



SupportPac LA71: IBM WebSphere Operational Decision Management Integration for WebSphere Process Server

Getting started with IBM Business Process Manager

Task 8 – Business Process Author manages the Advanced Integration Service Decision in a BPMN Process.

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Overview

In this task you will then go through the steps a Business Process Author undertakes to use and test the Advanced Integration Decision Services you developed in task 7 in their original process. You will then go on to modify the rules using Decision Center and observe the effects of that managed change on the Quote Process.

Readers who want to skip the exercise should import the task 8 solution into Process Center from the snapshot saved at

[SupportPac LA71 Path]\BPMTutorial\task8\Insurance_Sample - LA71TT8.twx

You should then open the Process App in Process Designer and test the integration as described in step 3 onwards.

Step 1. Examine the Advanced Integration Service available in Process Designer.

In Task 1 the Business Process Author designed the Decisions that were required and specified Advanced Integration Services interfaces that should be used to invoke the Managed Decision services that IT should develop. In task 7 the IT developers provided an implementation that is now available.

Open the **Insurance Sample** Process App in Process Designer and navigate to the **Eligibility_AIS** Advanced Integration Service.

The screenshot displays the IBM Process Designer interface for the 'Eligibility_AIS' Advanced Integration Service. The window title is 'Eligibility_AIS'. The 'Overview' tab is selected. The 'Advanced Integration Service' section provides a description: 'This service is implemented and deployed into the Process Center using IBM Integration Designer. The advanced integration service can be used like any other service.' It lists the following details: Module name: Insurance_Sample_Implementation, Export name: Eligibility_AIS, Operation name: invoke, and Can be used with service?: Yes. A button 'Open in Integration Designer' is present. The 'Parameters' section shows a tree view with 'Parameters' expanded, containing 'Input' (with 'AutoQuoteRequest') and 'Output' (with 'EligibilityResponse'). Buttons for 'Remove', 'Up', 'Down', 'Add Input', and 'Add Output' are available. The 'Parameter Details' section shows 'Name: AutoQuoteRequest', 'Documentation:' (empty), 'Is List:' (unchecked), and 'Variable Type:' set to 'AutoQuoteRequest' with 'Select...' and 'New' buttons.

From within your Integration workspace switch to the Process Center perspective.

At the Process Center login enter the process Center URI to correspond to your environment. Enter the User Name and Password – use tw_admin / tw_admin for a default install. Click Login.

Close the Welcome pane and select the Insurance Sample (INSDemo) Process Application.

Select Open in workspace and the project will be opened showing the default structure of the two Advanced Integration Services.

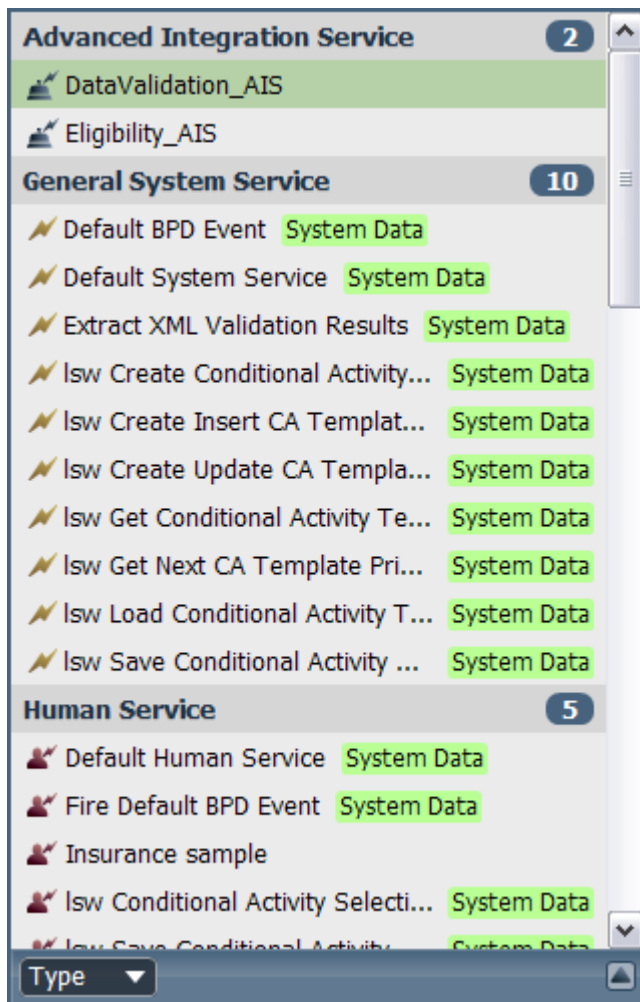
You should see that the implementation provided by development is now available.

