



J A D E



J A D E

CMIS

**CASE MANAGEMENT & INTELLIGENCE
SYSTEM**

What is CMIS?



What is CMIS?



- A custom built, computer based case management and intelligence system
- Originally designed by, and built for, Australian Federal Police
- Built from the ground up in Jade to be flexible, secure and powerful, yet simple to use and understand
- Designed to be able to store all case and intelligence information for any size organisation – from a small investigation team in a single location, to multi agencies with thousands of users across many location
- Eliminates silos of information otherwise held in multiple databases



AFP
AUSTRALIAN FEDERAL POLICE



Users of CMIS

- Specialist highly secure AFP investigative teams
- Australian Law Enforcement Co-operations Programme
 - Aid-based Capacity Building Programme aimed at stopping international crime before it crosses Australian Borders
 - Software and Training is gifted to increase law enforcement capacity
- Other Gifting Programme
 - US Drug Enforcement Agency - Thailand
 - British Embassy – Serbia
- WA Crime & Corruption Commission
- Now in 11 countries





J A D E™

What makes CMIS different?

- CMIS is a single integrated system, capable of holding all operational and intelligence information for single or multiple agencies
- Multiple agencies can use a single CMIS database, but “own” their information
 - They can share none, some, or all with other agencies using the same CMIS database
- There are no artificial boundaries that separate information gained during an investigation from informants, officer observations, and reports by the public
- Query and analysis tools act on all data, irrespective of source or context (subject to security)
- A single query will return **all** information about any particular entity (subject to security)
- Real time, complex analysis and diagramming are possible without data stripping/extracting

What makes CMIS different?



- Multi-lingual – currently
 - English
 - Indonesian
 - Serbian
 - Chinese
 - Thai
- Other languages to follow
- Can be user configured to suit local work practices, organisational structures, and data requirements
- Scalable from 1 to many thousands of users
- Easily maintained by existing IT staff





J A D E™

CMIS is very secure

- Data can only be accessed through the application
- There are no database administrator tools giving unaudited system access
- Uses a simple, consistent, fine grained security model that manages the access to EVERY individual piece of stored information
- Changes to the security of any piece of information or any function are effected immediately across the entire system
- Uses a system of roles and permissions to manage access to functionality
 - most objects have separate create, modify and delete permissions





J A D E™

CMIS is very secure

- All user actions for all users are recorded
 - log on,
 - log off,
 - create & modify (stores original and updated versions for all changes),
 - delete,
 - search,
 - view,
 - print
- All deletes are logical, not physical deletes
 - the deleted record can be viewed by an authorised user, if required
- User accounts are automatically deactivated after an administrator defined number of unsuccessful log on attempts





J A D E™

Maximum simplicity and power

- CMIS is consistent and simple
- Consists of “system” or “tangible” entities and relationships between them
- “System” entities are incidents, cases, case notes, information reports, and tasks, as they exist only within CMIS
- “Tangible” entities are persons, locations, contact numbers, organisations, etc., as they represent entities that exist in the real world
- Every tangible entity behaves in the same manner, irrespective of type
- CMIS can be learnt very quickly by people with intelligence analysis experience




J A D E™

Entities

- CMIS can record any sort of information about any entity
- CMIS has a standard set of entities and attributes that can be extended easily and quickly by an authorised user
- New tangible entities and attributes can be used and searched for immediately
- CMIS can store sound, video, images, files, text

Entities

Case Maintenance
Details
Contents
Attributes
X



- Details
- Contents
- Attributes
- Search Within
- Threads
- Diagram
- History

Case Officer
JACKSON, Anthony (AFP4254)

Security Access

Available

- AGCYA - Team 1
- Directors
- Everybody
- Team 1
- + Individual Users

< Selected ([X] = View Only)

