

회사 소개

KSTEC 연혁

- 1998.10.1 . ILOG 및 CPLEX 제품 공급
- . POSCON의 소사장 제도에 의해서 분사
- 1999. 2. . 한국 지능정보시스템학회 단체 회원 가입
- . 한국 CIO FORUM 회원 가입
- . 대한산업공학회 단체 회원 가입
- 1999. 4 . 기업부설 정보기술 연구소 설립
- 1999.12. . 병역특례 지정업체 선정 (병무청)
- 2000. 2. . 반도체 시스템 연구회 가입
- 2000. 4. . 벤처기업 등록 (중소기업청)
- 2000.10 . 한국 SCM 학회 가입
- 2001. 2 . 한국 데이터 베이스 학회 단체 회원 가입

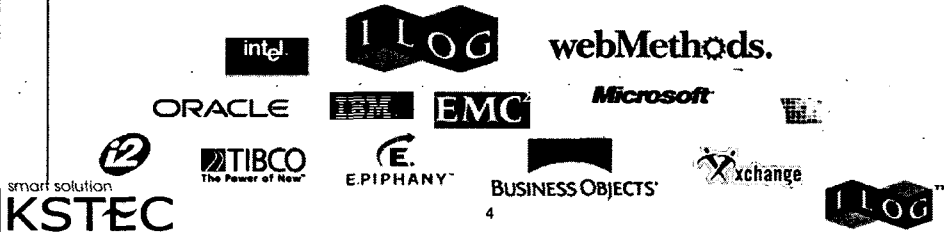
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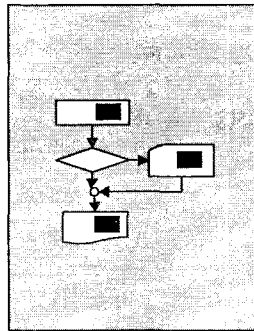
ILOG....

- Powering leading global organizations
- Driving today's standards with our technology
- Named top 12 most influential companies in 2001

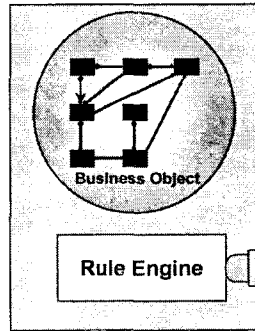


Overview

Rule-based System architecture



Standard Application



Rule based Application

Business Rules

WHEN FREQUENT FLYER MILES > 50000
THEN OFFER GOLD MEMBERSHIP

WHEN CERTIFICATE TYPE IS FIRST
CLASS UPGRADE
AND FIRST CLASS SEATS AVAILABLE > 0
THEN UPGRADE TO FIRST

Overview

Build applications that last.

Build applications that integrate.

Build applications that evolve.

Build applications that perform.

**ILOG JRules Business Rule
Management Software**

Overview

ILOG JRules Business Rule Management Software

Build applications that integrate.

- JRules does not impose on your technical or application infrastructure.
- JRules has an open architecture that is standards-based.
- JRules is packaged so that you use only the components required by your application.
- JRules features an open and flexible API that allows you to easily adapt and extend JRules components.

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Overview

ILOG JRules Business Rule Management Software

Build applications that evolve.

- JRules enables the development of applications that can be easily changed to meet new business requirements.
- JRules allows business users and analysts to write and maintain business rules.

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Overview

ILOG JRules Business Rule Management Software

Build applications that perform.

- JRules performs in demanding real-time transaction oriented applications.
- JRules is highly scalable.
- JRules allows the developer to tune the rule engine based on application specific characteristics.