You now need to substitute the embedded rules currently being used for the new Managed Decision Services

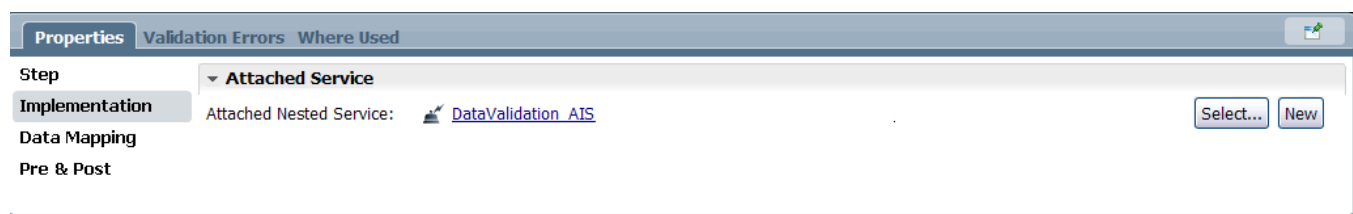
Step 2. Substitute the AIS Managed Decision Services for the embedded rule decision services

Open the Insurance sample Human service and select the Data Validation nested service. In the properties screen select the **Implementation** tab to show the current use of the DataValidation decision service based on embedded rules.

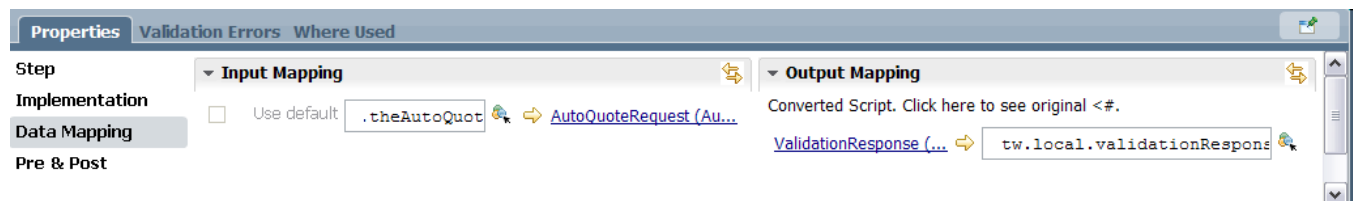
Click the **Select...** button and select the **DataValidation_AIS** Advanced Integration Service from the pulldown.



This should result in the following display



Select the Data Mapping tab and ensure that the inputs and outputs are correctly mapped.

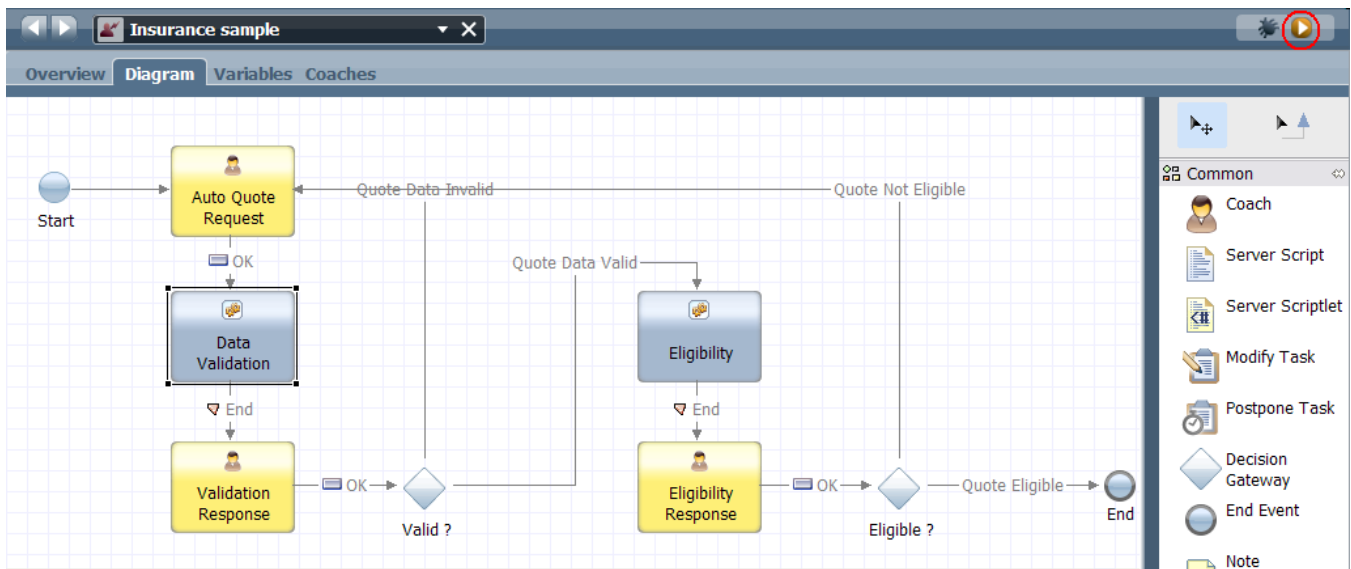


Repeat the process for the Eligibility decision service replacing it with the Eligibility_AIS advanced integration service.

Save your work.

Step 3. Test the AIS Managed decision services in the Process

The next step is to test that the AIS Managed Decisions work in the process. Navigate to the Insurance sample Human Service and click the Run Service Icon.



A browser opens with the Auto Quote Request Coach content. Leave the Number Of Accidents as -1 which should check the Data Validation rules.


Auto Quote Request

Driver

First Name:

Last Name:

Age:

Gender: 

Number Of Accidents:

Vehicle

Vehicle Identification Number:

Make:

Model:

Value:

Click **OK**. The Validation Response shows that the rules have operated correctly.

Validation Response

Validation Response

Validated: ☐

Main Message:

Click **OK**.

