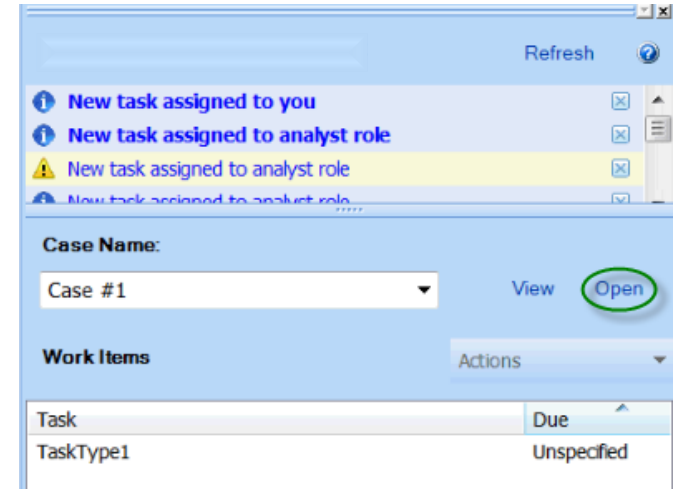
- Analyst can directly interact with:
  - Notifications
  - Cases and work assigned
  - Case Properties
  - Case Documents

The screenshot displays a user interface for case management. At the top, there is a notification bar with several messages: 'New task assigned to you', 'New task assigned to analyst role', and 'New task assigned to analyst role'. Below this, the 'Case Name' section shows 'Case #1' with 'View' and 'Open' buttons. The 'Work Items' section is currently empty. The 'Documents' section shows a hierarchical tree structure under 'Case #1's Documents', including folders for 'Case Analytics', 'Correspondence', 'Evidence', and 'Level12', along with a document titled 'Meeting notes from Dec 17'. A 'View Case Properties' dialog box is open, displaying a table of case details.

Name	Value
Address	888 N Street
Agent Phone Number	123-111-1111
Car Make	Chevy
Car Model	Malibu
Case Name	Case #1
City	Costa Mesa
Claim Amount	1500
Creator	P8Admin
Customer ID	12347
Customer Name	Brendan Smith
Date Created	12/16/13 4:19:45 PM
Date Last Modified	12/16/13 4:19:46 PM
ID	{DAEA529B-D70A-475D-B1C6-2173E79FEE91}
Incident Date	
Insurance Agent	Henry Ford
intMultiOrop	[1, 2, 3]
intProp	5
Last Modifier	P8Admin

## Direct Access to the case from i2 Analyst Notebook

- Analyst can open the case details in Case Manager
- View all case details
- Annotate documents
- Create new cases
- Split cases



# Content Analytics enables agencies to ingest, search and analyze unstructured and structured data from multiple sources

## Content Analytics for Public Safety

Enables agencies to ingest and analyze investigative documents

### Correlation of data

- Correlate unstructured information (reports, notes) to structural systems

### Analysis of unstructured information

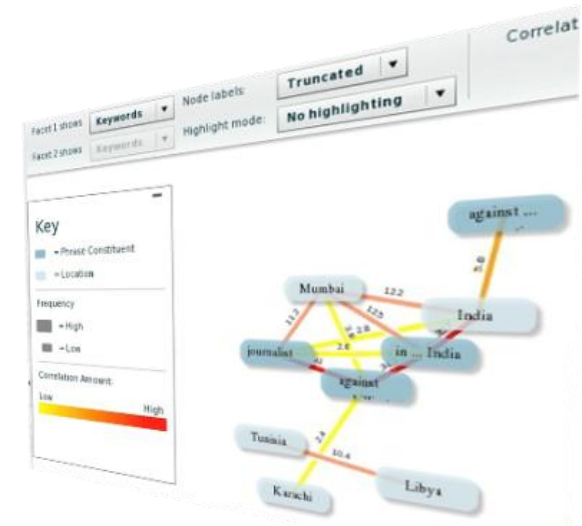
- Derive and identify new trends, patterns and anomalies

### Connections between structured and unstructured data

- Provide a 360-degree view of suspects and relationships

### Advanced analytical features

- Semantic searching, risk alerting, SNA etc... help turn volumes of data into a wealth of insights



A European-based law enforcement agency used IBM Content Analytics as part of a major pedophile investigation. The agency applied IBM Content Analytics to a combination of web social network data and seized computer data to analyze the relationships between members of the pedophile ring.