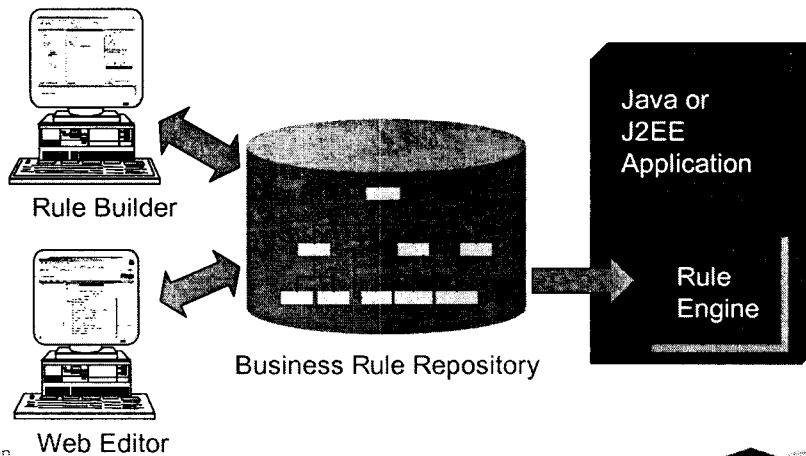
Overview

ILOG JRules Business Rule Management Software

- JRules Builder**
 - Develop and debug business rule applications using a complete IDE.
 - Write and maintain business rules.
 - Manage business rules stored in the Repository.
- JRules Web Editor**
 - Write and manage business rules over the web.
- JRules Repository**
 - Store business rules and related data in a database or file structure.
- JRules Rule Engine**
 - Execute business rules in your applications.

Overview

ILOG JRules Business Rule Management Software



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Business User Interface

Business people and analysts need tools for creating, editing, and managing business rules...

- Business Action Language**
- Rule Editor**
- Business Rule Repository**



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Rule Development

Business Action Language

- Write business rules in a structured-English natural syntax
- Use business terms in business rules
- Customize and extend the Business Action Language to meet application-specific requirements

Business Action Language

IF
shopping cart contains between 2 and 4 items
and the purchase value is greater than \$100
and the customer's category is Gold
THEN
apply a 15% discount
and display the message

"We're giving you a Gold discount!"

Rule Development

JRules Rule Editor

- Write business rules using a point-and-click Rule Editor
- Select from valid options as you write a business rule

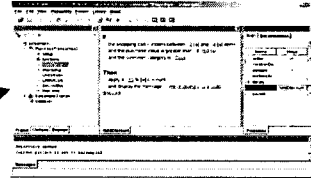
```
if
the shopping cart contains between : 2 [±] and : 4 [±] items
and the purchase value is greater than : $ 100 [+]
and the customer's category equals
+
+
Then
apply a : 15 % [+] discount
and display the message : discount!
```

Rule Development

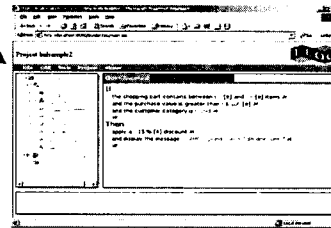
JRules Rule Editor

```
if
  the shopping cart contains between 2 [a] and 4 [a] items
  and the purchase value is greater than $ 100 [a]
  and the customer category is Gold

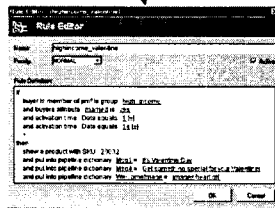
Then
  apply a 15 % [a] discount
  and display the message ' We're giving you a Gold
  discount! '
```



Rule Builder



Rule Editor



Web Editor

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Embedded in a Custom Application

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Rule Development

Business Rule Templates

- ❑ Write business rules from pre-defined rule templates

Maximum Loan Amount Template

```
If
  the state is <select a value>
  and the number of units is <select a value>

Then
  the maximum loan amount is $ <enter a value>
```

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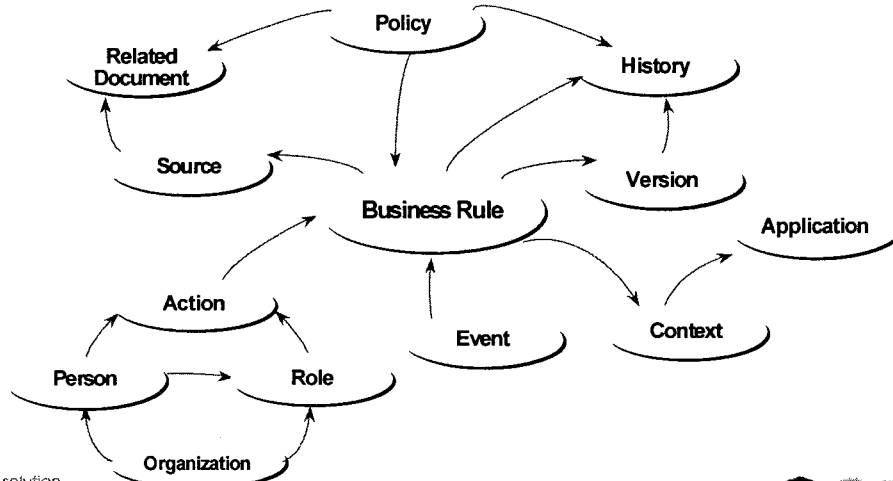
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Rule Management

