

Engine defines a Java-like production rule language called Oracle Business Rules RL Language (RL Language), provides a language processing engine (inference engine), and provides tools to support debugging.

Using Rules Designer you can specify business rules separately from application code which allows you to change business policies quickly with graphical tools. The Rules Engine evaluates the business rules and returns decisions or facts that are then used in the business process.

A rule-enabled Java application can load and run rules programs. The rule-enabled application passes facts and rules to the Rules Engine (facts are asserted in the form of Java objects or XML documents). The Rules Engine runs in the rule-enabled Java application and uses the Rete algorithm to efficiently fire rules that match the facts.

For more information, see [Oracle Business Rules Engine Architecture](#) and [Oracle Business Rules SDK](#).

1.3.3 Oracle Business Rules RL Language

Oracle Business Rules supports a high-level Java-like language called Oracle Business Rules RL Language (RL Language). RL Language defines the valid syntax for Oracle Business Rules programs. RL Language includes an intuitive Java-like syntax for defining rules that supports the power of Java semantics, providing an easy-to-use syntax for application developers. RL Language consists of a collection of text statements that can be generated dynamically or stored in a file.

Using RL Language application programs can assert Java objects as facts, and rules can reference object properties and invoke methods. Likewise, application programs can use XML documents or portions of XML documents as facts.

Programmers can use RL Language as a full-featured rules programming language both directly and as part of the Oracle Business Rules SDK (Rules SDK).

Business analysts can use Rules Designer to work with rules. In this case, the business analyst does not need to directly view or write RL Language programs. For more information, see [Rules Designer](#).

For detailed information about RL Language, see *Rules Language Reference for Oracle Business Process Management*.

1.3.4 Oracle Business Rules SDK

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Oracle Business Rules SDK (Rules SDK) is a Java library that provides business rule management features that a developer can use to write a rule-enabled program that accesses a dictionary, or to write customized rules programs that add rules or modify existing rules. Rules Designer uses Rules SDK to create, modify, and access rules and the data model using well-defined interfaces. Customer applications can use Rules SDK to access, display, create, and modify collections of rules and the data model.

You can use the Rules SDK APIs in a rule-enabled application to access rules or to create and modify rules. The rules and the associated data model could be initially created in a custom application or using Rules Designer.

This guide describes the Oracle Business Rules SDK Decision Point API. Using a Decision Point you can access a dictionary and run the rules in the dictionary. For complete Oracle Business Rules SDK API information, see *Oracle Fusion Middleware Java API Reference for Oracle Business Rules*.

For more information, see [Working with Rules in Standalone \(Non SOA/BPM\) Scenarios](#).

1.3.5 Rules Designer

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The Oracle Business Rules Designer (Rules Designer) extension to Oracle JDeveloper is an editor that enables you to create and edit rules.

Rules Designer provides a point-and-click interface for creating and editing General Rules and Decision Tables. Because you can work directly with business rules and a data model, you do not need to understand the RL Language to work with Rules Designer.

Rules Designer also provides Verbal Rules, with guided authoring (auto-suggest and filtering), and a keyboard based interface. For more information on using guided authoring and keyboard based interface, see [How to Add Verbal Rules in SOA Composer](#).

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Rules Designer supports several types of users, including the application developer and the business analyst. The application developer uses Rules Designer to define a data model and an initial set of rules. The business analyst uses Rules Designer either to work with the initial set of rules or to modify and customize the initial set of rules according to business needs. Using Rules Designer, a business analyst can create and customize rules with little or no assistance from a programmer.

Alternatively, in top-down modeling, a Business Analyst can descriptively define the rules which can be implemented by the developer later. These different modeling approaches require collaboration between the developer and the analyst.

In most cases, Rule modeling is done iteratively, with both of them contributing to the creation of a Domain Specific Language that can be used to define rules using less technical and more natural-language like sentences.

For more information about verbal rules, see [Working with Rulesets and Rules](#).

1.3.6 Oracle SOA Composer Application

When a dictionary is deployed in a SOA composite application, Oracle Business Rules lets you view the dictionary or edit and save changes to the dictionary. You can use the SOA Composer application (SOA Composer) to work with a deployed dictionary that is part of a SOA composite application.

For more information, see [Using Oracle SOA Composer with Oracle Business Rules at Runtime](#).

1.3.7 Oracle Business Process Composer Application

The Business Process Composer rules editor enables you to view and edit a rules dictionary. Rules dictionaries are displayed in a tabbed window similar to the process editor and data association editor.

For more information on using Rules in BP Composer, see *Working with Oracle Business Process Composer Rules Editor in Oracle Fusion Middleware Developing Business Processes with Oracle Business Process Composer*.

1.4 Oracle Business Rules Engine Architecture

A rule-based system using the Rete algorithm is the foundation of Oracle Business Rules.

A rule-based system consists of the following: