

EDGE EMEA 2009

October 11-13, 2009
Amsterdam

Rule Based Architecture for CA Gen Applications

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Session #13
Tuesday 13 October, 13:30

Intracom Holdings *Group of Companies*

					
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					
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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;**

Activity Type	Percentage
Domestic activities	35 %
International activities	65 %

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.



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



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.



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.



Why did we need a Rule Based System ?

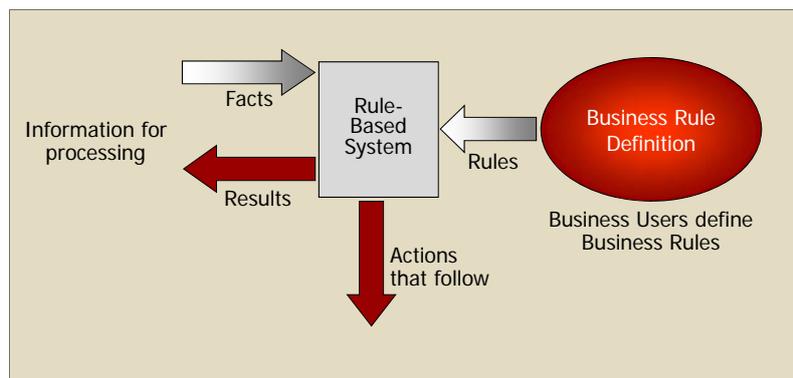


- ❖ Change Business functionality without coding
- ❖ Business Rules can be set-up by Business Users
- ❖ Drastic decrease in Development and Testing effort
- ❖ System Manageability and Maintainability
- ❖ Ability to differentiate using the same System
- ❖ Flexible in functional changes
- ❖ Functionality 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 Banking System

❖ We are going to take a look at some of the Rule-Based features offered in our system,

Less CODING needed, FUNCTIONALITY defined through RULES.

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PROFITS® – Rule Based, Advice Printout Manipulation

❖ Using this component the user can define: information on the voucher, format of fields, location and can add or remove printout information based on fields used by the transactions.

Voucher Rules

Advice Printout reusability
Dynamically changed
No Generation needed
Ability to differentiate For the same executable
Ability to differentiate based on rules, - depending on amount - depending on Customer Category - depending on Product - depending on Language - depending on any transaction information
Forecast capabilities

Customers can change their own vouchers.

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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.



Reporting Rules

The screenshot shows a 'PROFIT Report Execution' window with a 'Bank of Greece' report titled 'SURVEILLANCE FOR CREDIT RISK'. The report is a table with columns for 'Balance' and rows for various credit risk categories. The table data is as follows:

Category	1	2	3	4	Total other requirements
Category requirements of lending					
Balance of requirements (including requirements for parts on a temporary basis of up to 2 months)	26.986.132	0	4.989.767	7.737.081	
Requirements for parts temporarily delayed by 2-6 months	0	0	0	0	
Requirements for parts temporarily delayed by 6-12 months	1.844.261	0	690.263	690.363	
Requirements for parts temporarily delayed 12 months or more (including requirements for residential assets)	2.190.695	0	0	996.288	

- 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.



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.



Interface Rules

The screenshot shows the 'AS400 File Definition Component' window with a 'TRANSACTION from ATM' file definition. To the right, a table maps fields to their types and positions:

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.



PROFITS® – Rule Based, Business Rules

❖ Different Functionality can be defined, for the same transaction, based on the Customer's needs.

Business Rule Information
Project: [70] PROFITS® - Package Product Manipulation
Business Rule: [9000005] Student's PACKAGE

1 Begin Processing = "Yes"
process Business Rule ... [70-10 Verify INDIVIDUAL CUSTOMER]
2 process Business Rule ... [70-11 Verify PROFESSION - STUDENT]
3 process Business Rule ... [70-12 Verify Customer's Age (>18 and <= 25)]
4

Management Component
[70] PROFITS® - Package Product Manipulation
[11] Verify PROFESSION - STUDENT

Begin Processing = "Yes"
Use Gen Action Block: [01012] RETRIEVE_PERSONAL_BASIC_DT
If the OCCUPATION CODE <= 51.00 [error] CUSTOMER_NOT_STUDENT

Business Rules

- Ability to change the functionality of the Transaction
- Seamless transfer of Functionality
- Ability to use CA Gen Action Blocks dynamically.
- Dynamically changed.
- No Generation needed.
- Simulation Capabilities
- Automated Testing

The ability to dynamically change the transaction functionality.