# Unstructured data analysis increases the observation space...

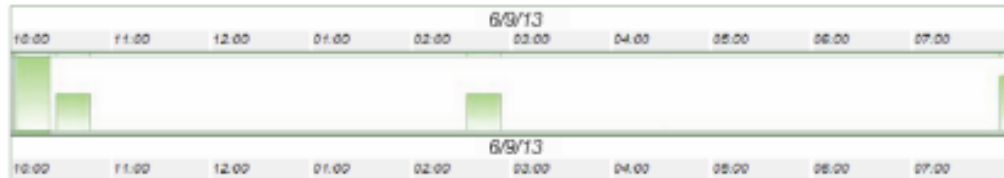




# Real Time Tracking

IBM Counter Fraud Management Rich

Work Cases Home **Review** Focus Insurance | Investigator



<b>Inv1306072013</b> Created on 10/9/13	
<b>Review Medical Records</b> Started on 6/9/13, 6:40PM	
<b>Interview Witness</b> Started on 6/9/13, 6:20PM	
<b>Inspect Property Damage</b> Task Completed on 6/9/13, 5:47PM	
<b>Inspect Automobile Damage</b> Task Completed on 6/9/13, 4:45PM	
<b>Inspect Accident Site</b> Task Completed on 6/9/13, 3:49PM	
<b>Review Forensics/Analysis</b> Task Completed on 6/9/13, 2:10PM	
<b>Review Police Report</b> Task Completed on 6/9/13, 11:40AM	
<b>Review Witness Statements</b> Task Completed on 6/9/13, 10:30AM	
<b>Review Claim History</b> Task Completed on 6/9/13, 10:30AM	

**Review Medical Records**  
 6/9/13 6:40PM - Not Completed  
 Current Status: Available  
 Date: 6/9/13, 6:40PM  
 User: Rich Rogers

## Metrics and Key Performance Indicators (KPIs)

Business users can create realtime case monitoring dashboards

They can set KPI thresholds to trigger critical alerts



Reports, dashboards, and KPIs can be based off of case state, handling times, or any custom case properties

# Case Packager

IBM Counter Fraud Management

Rich ▼
TUE 12:05

Work Cases Home

Manage Roles Add Case ▼

Investigator My Work (3)

Filter: No filters applied Reset

Time Created
08 Jul 2013 6:08:51 PM
17 Jun 2013 11:22:13 AM
24 May 2013 11:38:43 AM
15 May 2013 11:38:43 AM

Active cases in my department

Sort by: Date Modified ▼

Items 1-10

[Inv1306072013](#)

Case Description: | Case Name: Inv130  
Resolution Date: ...

Case state: Working | Claimant Name: (

[Inv1306101146](#)

Case Description: | Case Name: Inv130  
Resolution Date: ...

Case state: Working | Claimant Name: )

[Inv1306041750](#)

Case Description: | Case Name: Inv1306041750 Case Owner: John | Case Status: Finalizing | Resolution Insufficient Evidence |  
Resolution Date: ...

Case state: Working | Claimant Name: Thomas White

CasePackage.pdf - Adobe Reader

File Edit View Window Help

1 / 1 101% Tools Sign Comment

Focus Insurance: Auto Fraud Investigation Claim: 999-99-999870

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Previous | Next

Sender	Sent date
System	7/8/2013 6:49 PM
System	7/1/2013 2:48 PM
System	6/17/2013 6:57 PM
System	5/24/2013 2:08 PM

st role

Notification type New task Priority 2

감사합니다 Natick  
Danke Ευχαριστίες Dalu  
Grazie Thank You Köszönöm  
Спасибо Dank Gracias  
谢谢 Merci Seé  
ありがとう

Obrigado

## Alert Management: Default Configuration Underway

- Platform already supports all major requirements, but configuration is required
- Default configuration (templates) underway now in the lab to minimize configuration effort
  - Scope:
    - Alert Queuing & Administration (routing of alerts to people/groups based on logic)
    - Alert Triage & Administration (screens, widgets, fields, workflow)
  - Timing: End Q1 2015 ??
- Key concepts:

### Queuing

- Architectural blueprint for which tools to use for which functions and how they fit together
- Default logic for routing alerts based on TD requirements

### Triage

- Building blocks for major entities (customer, account, check, device, alert, case, etc)
- Standard UI interaction paradigm so all fraud typologies follow the same approach for layout, viewing summary vs detail information (drill down), workflow, and data entry

The screenshot displays the IBM Smarter Counter Fraud 2 interface. The main window shows an 'Alert Summary: Additional Information' for Alert 12321. The alert is categorized as 'High Priority' and 'Score 98'. The account information shows a current balance of \$100,000 and an average balance of \$75,000. The customer information identifies Antonio Smith, a 56-year-old male, with a spouse, Jose Smith. The device details show an Apple iPhone 6, registered to a trustee, with a poor reputation and high ATO risk.

ID	Type	Current Balance	Average Balance	Overdraft Limit	Home Branch	Watchlist
95765	Personal	\$100,000	\$75,000	\$1,000	87767	Yes

ID	Customer	Segment	Phone	Case Association	On List	Personal
1234	Antonio Smith Male 56 years 08/21/1958 KYC 72 Sales Associate Best Buy	Personal	(954) 455-7867 1000 Seah Street Anytown, FL 33327	Spouse	Watch Monitoring Exempt PEP	American 33322-8444 FL_ID1837193219 Venezuela USA

Device ID	Source (T)	Registration	Watch List
954.123.1212	Trustee	Poor	Yes