Business Rule Metadata



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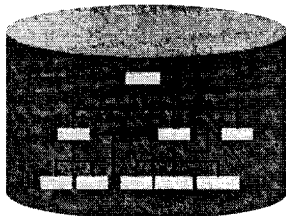
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Rule Management

Business Rule Metadata

- ❑ Store business rules and related data in the Business Rule Repository
- ❑ Customize and extend the repository to store application-specific business rule metadata

Business Rule Repository



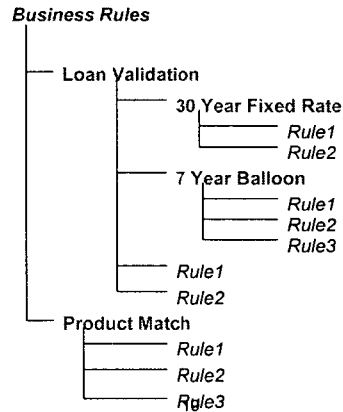
Business Rule Properties

- **Business Rule**
- **Rule Author**
- **Rule Source**
- **Rule Context**
- **Effective/Expiration Date**
- **Etc.**

Rule Management

Business Rule Packages

- Organize business rules into business categories independently of how rules are deployed in applications



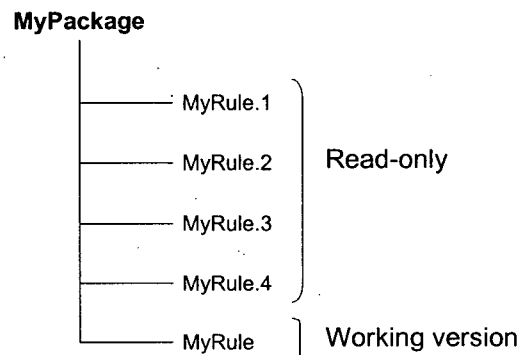
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Rule Management

Business Rule Versions

- Create versions of business rules to track business policy changes over time

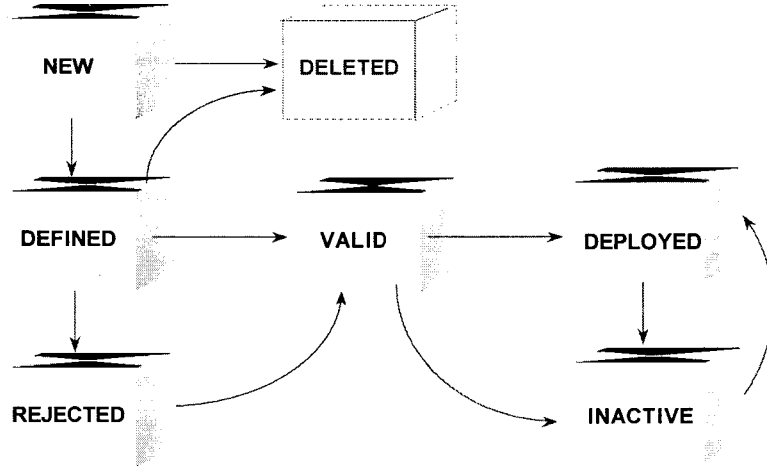


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Business Rule Lifecycle



Business Rule Lifecycle

- Track business rules using *rule status* property
- Define status names to reflect application requirements
- Define valid status transitions
- Enforce status transitions in the JRules Business Rule Repository

Rule Status	Valid Transitions
New	Valid, Inactive
Valid	Tested, Inactive
Tested	Deployed, Inactive
Deployed	Inactive
Inactive	Deployed