- + Directors
- + Team 1

Case Number 000044

Title

Operation Mouse

Description

Investigation into the criminal activities of John SMITH

Extract
Report
New
Save
Delete
Close



JADE™

www.jadeworld.com

Entities

Case Maintenance

Details Contents Attributes

Search New Edit

Contents

#	Date	Time	FI	Title
000053	4/08/2004	17:20		Importation of amphetamines
000002	8/12/2004	01:00		Registration check ABC123
000001	7/03/2005	23:10		Vehicles sighted at 23 Smith St Weston
000003	7/03/2005	23:16		Registration check RKK888
000004	7/03/2005	23:17		Habitation check on 56 West St Ryde
000005	7/03/2005	23:18		Records check on Frank Gardiner
000006	7/03/2005	23:22		Records check on John Gardiner
000008	22/03/2005	21:00		Information form Registered Informant 1234
000009	4/04/2005	12:24		Habitation check on 34 Fern St
000014	29/05/2005	01:08		Subscriber check 02 94514065
000015	7/06/2005	19:40		Execution Of Search Warrant at 88 Green St
000016	7/06/2005	19:41		Subscriber check 02 52345234
000017	7/06/2005	19:42		result of sub check
000018	8/06/2005	22:59		Enquiries at Westin Hotel
000019	8/06/2005	23:00		sub check 5463456
000020	8/06/2005	23:01		sub check result
000021	22/06/2005	17:09		Company Director check - Brown
000022	22/06/2005	17:10		Phone call information from Westin Hotel
000023	27/06/2005	12:12		Surveillance of Brown - 27/6/2005


Extract New Save Delete Close

Details Contents Attributes

Threads Diagram

Entities

Person Maintenance
Details
Related Text
Attributes



Details

Related Text

Attributes

Diagram

Images

Entity Id 0000073

Family name

Given name 1 Given name 2

Given name 3

Title Gender

Date of birth

Date of death

Limited Release

Relationships

Relationship	to
subject of (subject)	bali
subscriber of (subscriber)	61-2-67890123
accountant (accountant)	MICHAEL, Ian, 01/Oct/
relative of (relative)	MICHAEL, Ian, 01/Oct/
employed by (employer)	ACME Rocket Co
employed by (employer)	Acme Airlines

Limited Release (...entity does not actually exist)


Filter

- Case Note
- Contact Number
- Image
- Information Report
- Location
- Organisation


Entities






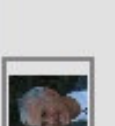
Person Maintenance
Details
Related Text
Attributes
X


Images for entity
Thumbnails
Filmstrip



- Details
- Related Text
- Attributes
- Diagram
- Images





Clear Identifying Image

Set Identifying Image

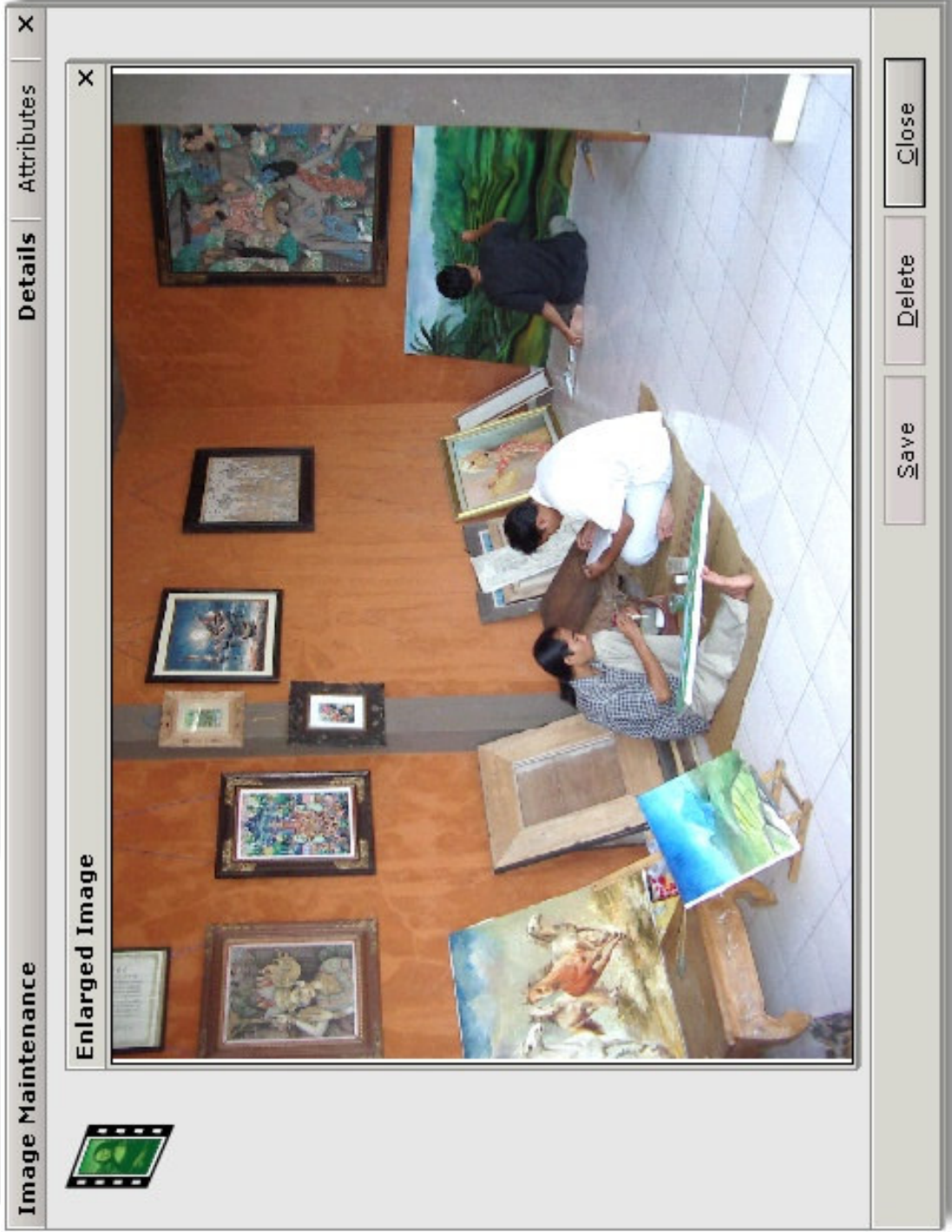
Extract

Save

Delete

Close

Entities



Searching

- All text entered in CMIS is available to be searched. Includes text in
 - Word docs,
 - Excel spreadsheets,
 - PowerPoint presentations,
 - PDF docs, etc.
- Searches can be made against a single entity, or against all entity types at once
- Can be simple exact matches, or complex boolean expressions and wildcards
- Can use a thesaurus to find broader terms, narrower terms, or synonyms in text



J A D E™



Searching

- Related entity searches allow a search for a particular entity that is directly or indirectly related to another entity
 - For example, search for all persons with black hair, blue eyes, between 180 and 210 cm tall who are directly or indirectly connected within a user defined number of levels to an address in a particular suburb/town/city
- Convergence searches allow a search for other case notes and information reports that contain all or some of the entities in a selected case note or information report
- Active searches allow a user to be notified when a new entity is added that matches certain criteria



J A D E™



Searching

Case Search
Standard
Attributes
Extended
X

Enter Criteria below

Search words

Any Words

Start Case # End Case #

Case Officer

Created Date Range - From To

Show Deleted

Results

Case #	Title	#	Contents	Created Date	Case Officer

Additional Detail

Built in Jade

- Manipulating and storing entities as objects enables CMIS to store, process, and retrieve information that would be difficult or impossible to do in a relational database
- Application development speed is significantly greater than with “conventional” systems



J A D E™



J A D E™

Flexible dates and times

- Exact date (eg. 2 April 2005)
- Unbroken date range that can cover a continuous number of days spanning months or years (eg. Sometime between 2 March 2005 and 5 April 2006)
- Broken date range, that can cover a discontinuous number of days spanning months or years (eg. All Sundays in March and April 2005)
- Unknown date (where something is known to have happened, but no date range is known)
- Exact time (eg. 6:15am)
- Unbroken time range (eg. Between 6:00am and 11:30am)
- Broken time range (either 6:00am, 10:00am, or 11:00am)



J A D E™

Covert & Overt notification

- CMIS allows an authorised user to flag any entity for covert or overt notification
- Covert or overt notification, if that entity or a directly related entity is viewed by any other user
- Covert or overt notification, if that entity or a directly related entity is updated by another user
- Covert notification, if that entity is searched for by another user, whether or not that user has security to view