Set the **Number Of Accidents** to **5** which should pass the **Data Validation** rules but be rejected by the Eligibility Rules.

Auto Quote Request

Driver

First Name:

John

Last Name:

Doe

Age:

40

Gender:

Male

Number Of Accidents:

5

Vehicle

Vehicle Identification Number:

123456

Make:

Lemon

Model:

Yellow

Value:

0

OK

Click **OK** and observe that the **Data Validation** rules pass.

Validation Response

Validation Response

Validated:

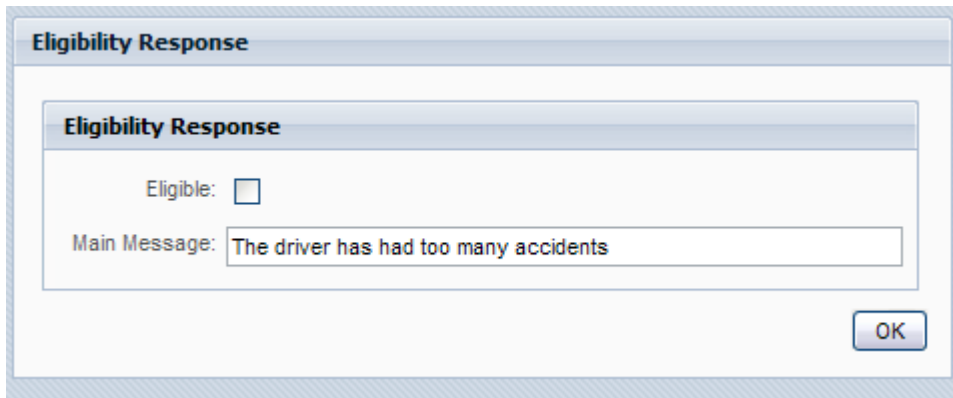
☒

Main Message:

The Quote Data is valid

OK

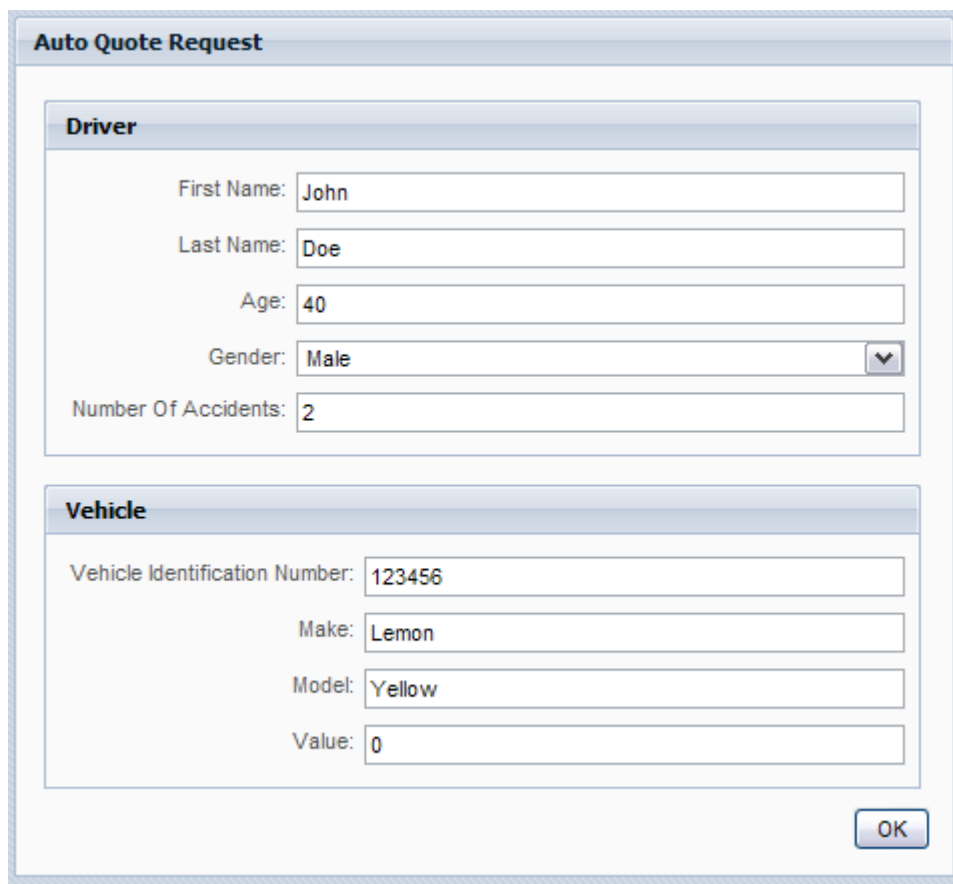
Click **OK** again and observe that the **Eligibility** rules reject the quote.



The dialog box is titled "Eligibility Response". It contains a sub-section also titled "Eligibility Response". Inside this sub-section, there is a label "Eligible:" followed by an unchecked checkbox. Below this is a label "Main Message:" followed by a text box containing the text "The driver has had too many accidents". At the bottom right of the dialog box is an "OK" button.

Click **OK**.

Set the **Number Of Accidents** to **2** which should pass both the **Data Validation** rules and the **Eligibility** Rules.



The dialog box is titled "Auto Quote Request". It contains two main sections: "Driver" and "Vehicle".