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PROFITS® – Rule Based, Accounting Rules for GL Posting

❖ Ability to perform GL Posting based on any criteria.

Accounting Rule
Rule: [42012] Description [DRAW/DOWN JOURNAL FC / DC]
Subsystem: [0] Insert acting rule

Ignore records with message This Rule resulted in ZeroAm.

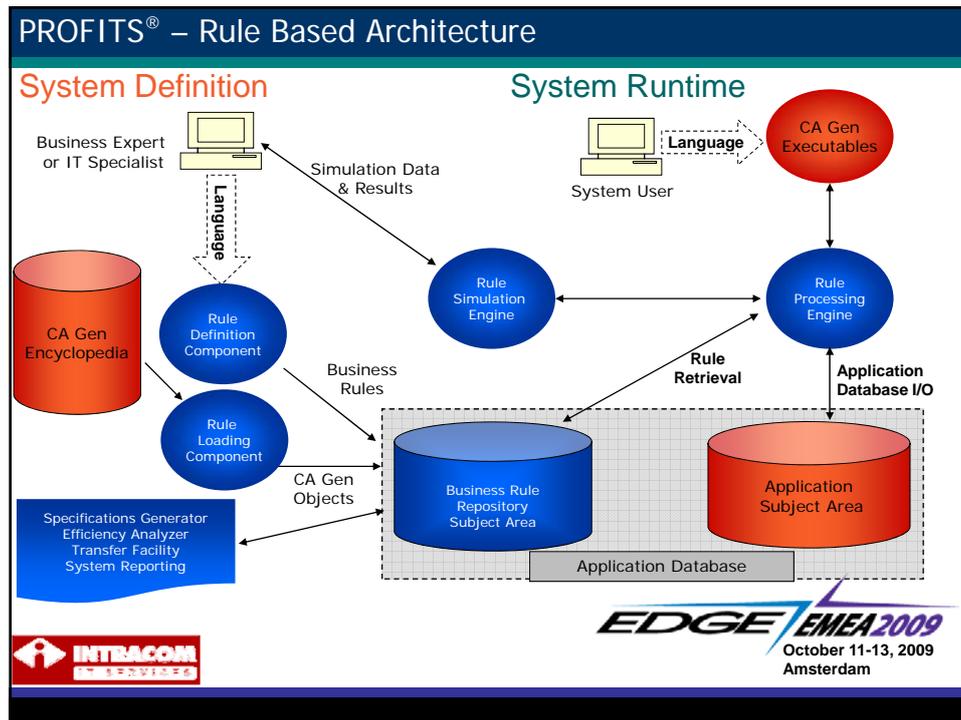
S/N	So	G.L. Account:	Cont	Code	Serial	Type	Journal	Justif	D/C	+/- FC	Unit
1	1	39.91.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
1	2	03.11.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
10	1	07.11.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
10	1	07.11.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
11	1	03.11.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
11	1	03.11.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
1	1	39.91.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
1	1	48.00.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
1	1	48.00.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
1	1	48.00.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
1	2	48.00.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
1	1	48.00.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
10	1	07.11.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
10	1	07.11.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
11	1	07.11.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0
11	1	03.11.00.0000.0000	JRL2	04	1	04	S04	2	1	0	0

Accounting Rules

- Configurable Chart of Accounts
- Dynamic Generation of accounting amounts
- Definable GL Posting Method
- Multi-Currency
- Multi-Branch
- Ability to differentiate for the same executable
- Dynamically changed.
- No Generation needed.

Ability to conform to any General Ledger scheme.

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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

