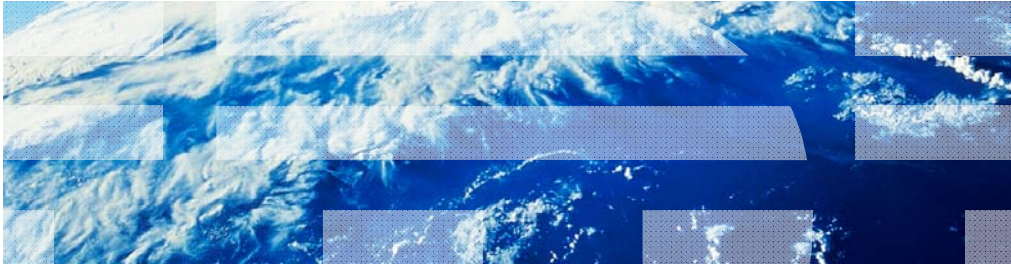


---

# IBM Operational Decision Manager V8.0.1

## Enhancements overview



© 2012 IBM Corporation

A high level summary is presented of the enhancements in version 8.0.1 of the IBM Operational Decision Manager.

## Agenda

- Product name change
- Enhancements for rules
- Enhancements for events
- Enhancements for z/OS

The presentation begins by explaining a product name change that occurred with this release of the product. Then the remaining slides summarize the enhancements made in this release for rules, events and the z/OS platform.

## Updated product names

- Product naming change from V8.0 to V8.0.1
  - WebSphere branding dropped from name
  - Management changed to Manager

Version 7.5 and 8.0 Name	Version 8.0.1 Name
IBM WebSphere Operational Decision Management	IBM Operational Decision Manager
IBM WebSphere Decision Server	IBM Decision Server
IBM WebSphere Decision Center	IBM Decision Center
IBM WebSphere Operational Decision Management for z/OS	IBM Operational Decision Manager for z/OS
IBM WebSphere Decision Server for z/OS	IBM Decision Server for z/OS
IBM WebSphere Decision Center for z/OS	IBM Decision Center for z/OS
IBM WebSphere Business Rules for z/OS	IBM Business Rules for z/OS

The product names are changed in the transition from version 8.0 to version 8.0.1. There are essentially two changes. The first is that the WebSphere brand has been dropped from the product names. The second is changing the term Management to Manager. The table on the slide provides a list of the changed names.

## Rules – Business Console

### **Business Console enhancements**

- Motivation:
  - Greater involvement of the business user in managing rules
  - Enables the business user to be more productive
- Areas of enhancement:
  - Project timeline
  - Search enhancements
  - Snapshot governance and comparison
  - Full web accessibility support for physical and visual disabilities
  - Decision table editor

The first set of enhancements are to the business console for the management of rules. The business console is used with the decision center. It was originally introduced in version 8.0 to provide an interface enabling a business user to become more directly involved in the management and editing of rules. This helps to make the business user more productive. In version 8.0.1, the business console has several updates to further enable the involvement and productivity of the business user.

The enhancements include providing a project timeline capability, improved search functionality, and governance and comparison capabilities for snapshots. Also, these enhancements include full web accessibility support for those with physical and visual disabilities. Finally, a new editor for decision tables has been provided.

## Rules – REST APIs

### REST APIs to manage Rule Execution Server resources

- Motivation:
  - Provide an API to discover, deploy and run rules
  - Enables applications to implement their own rule management capabilities
- Areas of enhancement:
  - New REST APIs used
    - RuleApp resources
    - Ruleset resources
    - XOM resources
    - Library resources

The other enhancement for rules is the addition of a set of REST APIs, that you use to manage resources in a rule execution server. The motivation for adding these APIs is to enable applications that use rules, to be able to implement their own integrated rule management capabilities.

The APIs introduced address the management of rule application and ruleset resources, execution object model resources and library resources.

## Events – Context management

### Context Management

- Motivation:
  - Removal of context data that is no longer needed
  - Differentiate context data of events/actions with different context IDs that evaluate to the same value
- Areas of enhancement:
  - Addition of a context definition
    - Enables management of the life cycle of a context instance
    - Options to terminate events
      - by time
      - by incoming event
    - Specification of retention period for the context data

For events, there have been improvements made in the handling of contexts. In previous releases, context data can build up because there was no way for the event runtime to determine when particular data was no longer needed. Also, contexts were determined by value only, so two logically different contexts are considered by the runtime to be the same context when they contained the same data values. This enhancement addresses both of these issues.

First of all, an explicit context definition artifact is provided, as opposed to the context being implicit. This context definition enables the life cycle of a context instance to be managed. Retention of event data for a context can be terminated based on a specified time or by arrival of a specified event. In addition, a retention period can be specified for the context data.

## Events – JDBC connector

### Single unit-of-work for multiple JDBC actions

- Motivation:
  - All actions from an event should be processed in a single transaction, so that all succeed or all fail
- Areas of enhancement:
  - JDBC action connector enhanced to process multiple actions in a rule or rule group in one transaction
    - This behavior is the default

The next enhancement for events is related to the use of the JDBC connector. Previously, each JDBC connector interaction was processed in its own transaction, and therefore you can have some actions related to a single event succeed while others failed. Now, by default, multiple actions in a rule or rule group are processed in a single transaction so that all succeed or all fail.

## Events – Widget repackaging

### Event widgets no longer in Business Space

- Motivation:
  - Simplify installation and remove business space as a prerequisite
- Areas of enhancement:
  - Event testing, simulation and charts widgets provided as Dojo components
  - Launchpad and Installation Manager updated to not include business space

In previous releases, the event widgets for testing, simulation and charting were implemented using business space. This made the business space capability of WebSphere Application Server a prerequisite for using the event runtime. By changing the widgets to be implemented as Dojo components, business space is eliminated from the product launchpad and installation manager.



## Events – Business object enrichment

### Business object enrichment enhancements

- Motivation:
  - Remove single field limitation of enrich by expression option
- Areas of enhancement:
  - New enrichment type added – mapped query
  - Using a stored procedure or select statement
    - Enrich multiple attributes of a business object
    - Create an array of business objects when multiple rows returned

In previous versions, when processing a business object in event rules, a database interaction can only be used to update a single field in the business object. This enhancement introduces a mapped query capability. When accessing database data using a stored procedure or select statement, the data can be mapped into multiple fields in the business object. Additionally, if multiple rows are returned, an array of business objects is created that contain the data.

## z/OS – Decision Engine

### Decision Engine

#### ▪Motivation:

- Improve overall performance of rule execution
- Reduce load time for rule apps
- Make a compelling story for rule execution versus native COBOL

#### ▪Areas of enhancement:

- Implement a new engine for rule execution
  - Available for use with rule apps deployed to zRES
  - Fully compiled - eliminates some runtime interpretation of rules
  - Move parsing, compilation and optimization from load time to development time

The next few slides address enhancements that are specific to the z/OS platform. The first of these is the new decision engine. This is a new implementation of the code that processes rules at runtime. The motivation for this new engine is to improve the overall performance of rule execution, including a reduction in load time for rule applications. These enhancements provide justification for the COBOL user to call rules from COBOL rather than generating native COBOL code for the execution of rules.

The new decision engine is available in this release in the zRule Execution Server only. Whether to run the decision engine or the classic rule engine is a deployment time option. Rule applications that are deployed for the decision engine are fully compiled rather than having some interpretive parts at runtime. Also, the parsing, compilation and optimization work is done at development time rather than at load time.

## z/OS – IMS message processing region support

### Invoking rules from an IMS message processing region

- Motivation:
  - Full support for the IMS customer
- Area of enhancement:
  - Enable installation and configuration of the Operational Decision Manager API stub into an IMS message processing region

Providing full support to the IMS customer using rules is the motivation behind this enhancement. In the previous release, calling rules from COBOL running in IMS was only supported from an IMS batch message processing region or using the data language interface. With this enhancement, an IMS message processing program running in a message processing region can also make calls to rules.