Driver Section:

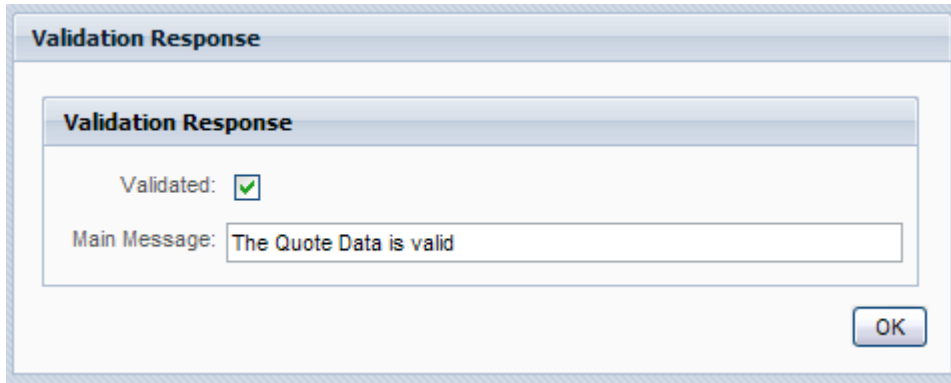
- First Name: John
- Last Name: Doe
- Age: 40
- Gender: Male (dropdown menu)
- Number Of Accidents: 2

Vehicle Section:

- Vehicle Identification Number: 123456
- Make: Lemon
- Model: Yellow
- Value: 0

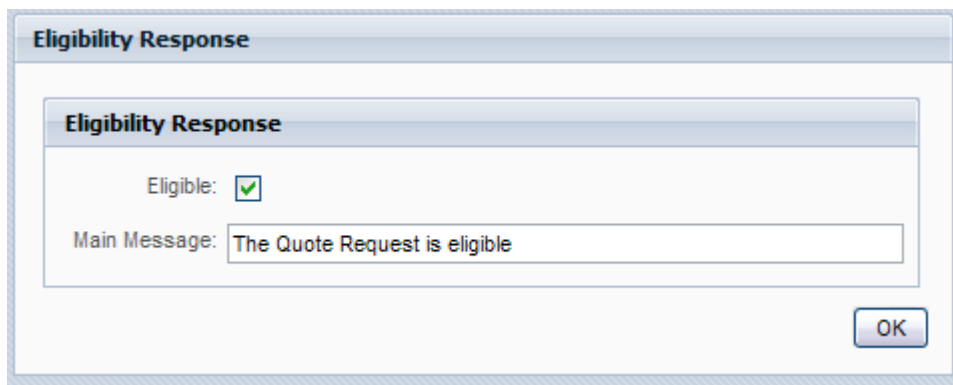
At the bottom right of the dialog box is an "OK" button.

Click **OK** and observe that the **Data Validation** rules pass.



A dialog box titled "Validation Response" with a sub-header "Validation Response". It contains a "Validated:" label followed by a checked checkbox, and a "Main Message:" label followed by a text box containing "The Quote Data is valid". An "OK" button is at the bottom right.

Click **OK** again and observe that the **Eligibility** rules pass.



A dialog box titled "Eligibility Response" with a sub-header "Eligibility Response". It contains an "Eligible:" label followed by a checked checkbox, and a "Main Message:" label followed by a text box containing "The Quote Request is eligible". An "OK" button is at the bottom right.

Click **OK** again to exit the service.

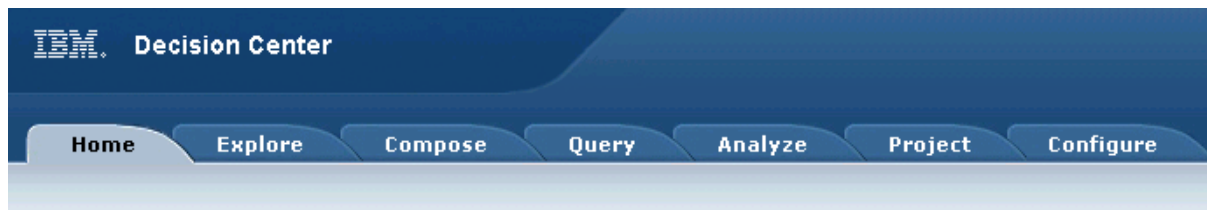
You have now used the Advanced Integration Managed Decision Services in a BPMN process.

Step 4. Manage the Decisions Using Decision Center

In this step you will change the rules being used for the Eligibility to increase the limit on number of accidents.



Open Decision Center logging in as **Username:** rtsAdmin and **Password:** rtsAdmin.

In the **Home** tab select the **Eligibility** project.



Welcome to the Decision Center Home Page



Project in use:  Eligibility 

Branch in use:  main 

Current action: Work upon branch 

Navigate to the **Explore** tab and click the **Quick edit** icon for the **TooManyAccidents** rule.

The screenshot shows the IBM Decision Center interface. The top navigation bar includes 'Home', 'Explore', 'Compose', 'Query', 'Analyze', 'Project', and 'Configure'. The 'Explore' tab is selected. On the left, a 'Smart Folders' pane shows 'Business Rules' with a sub-item 'Ruleflows'. The main area displays a table of Business Rules. The table has columns: Actions, Name, Status, Priority, Last Changed By, and Last Changed On. Two rules are listed: 'EligibleDefault' and 'TooManyAccidents'. The 'TooManyAccidents' rule is highlighted, and its 'Quick edit' icon (a small pencil) is circled in red. The bottom right corner indicates '2 Results'.