CMIS Concepts

- System entities are Incidents, Cases, Case Notes, Information Reports, Tasks
- An Incident
 - Contains a narrative of information
 - May be the reason for a Case being created that is linked to the Incident
 - May be a User defined incident type to capture information about specific types of incident
- A Case
 - Is a repository for all information about a single investigation
 - Contains zero, or one or more (no limit) Case Notes.
- A Case Note
 - Contains a narrative of a single investigative activity in a Case
 - Together with other Case Notes, contains all information about a Case
 - May be shared between Cases, if the information is relevant to multiple Cases
 - May be related to other Case Notes in a process called “threading” that represents the logical flow of an investigation



J A D E™

CMIS Concepts

- An Information Report
 - Contains a narrative of information obtained from one source in one instance that does not relate to any current Case
 - May be added to a Case, if the information is relevant
- A Task
 - Contains a request to carry out a particular action and/or provide information
 - Is connected to the Case Note or Information Report that caused the task to be created
 - May have one or more recipients and each recipient may submit zero, or multiple interim results, and one final result for each Task

CMIS Concepts – Information Report



The screenshot displays the CMIS Case Management and Intelligence System (v3.2.11) - [Information Report Maintenance] window. The interface includes a menu bar (System, Information Report, Case, Search, Audit Log, Administration, Tasks, Watches, Reporting), a Navigator pane on the left with the Australian Federal Police logo and a tree view of folders (Cases Folder, Favorites, Recent) and a list of persons (GREEN, Brian, Ian; FLACK, Daryl; BITTER, Victoria; DORFMAN, Kent; KERNAN, Peter; BAKEWELL, Anna; WATSON, Harold; MICHAEL, Ian, 01). The main area is titled "Information Report Maintenance" and shows a "Details" tab for an "Information Report Number". The "Details" section includes fields for "Title" and "Description". Below this is a "Security Access" section with "Available" and "Selected" lists. The "Selected" list includes "AG1 - Team 1", "Team 1", and "Directors office". At the bottom, there are fields for "Actioned Date" (15/06/2005) and "Time" (08:40), along with "Created" and "Last Updated" fields. The bottom toolbar contains buttons for "Previous", "Next", "New", "Save", "Delete", and "Close".

CMIS Concepts

- A tangible entity is a person, place, thing or event that exists in the real world.
- Tangible entity types are:
 - BOMB – a real or hoax explosive device
 - CONTACT NUMBER – a phone or mobile phone number
 - DOCUMENT – a physical document or a document that exists in CMIS (includes sound and video files)
 - EVENT – represents any sort of occurrence such as a meeting, terrorist attack, etc.
 - IMAGE – any picture or image
 - LOCATION – any place such as a home, apartment, factory, park, etc.
 - MISCELLANEOUS – anything else that is not defined as another Entity
 - OFFENCE – an occurrence of an offence
 - ORGANISATION – a company, club, illegal organisation, etc.
 - PERSON
 - TRANSACTION – transfer of any item or property between two parties
 - VEHICLE