Rule Management

Rule History

- Log business rule changes in the Business Rule Repository
 - Rule Creation/Deletion
 - Rule Property Modification
 - Rule Definition Modification
 - Rule Version
- View history of changes associated with a rule in the JRules Builder

Rule Management

User Permissions

- Define permissions based on user or user role
- Enforce permissions in Business Rule Repository

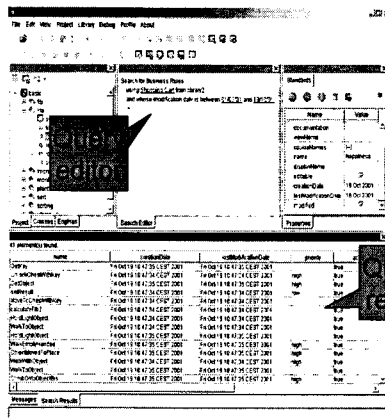


Developer	Create/ Edit/ Delete Rule Version Rule , Change Rule Status
Analyst	Create/ Edit Rule Version Rule, Change Rule Status
Administrator	Change Rule Status, Deploy Rules

Rule Testing

Rule Query

- Analyze changes to business policy using the ILOG Rule Builder
- Write queries using the Business Query Language:



Select the business rules such that

the rule status is deployed and the residency status is contained in the rule

Then

insert as query result

Rule Testing

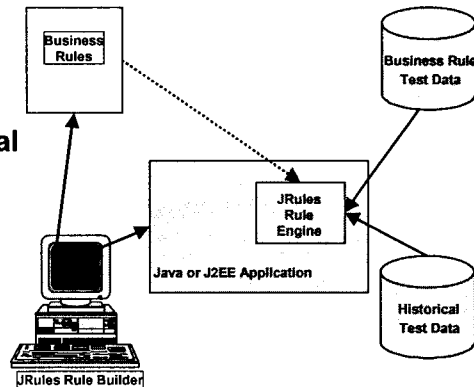
Rule Query

- Find rules that reference the same business objects to determine the impact of business rule changes
 - Example: Find all rules about second mortgages
- Find rules with specific rule property values
 - Example: Find all deployed rules that are going to expire within the next 60 days
- Make global changes to business rules
 - Example: Change the rule status to "validated" for all rules pertaining to a new loan product

Rule Testing

Business Rule Test Environment

- ❑ Execute business rules against business rule test data to ensure rules execute when they should
- ❑ Execute business rules against historical test data to perform business impact analysis
- ❑ Define test scenarios in the Builder



Rule Deployment

Deploying Business Rule Applications

- ❑ **Deploy rules from the Builder**
 - ❑ Extract a ILOG Rule Language ruleset from the repository
 - ❑ Publish the ruleset to a file, database, or entity bean
 - ❑ Load the ruleset from the data source at execution time
- ❑ **Change rules at execution time without stopping the application or the rule engine**
 - ❑ Application-Driven deployment – extract rules from the repository at runtime
 - ❑ J2EE Rule Engine Server – update entity bean ruleset and refresh the Rule Engine Server at runtime

Key features

Key Features of ILOG JRules

- Complete Business Rules Environment that allows applications to:**
 - Integrate
 - Evolve
 - Perform
- Unique Business Rules Management features**
 - Repository
 - Permission Management
 - Versioning
- Best performing rule engine**
 - High performance engine that can be tuned to application characteristics
- Most embeddable rule engine**
 - Open, flexible API's
 - J2EE Compatible



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Application

Finance and insurance

- Web Personalization (e-Banking)**
- Web-based Profile Management**
- Underwriting**
- Portfolio Optimization**
- Automated Trading**
- Online Financial Planning**
- Claims Processing**

VSP

Meloche Monex

BUSINESS LOGIC CORPORATION

Fidelity

Investments

Deutsche Bank



VISA

ING



FannieMae

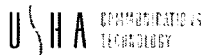
Fraser
Accelerating The Trading Frontier

National Bank of Oman

Application

Telecommunications

- Alarm Filtering & Correlation
- Billing
- Service provisioning
- Customer care
- Interaction Call Routing and CTI
- Supervision



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Application

E-Business

- Customer Relationship Management
- Supply Chain Management
- Workflow Management
- Web Personalization
- 1 to 1 Marketing



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