Actions	Name	Status	Priority	Last Changed By	Last Changed On
	EligibleDefault	New		rtsAdmin	1/13/12 3:09 PM
	TooManyAccidents	New		rtsAdmin	1/13/12 3:09 PM

In the **Rule Editing** panel change the number of accidents to 5 and modify the message as shown.

The screenshot shows the 'Rule Editing' panel for the 'TooManyAccidents' rule. The panel has a 'Save' button and a 'Cancel' button. The 'Name' field is 'TooManyAccidents' and the 'Status' is 'New'. The rule logic is defined as follows:

```
[definitions]
if
  the number of accidents of the driver of AutoQuoteRequest [±] is more than ▼ 5 [±] ✕
then
  make it false [and/or] that EligibilityResponse is eligible ✕
  set the main message of EligibilityResponse to ▼ The driver has had FAR too many accidents [±] ✕
[else]
```

The number '5' and the message 'The driver has had FAR too many accidents' are circled in red. Below the rule logic, there is a checkbox for 'Update major version number' and a text area for 'Add a comment to this version'.

Click **Save** and check your editing in the **Rule Preview** panel that is displayed.

Rule Preview

Edit

Name TooManyAccidents
Status New

if
the number of accidents of the driver of **AutoQuoteRequest** is more than 5
then
make it *false* that **EligibilityResponse** is eligible ;
set the main message of **EligibilityResponse** to "The driver has had FAR too many accidents" ;

You now need to deploy the changes you have made to the rule execution server.
Navigate to the **Configure** tab and select the **Manage RuleApps** link. Select the **InsuranceSampleRuleApp**

Home
Explore
Compose
Query
Analyze
Project
Configure

Configure > Manage RuleApps

Eligibility

Available RuleApps

New |
 Details |
 Edit |
 Delete |
 Deploy |
 Redeploy |
 Refresh |
 Help

Display by 10

<input checked="" type="checkbox"/>	Name	Display Name	Major	Minor	Created On	Created By	Last Changed On	Last Changed By
<input checked="" type="checkbox"/>	InsuranceSampleRuleApp	LA71 Insurance Sample	1	0	6/9/11 1:11 PM	rtsAdmin	6/9/11 1:11 PM	rtsAdmin

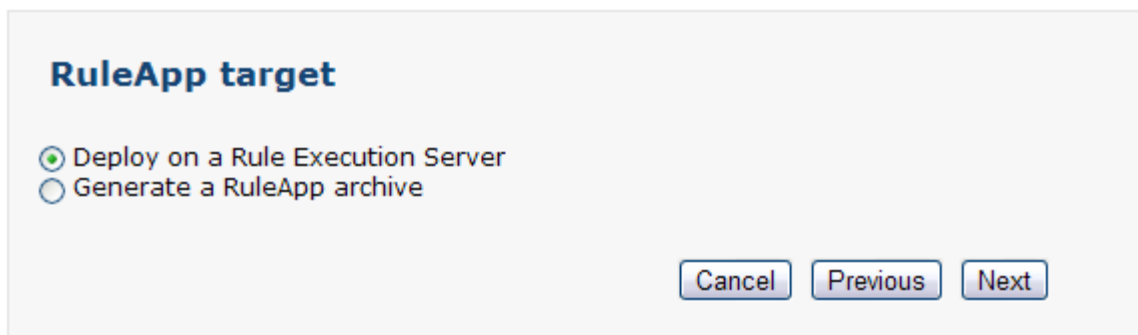
1 Result

Click **Deploy** and in the Deployment Name uncheck the **Create a baseline for this deployment** box.

Deployment Name

☐ Create a baseline for this deployment

Click **Next** and select **Deploy on a Rule Execution Server**.

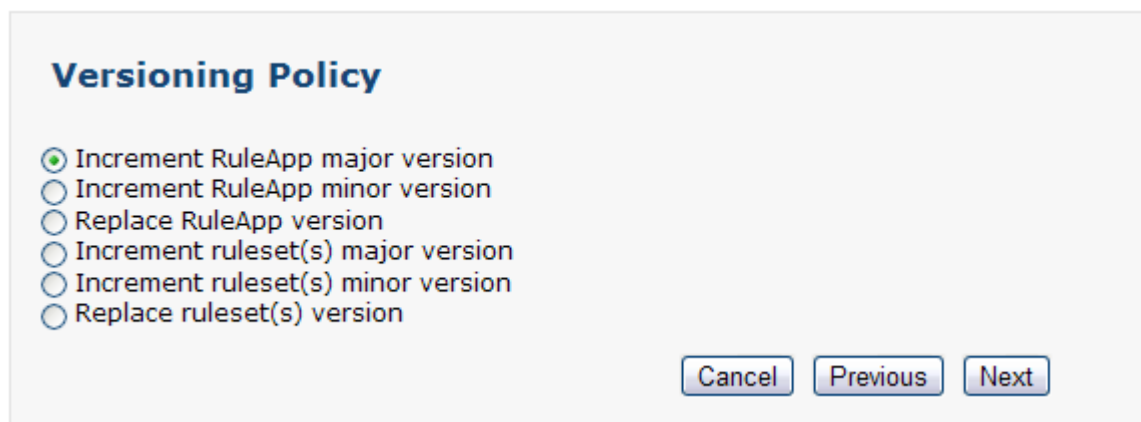


RuleApp target

☒ Deploy on a Rule Execution Server
☐ Generate a RuleApp archive

Cancel Previous Next

Click **Next** and select **Increment RuleApp major version**.