J A D E™



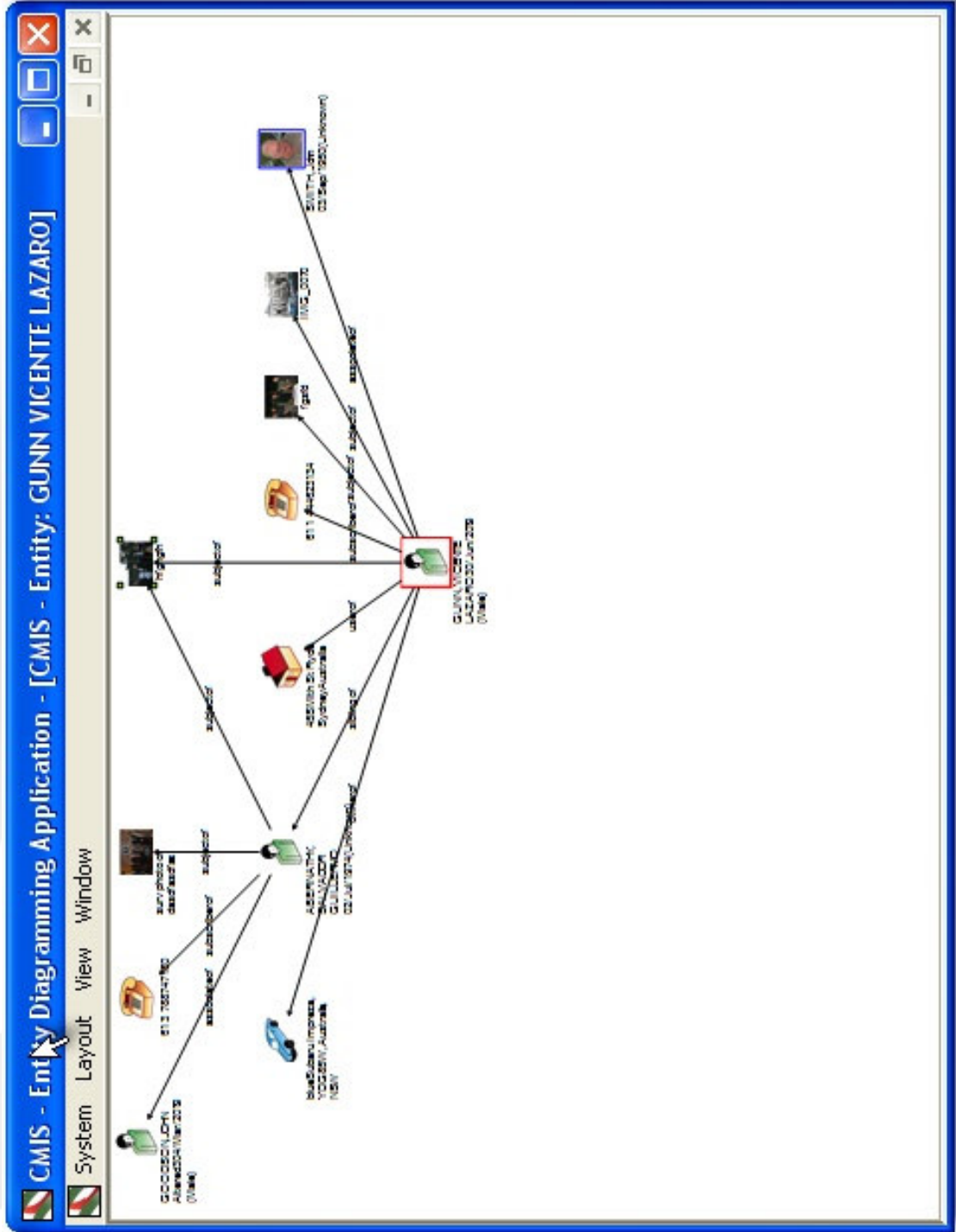


J A D E™

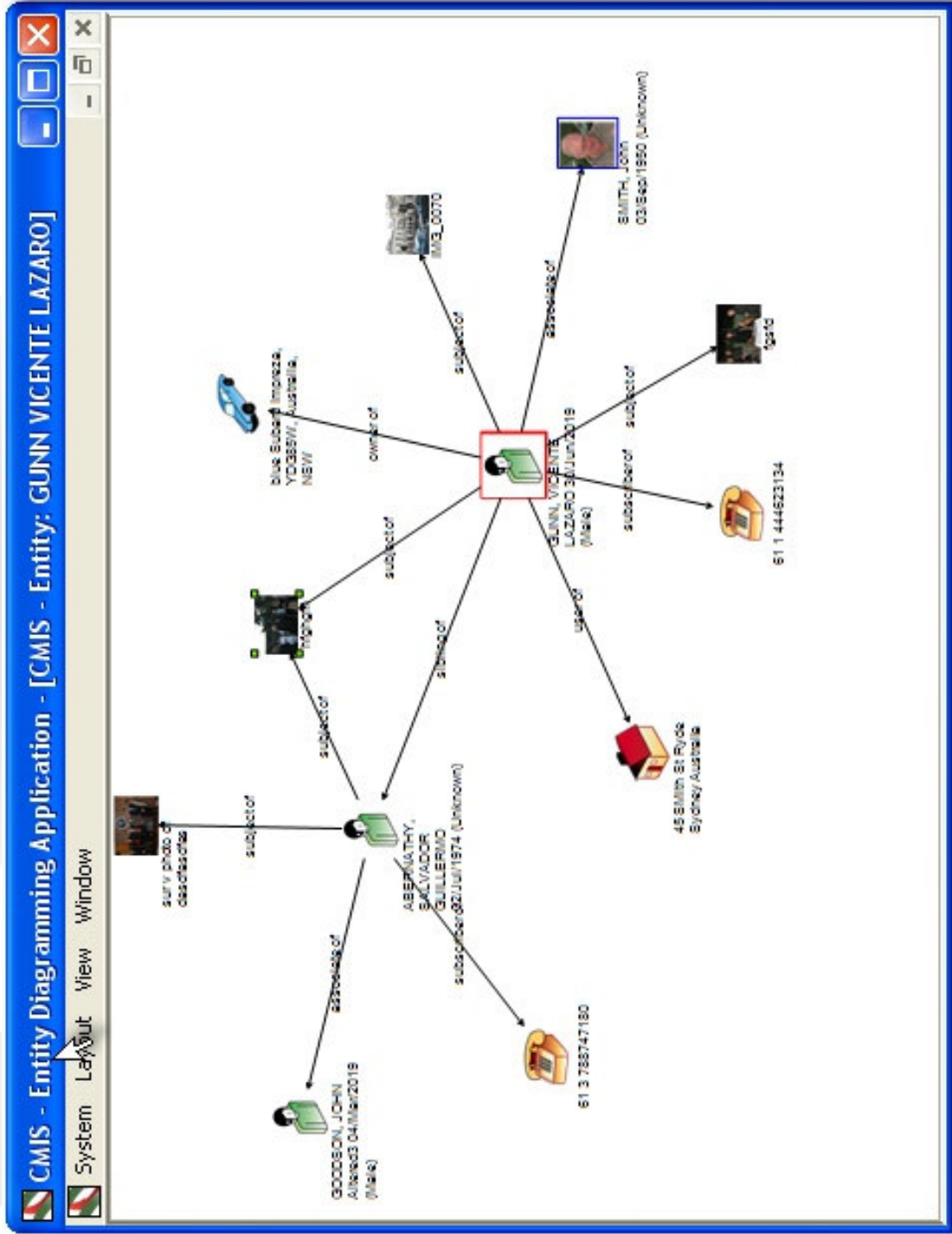
CMIS Concepts

- A Tangible Entity can be related to
 - An Incident
 - A Case Note
 - An Information Report
 - A Task
 - A Task Result
- Tangible Entities can be related to each other to represent real world relationships
- System and Tangible Entities are connected by relationships, which allows complex analysis of both System and Real World relationships


Analysis



Analysis



Reporting

Serious Crime Report Maintenance
Entities Attributes
Search to Add 
Serious Crime Report Number 000028
X

Details

Title
Discovery of illegal weapons

Description
Incident Description
Discovery of illegal weapons concealed in machinery consignment
Inquiries made at scene
Preliminary examination of consignment shows it contains at least 40 AK47 assault rifles. Consignment addressed to John Rose

Security Access

Available

- AGCYA - Team 1
- Directors
- Everybody
- Team 1
- Individual Users

< Selected (= View Only)

- Directors
- Team 1

Reported Date **Time**

Happened Date **Time**

Created 14/02/2006 15:48 by JACKSON, Anthony (AFP4254)

Last Updated 14/02/2006 16:14 by JACKSON, Anthony (AFP4254)



J A D E™

Market Potential

- Federal Police Departments
 - Money laundering
 - Terrorism
 - Drug Trafficking
 - People Trafficking

- Local Police Departments
 - Drugs
 - Gangs

- Insurance Companies, Banks, Social Welfare Agencies, Tax Departments
 - Fraud



J A D E