

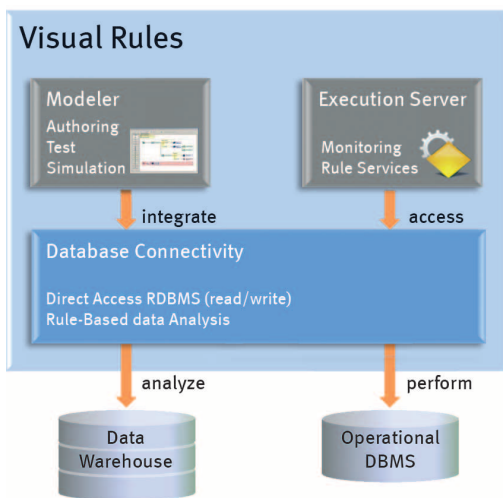
Visual Rules Database Connectivity

Efficient Access to Relational Databases

Modeling Data Access Instead of Writing Code

Visual Rules Database Connectivity extends the graphical modeling of business rules with powerful database operations. The Database Connectivity add-on provides actions and functions for database queries and updates including transaction control. Furthermore, direct access to the metadata of the engaged databases simplifies the modeling process. With Visual Rules Database Connectivity, the user achieves noticeable increases of productivity and quality in developing rule-based systems

that use operational database systems or data warehouses. The Java code generated from the rule model is ready-to-go, without any additional programming. Optionally, it can be processed on a Java EE Application Server, thus supporting global transactions as well.



At a Glance

Easy generation of executable programs for rule based analysis, enrichment, and processing of any data, e.g. in a data warehouse

Extends Visual Rules Modeler with special actions, functions, and wizards for efficient access to relational databases

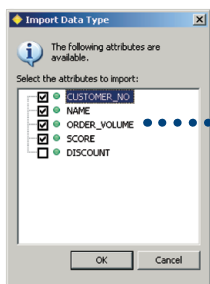
Read and write access to records in the database including transaction control

Call stored procedures and functions

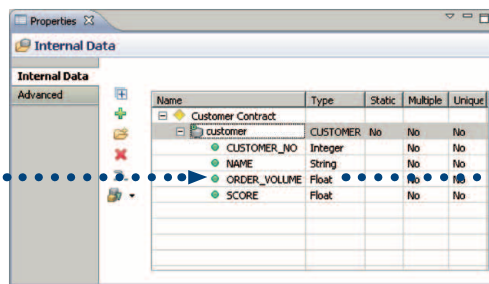
SQL access to the database via JDBC

Import of Metadata

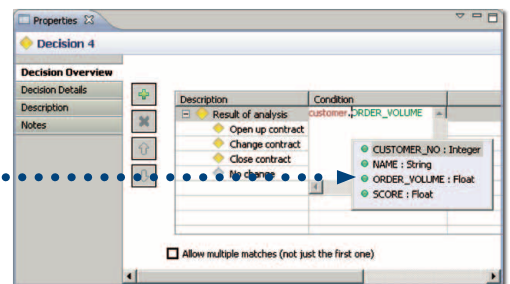
- 1 A wizard helps create object structures from the database metadata. Individual tables and columns can be selected for import.
- 2 Visual Rules then generates the data types automatically according to the selection. This ensures type-safe processing of the data within the rules.
- 3 The generated data types can be used directly in the rule modeling process.



1 Import



2 Definition data types



3 Rule modeling

Data Access and Transaction Control

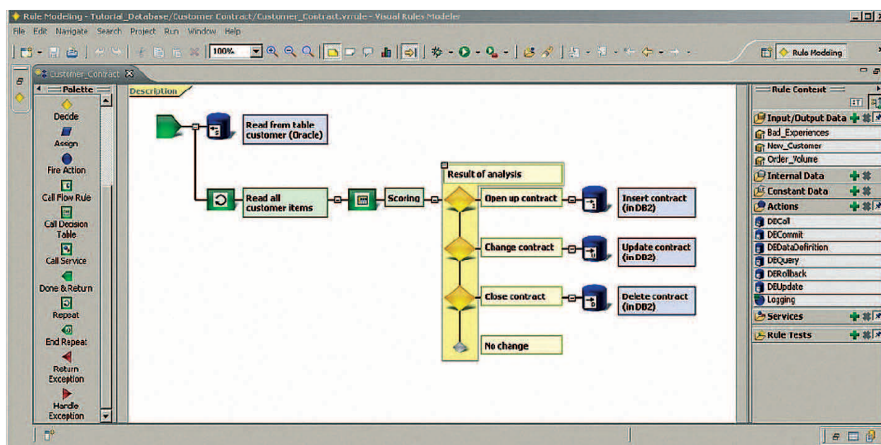
Specific action elements are used for the direct data access from inside the rule models. An easy graphical editor supports the user with code assist and syntax highlighting. There is advanced support for all kinds of select, update, insert, and delete statements with these actions.

It is possible to access multiple databases from a single rule model, using JNDI and JDBC. Configuration of the database connections is done while modeling the actions.

The Visual Rules Database Connectivity add-on allows parameterization of the SQL statements. Any values resulting from rules processing can be passed to the database as parameters, making the statements flexible, dynamic, and more secure.

In the process of modeling, Visual Rules automatically generates the data objects matching the record structure of any select statement, irrespective of the complexity of a query. The data objects can instantly be used for further modeling.

The control of local transactions can explicitly be defined in the rule models. There are Visual Rules actions to commit or rollback transactions. JTA global transactions in Java EE Application Servers are supported as well.



Rule Editor with flow rule using database operations

Why Use Visual Rules Database Connectivity?

- Increase of productivity for the development of rule-based systems
- Powerful database operations for the graphical modeling of business logic
- Automatic generation of data objects from database queries
- Rule code that is ready-to-go and also can be used on Java EE Application Servers
- Support of all JDBC capable relational databases and Java EE Application Servers

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