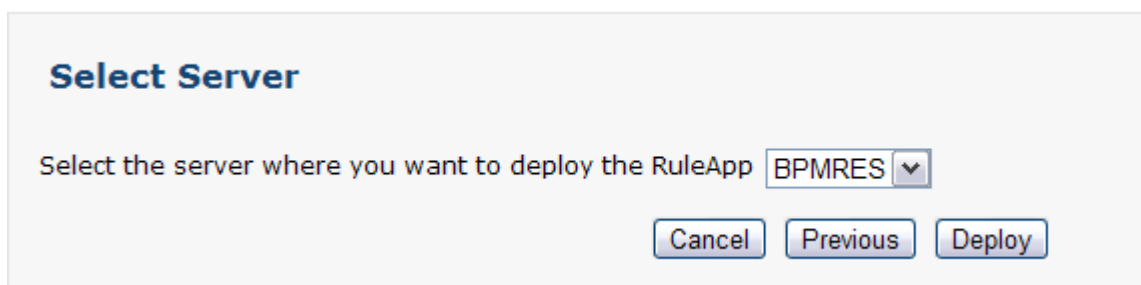


Versioning Policy

☒ Increment RuleApp major version
☐ Increment RuleApp minor version
☐ Replace RuleApp version
☐ Increment ruleset(s) major version
☐ Increment ruleset(s) minor version
☐ Replace ruleset(s) version

Cancel Previous Next

Click **Next** and select the BPMRES server that you have configured.



Select Server

Select the server where you want to deploy the RuleApp BPMRES ▼

Cancel Previous Deploy

Click **Deploy** and the RuleApp is deployed to the Rule Execution Server. A summary screen is displayed showing the versioning that has been applied.

You can log into the Rule Execution Server management console as resAdmin password resAdmin to check the new deployment status and versions that have been used.

WebSphere Rule Execution Server Console

resAdmin Sign Out IBM

Home Explorer Decision Warehouse Diagnostics Server Info

Explorer > RuleApps

RuleApps View

Add RuleApp Deploy RuleApp Archive Update RuleApps

RuleApps

Total Number of RuleApps 2

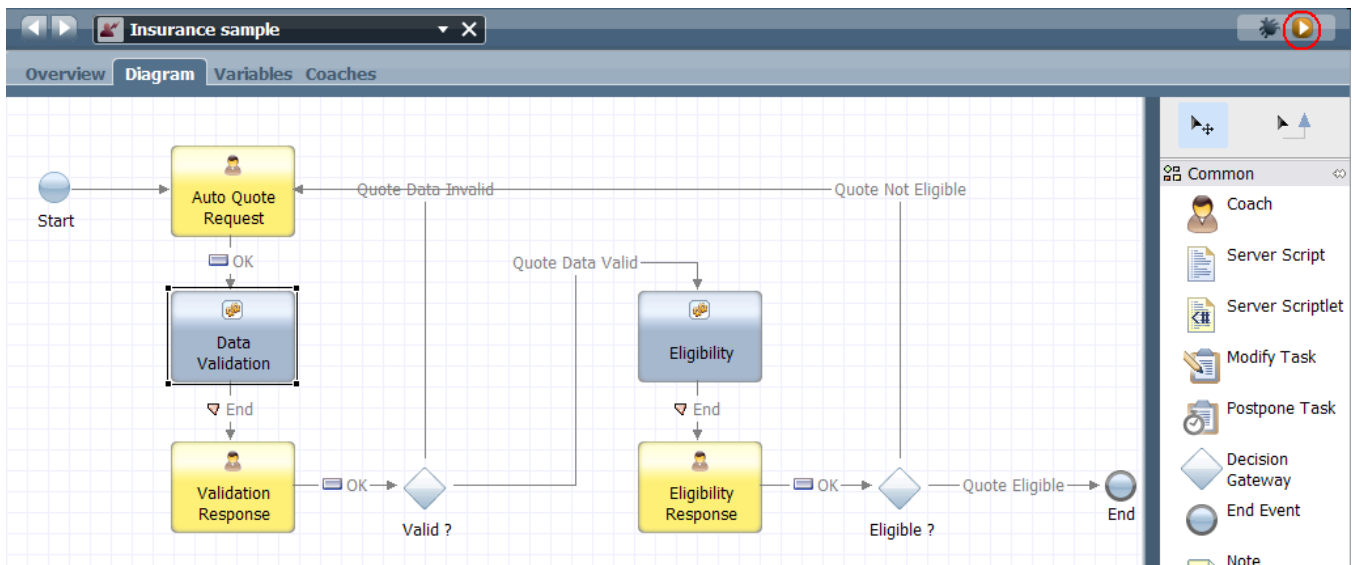
2 RuleApp(s) Name Filter: View only: Latest version Display by: 10

