



Rule Based Architecture for CA Gen Applications

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Session #13

Tuesday 13 October, 13:30

Intracom Holdings *Group of Companies*

	 INTRACOM ΥΠΟΛΟΓΙΣΤΕΣ	 INTRACOM SYSTEMS	 hol business solutions	 INTRAKAT	 INTRACOM DEFENSE ELECTRONICS
MARKET POSITION	A leading regional telecommunications systems manufacturer and solutions provider	The leading IT services provider in the Greek market and a major regional IT solutions integrator	One of the largest voice/internet telecom service providers in Greece	The leading hi-tech construction company in Greece	Greece's largest defense electronics systems provider
ACTIVITIES	<ul style="list-style-type: none"> ▪ Telecoms products ▪ Turn-key solutions ▪ Network integration ▪ Professional services 	<ul style="list-style-type: none"> ▪ IT systems integration and deployment ▪ Software development ▪ Outsourcing & managed services 	<ul style="list-style-type: none"> ▪ Next generation telecommunications operator ▪ Internet, voice and data services 	<ul style="list-style-type: none"> ▪ Construction ▪ High-tech infrastructures ▪ Energy / natural gas ▪ Site maintenance ▪ Steel structures 	<ul style="list-style-type: none"> ▪ Defense electronics products & applications ▪ Co-production of defense electronics subsystems ▪ Participation in international R&D programs

BROAD PORTFOLIO OF PRODUCTS/SOLUTIONS/SERVICES

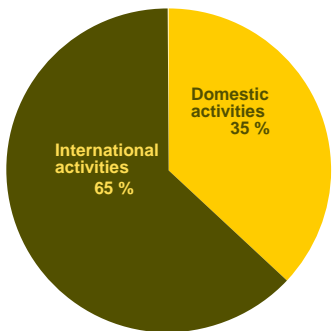


Intracom IT Services Group *Company Overview*


- **Personnel-:** 1,575 employees
 - 67% scientific staff
 - 49% work outside Greece


* December 2008
- **Certificates:** Quality Management (ISO 9001:2000), Environmental Management (ISO 14001:2004), Occupational Health and Safety (OHSAS 18001: 1999) and Social Accountability (SA 8000: 2001) management systems, CMMI 2nd level

- **2008 consolidated revenues:** €161 million;



ACTIVE IN THE IT MARKET FOR 20 YEARS



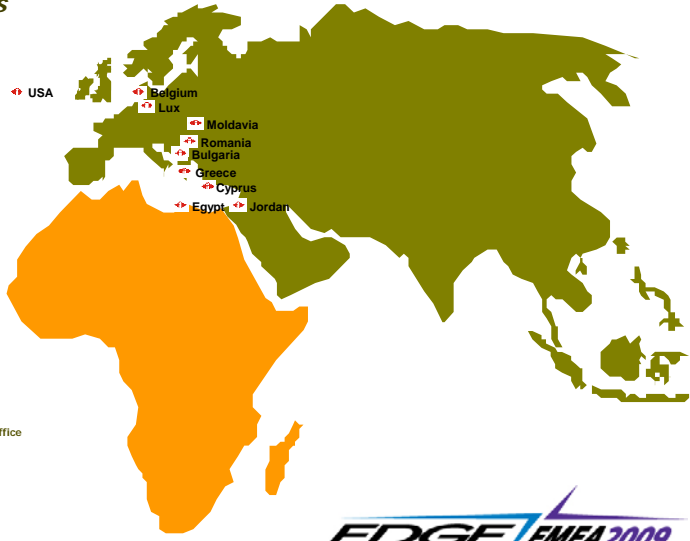



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Intracom IT Services Group in the World


Location of offices

- Greece:
 - INTRACOM IT SERVICES
 - INTRASOFT INTERNATIONAL
 - DATABANK
 - DIALOGOS
- Cyprus:
 - INTRACOM IT SERVICES
- Romania:
 - INTRACOM IT SERVICES
 - INTRASOFT INTERNATIONAL
- Moldavia:
 - INTRACOM IT SERVICES Rep Office
- Bulgaria:
 - GLOBALNET
- Belgium:
 - INTRASOFT INTERNATIONAL
- Luxembourg:
 - INTRASOFT INTERNATIONAL
- Denmark:
 - INTRACOM IT SERVICES DENMARK
- Egypt:
 - INTRASOFT INTERNATIONAL Rep. office
- Jordan:
 - INTRACOM IT SERVICES JORDAN
- USA:
 - PC Consulting Timeshareware Inc





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PROFITS® Integrated Core Banking System

- PROFITS® is an integrated banking system which covers all needs of Banking & Financial Institutions.
- The system is an ongoing development process of over 15 years and has been developed 100% using CA Gen.
- The system consists of **6,000+** executables, **1,100+** database tables, **400+** CA Gen Models made up of over **10,000+** action blocks.



profits®
Universal Banking System

Multi - Scale
Multi - Country
Multi - Lingual
Multi - Currency
Multi - Channel
Multi - Platform



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Why did we need a Rule Based System ?