## z/OS – Artifact sharing

### Rule artifact sharing with COBOL

#### ▪Motivation:

- Enable additional scenarios of a rule project deployed in Decision Server to also be deployed in zRES for use from COBOL

#### ▪Areas of enhancement:

- Generation of Java XOM from COBOL copybook
  - Preserving code added to a generate Java XOM
  - Mapping a COBOL fixed length table to a Java List
  - Mapping identical COBOL structures to same class
- Generation of COBOL copybook from a BOM
  - BOM with virtual attributes and virtual classes
  - Improved accessor support
  - Copybook generation with multiple BOMs

When calling rules from COBOL, there are limitations on the execution object model and business object model definitions, so that they are compatible with the COBOL copybook. The motivation for the enhancements described here is to enable a wider range of scenarios where rules deployed in a decision server can also be used to the zRule Execution Server and called from COBOL.

The first set of enhancements involve the scenario where you have an existing COBOL copybook and need to generate a Java execution object model. These include the ability to preserve code added to the generated Java when it needs to be regenerated due to updates in the copybook. The next is the ability to map a COBOL fixed length table to a Java list, rather than to an array, which is the default. Finally, identical COBOL structures can now be mapped to the same Java class.

The second set of enhancements involve the scenario where you have a business object model and want to generate the COBOL copybook. This includes support for a business object model that contains virtual attributes and virtual classes. Also, the way accessors are handled is improved. And the ability to generate a single copybook from multiple business object models is added.

## Summary

- Product name change
- Enhancements for rules
  - Business console
  - REST APIs
- Enhancements for events
  - Context management
  - JDBC connector
  - Widget repackaging
  - Business object enrichment
- Enhancements for z/OS
  - Decision engine
  - IMS message processing region
  - Rule artifact sharing with COBOL

In the is presentation you were introduced to the enhancements added in version 8.0.1 of IBM Operational Decision Manager. The first thing addressed was the product name change between version 8.0 and version 8.0.1. Then the enhancements for rules, events and the z/OS platform were summarized.

## Feedback

Your feedback is valuable

You can help improve the quality of IBM Education Assistant content to better meet your needs by providing feedback.

- Did you find this module useful?
- Did it help you solve a problem or answer a question?
- Do you have suggestions for improvements?

Click to send email feedback:

[mailto:iea@us.ibm.com?subject=Feedback\\_about\\_ODM801\\_EnhancementsOverview.ppt](mailto:iea@us.ibm.com?subject=Feedback_about_ODM801_EnhancementsOverview.ppt)

This module is also available in PDF format at: [../ODM801\\_EnhancementsOverview.pdf](http://ODM801_EnhancementsOverview.pdf)

You can help improve the quality of IBM Education Assistant content by providing feedback.



## Trademarks, disclaimer, and copyright information

IBM, the IBM logo, ibm.com, IMS, WebSphere, and z/OS are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of other IBM trademarks is available on the web at "[Copyright and trademark information](http://www.ibm.com/legal/copytrade.shtml)" at <http://www.ibm.com/legal/copytrade.shtml>

THE INFORMATION CONTAINED IN THIS PRESENTATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE INFORMATION CONTAINED IN THIS PRESENTATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. WHILE EFFORTS WERE MADE TO VERIFY THE COMPLETENESS AND ACCURACY OF THE INFORMATION CONTAINED IN THIS PRESENTATION, IT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. IN ADDITION, THIS INFORMATION IS BASED ON IBM'S CURRENT PRODUCT PLANS AND STRATEGY, WHICH ARE SUBJECT TO CHANGE BY IBM WITHOUT NOTICE. IBM SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES ARISING OUT OF THE USE OF, OR OTHERWISE RELATED TO, THIS PRESENTATION OR ANY OTHER DOCUMENTATION. NOTHING CONTAINED IN THIS PRESENTATION IS INTENDED TO, NOR SHALL HAVE THE EFFECT OF, CREATING ANY WARRANTIES OR REPRESENTATIONS FROM IBM (OR ITS SUPPLIERS OR LICENSORS), OR ALTERING THE TERMS AND CONDITIONS OF ANY AGREEMENT OR LICENSE GOVERNING THE USE OF IBM PRODUCTS OR SOFTWARE.

© Copyright International Business Machines Corporation 2012. All rights reserved.