Select All	Name	Version	Creation Date	Number of rulesets	
<input type="checkbox"/>	InsuranceSampleRuleApp	1.0	Jun 13, 2011 3:03:15 PM GMT +01:00	2	Download Archive
<input type="checkbox"/>	InsuranceSampleRuleApp	2.0	Jun 16, 2011 4:29:56 PM GMT +01:00	2	Download Archive

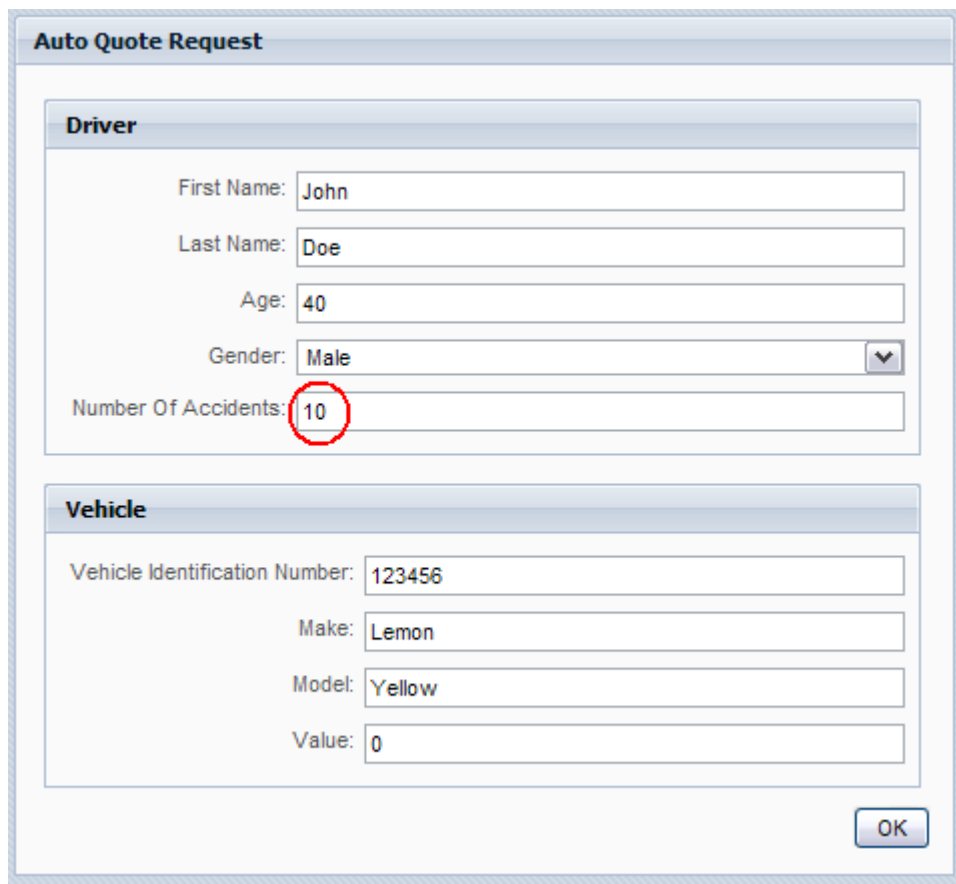
RuleApp 1 - 2 of 2 prev 10 next 10 Remove

Step 5. Testing the Changed Decision

You should now return to Process Designer, navigate to the **Insurance sample** Human Service and click the Run Service icon.



In the **Auto Quote Request** coach set the number of accidents to **10**. This should exceed the new **Eligibility** threshold.



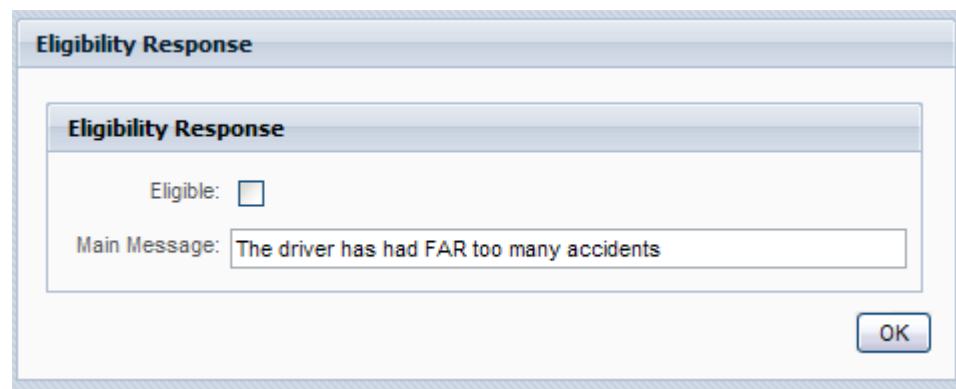
The **Auto Quote Request** dialog box contains two sections: **Driver** and **Vehicle**. In the **Driver** section, the **Number Of Accidents** field is set to 10 and is circled in red. The **Vehicle** section contains fields for **Vehicle Identification Number** (123456), **Make** (Lemon), **Model** (Yellow), and **Value** (0). An **OK** button is located at the bottom right.