- Intracom using the Profits® system supplies multiple Customers in different countries requesting different functionality using the SAME SOURCE CODE.



Bank A	Bank B	Bank C	Bank D
Client - Windows	Client - Windows	Client - Web	Client - Web, Proxy
Server - C, Oracle, Unix	Server - Cobol, DB2, ZOS	Server - C, Oracle, Windows	Server - C, Oracle, Unix
Language - English	Language - Greek	Language - English	Language - Georgian
Functionality - A	Functionality - B	Functionality - C	Functionality - D

Client Environment	CA Gen
Server Environment	CA Gen
Customer Versioning	Intracom's Versioning Tool
Language	Intracom's Translating Tool
Different Functionality	Intracom's Business Rules Suite

The ability to differentiate from one Customer to another.



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Why did we need a Rule Based System ?

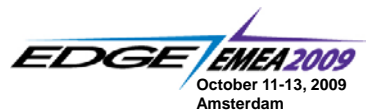
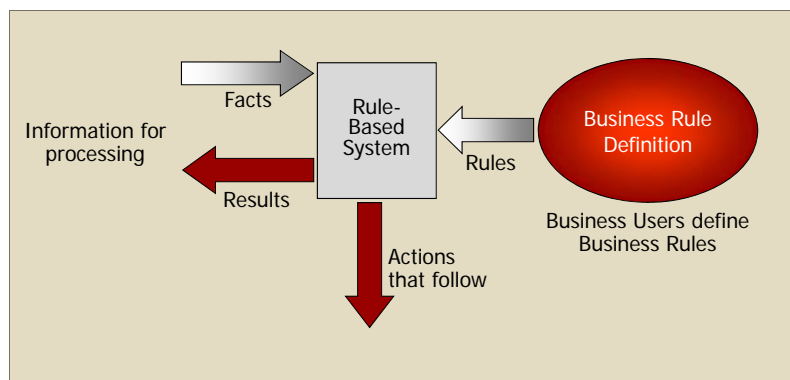


- ❖ Change Business functionality without coding
- ❖ Business Rules can be set-up by Business Users
- ❖ Drastic decrease in Development and Testing effort
- ❖ System Manageability and Maintainability
- ❖ Ability to differentiate using the same System
- ❖ Flexible in functional changes
- ❖ Functionality is Transparent to a larger group of users, including non-technical personnel
- ❖ Applications are developed closely approximating the way **People think**.



What is a Rule Based System ?

- ❖ A Rule Based System is an,
Informational System that processes Business Rules in order to analyze facts
and return results and/or call Actions.



PROFITS® – Rule Based, Report Manipulation

- Using this component we are able to: quickly define report information, transfer this functionality seamlessly to the customer and execute it through a CA Gen transaction. The runtime module remains the same for any report created.

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Universal Banking System

Reporting Rules

The screenshot shows the 'Report Definition' window in PROFITS. It includes fields for 'Project ID', 'Report ID', 'Criteria Set ID', and 'Template'. The main area displays a report structure for 'SURVEILLANCE FOR CREDIT RISK' with columns for 'Balance' and 'Total other requirements'. The report is categorized by 'Category requirements of lending' and includes sub-categories like 'Requirements to parts on a temporary basis of up to 2 months'.

Create Reports quickly.

Reports can be implemented quickly to different environments.

Trigger Mechanism for initiation – EVENT DRIVEN

Report in text, excel, xml and word format

Common execution Mechanism written using CA Gen.

No Generation needed

Create and change Reports quickly and easily without coding or generation.



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PROFITS® – Rule Based, Parametric Interface Generator

- Using this component we are able to: parametrically define file/message formats for incoming or outgoing information. Uses the simple idea of mapping information to business rules.

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Interface Rules

The screenshot shows the 'Parametric Interface Generator' window. It includes a 'File Definition' section with fields for 'File Name', 'File Code', and 'File Format'. Below this is a table mapping fields to types and positions. The table has columns for 'Field', 'Type', and 'Position'.

Field	Type	Position
Unit	Numeric - 5	1-5
User	Text - 8	6-13
Transaction	Numeric - 5	14-18
	Numeric - 5	19-23
	Numeric - 15,2	24-38

Quickly handle information sent to the system without the need for coding.

Quickly send information to another system without the need for coding.

No Generation needed

Ability to handle and send information to and from the system without coding.



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PROFITS® – Rule Based, Authorization Rules

- ❖ Ability to perform Authorization, based on any transaction information. The Authorization mechanism searches for the logged-in authorizer throughout the bank's network.



Authorization Rule

Actions: [30] [40]

Insert	Refresh	Modify	Copy	Clear	Exit
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Code: [320] [2] Rule Functionality

Description: Authorization Rule

Condition	Check Field	Function	Value	Authorizer	Authorization Co
CONDITION 1	PENALTY_DISCNT	>	10%		
CONDITION 2	TRANSACTION_AMN	>	5,000.00 EUR		
CONDITION 3	VALUE_DAYS	<	3 DAYS		
CONDITION 4	DEBIT_RATE_SPR	<	5 %		

AUTHORIZER1 ACCSUP
AUTHORIZER2 BRANRGR

EXISTING AUTHORIZED USER SUPERVISOR

BATCHGRS	SYSTEM BATCH FLOW USER
BRMGRBR	BRANCH MANAGER
BRGUP	BRANCH SUPERVISOR
CASHIER	CASHIER
CONTRCL	CONTROLLER
DEPCLRK	DEPOSITS CLERK
DEPSUP	DEPOSITS SUPERVISOR
FTCLRK	FOREIGN EXCHANGE CLERK
FGSUP	FOREIGN EXCHANGE SUPERVISOR
HLPSK	HELP DESK
HLPSKSA	HELPDESK SATELLITE
HQCLRK	HEAD OFFICE CLERK
INSCCLRK	LOANS CLERK
LOCSUP	LOANS SUPERVISOR
OPERATOR	OPERATOR
PAYCLRK	PAYMENTS OFFICE CLERK
PAYMSUP	PAYMENTS OFFICE SUPERVISOR
SATIST	SAT TESTER
SECMAGR	SYSTEMS SECURITY MANAGER
SYSDADMIN	INSTALLED SUPER USER
TELLER	TELLER
ATM	PROFILE ATM

Authorization Rules

- | |
|---|
| User defined – no Coding |
| Dynamic application – modification |
| Rule process at runtime |
| Rules can be defined on a combination of conditions |
| Multiple Levels of Authorization |
| Simulation Capabilities |

Ability to perform any type of Authorization.



PROFITS® – Payment System Rules

- ❖ Ability to generate and receive information for any Payment System.

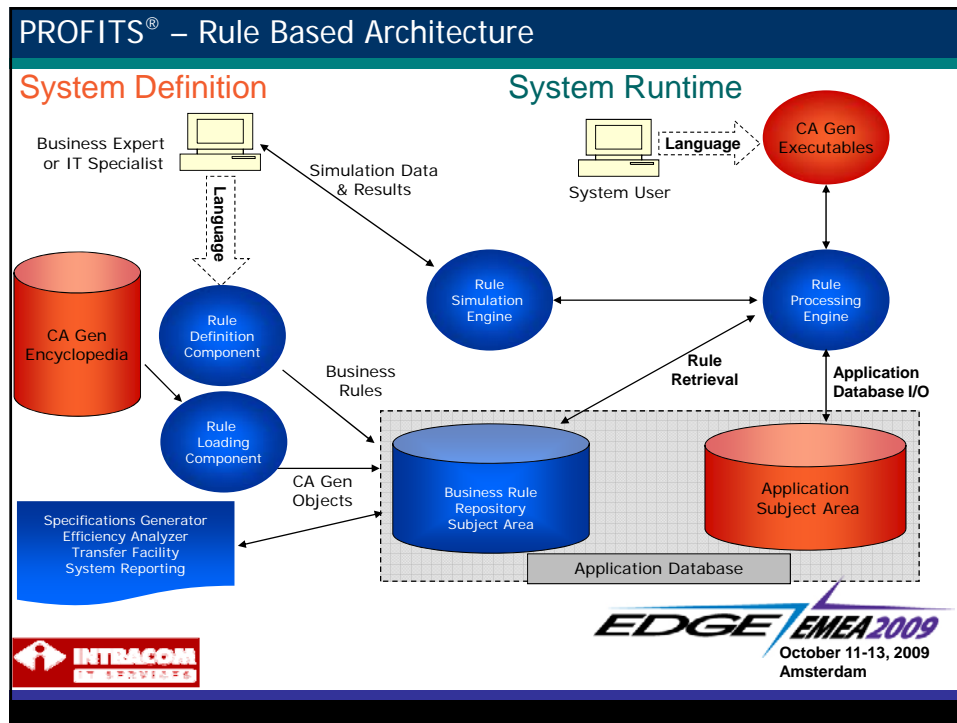
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Payment Rules

- | |
|--|
| User defined – no Coding |
| Ability to Setup Rules for any type of Payment System |
| Rule process at runtime |
| Rules can be defined on a combination of conditions |
| Comply to any Validation |
| Generate payment in any format, text, xml message |
| Simulation Capabilities |

Ability to validate and generate any payment method.





Conclusion

- When a **NEW REQUEST** is submitted to us by one of our Customers, we ask ourselves,

Can we fulfill this new functionality using the **BUSINESS RULE** implementation methodology incorporated into our system, and not by **CODING** ?

- If not,

Planning is made to implement code in the future for this task, using the **BUSINESS RULE** idea.

Thank You