Driver	
First Name:	John
Last Name:	Doe
Age:	40
Gender:	Male
Number Of Accidents:	10

Vehicle	
Vehicle Identification Number:	123456
Make:	Lemon
Model:	Yellow
Value:	0

Click **OK** and **OK** again to the Validation Response.

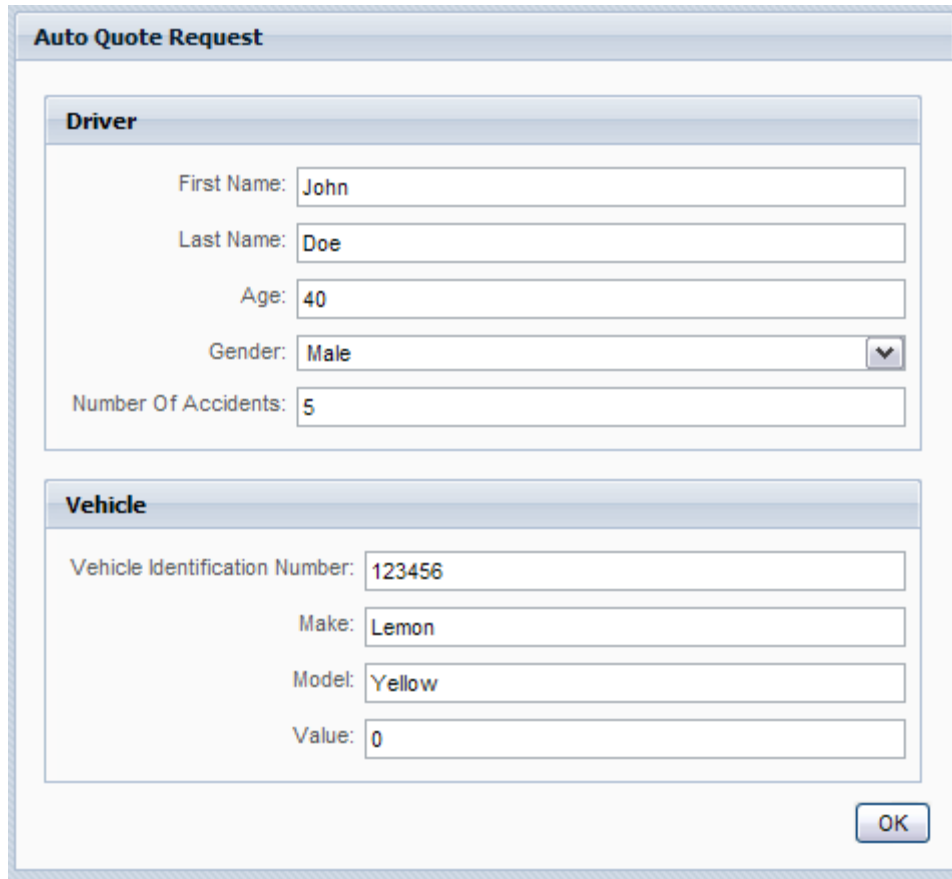
The Eligibility Response show the message from the changed rule.



The **Eligibility Response** dialog box shows an **Eligible** checkbox that is unchecked. The **Main Message** field contains the text "The driver has had FAR too many accidents". An **OK** button is located at the bottom right.

Eligibility Response	
Eligible:	<input type="checkbox"/>
Main Message:	The driver has had FAR too many accidents

Click **OK** and in the next **Auto Quote Request** coach set the **number of accidents** to **5** which failed **Eligibility** in previous runs.



Auto Quote Request

Driver

First Name:

Last Name:

Age:

Gender: ▼

Number Of Accidents:

Vehicle

Vehicle Identification Number:

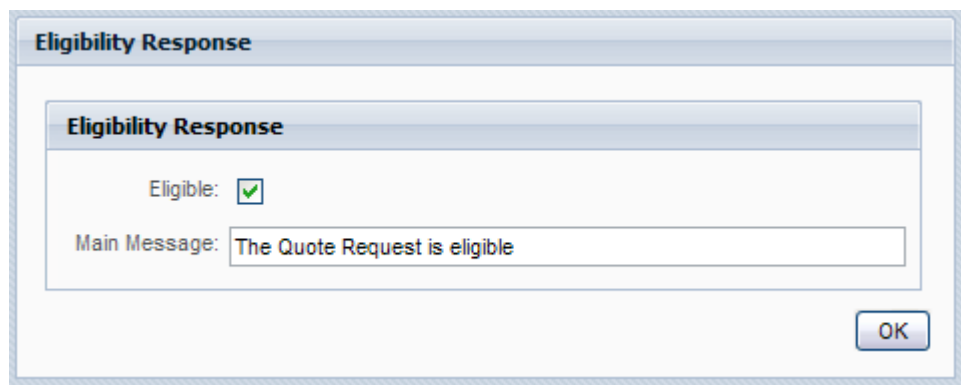
Make:

Model:

Value:

OK

Click **OK** and **OK** again to the Validation Response. This time the Eligibility rules accept the higher number of accidents showing the changed rules are active.



Eligibility Response

Eligibility Response

Eligible: ☒

Main Message:

OK

This completes Task 8 of the tutorial. You have now completed the whole tutorial from a Business Process Author defining a process and the decisions within it, through developers implementing a Managed Decision from those specifications, to the Business Process Author modifying the rules in those Managed Decisions and observing the impact on their processes.