

SupportPac LA71: IBM Operational Decision Manager 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 'Eligibility_AIS' Advanced Integration Service configuration in the IBM Process Designer. The interface is divided into several sections:

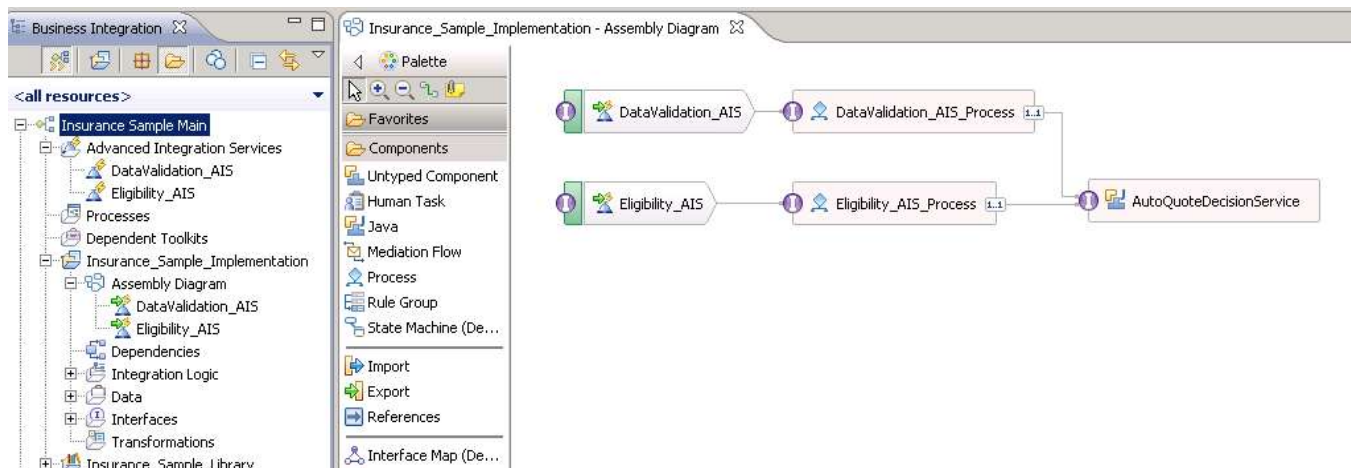
- Common:** Contains fields for 'Name' (Eligibility_AIS), 'Modified' (admin (Oct 31, 2012 10:13:11 AM)), and 'Documentation' (Click [Edit](#) to add or edit text.). There is also an 'Emulate Service' checkbox which is currently unchecked.
- Advanced Integration Service:** Contains fields for 'Module name' (Insurance_Sample_Implementation), 'Export name' (Eligibility_AIS), 'Operation name' (invoke), and 'Can be used with service?' (Yes). There is an 'Open in Integration Designer' button.
- Parameters:** A tree view on the left shows the parameter hierarchy: Parameters > Input > AutoQuoteRequest and Parameters > Output > EligibilityResponse. There is also an 'Error' icon. To the right of the tree are buttons: 'Add Input', 'Add Output', 'Add Error', 'Remove', 'Move Up', and 'Move Down'.
- Parameter Details:** Contains fields for 'Name' (empty), 'Documentation' (View More), 'Is List' (unchecked), and 'Parameter Type' (none). There are 'Select...' and 'New...' buttons at the bottom right.

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 **admin / admin** for a default install. Click Login.

Close the Welcome pane and select the **Insurance Sample (LA71TT1)** Process Application.

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



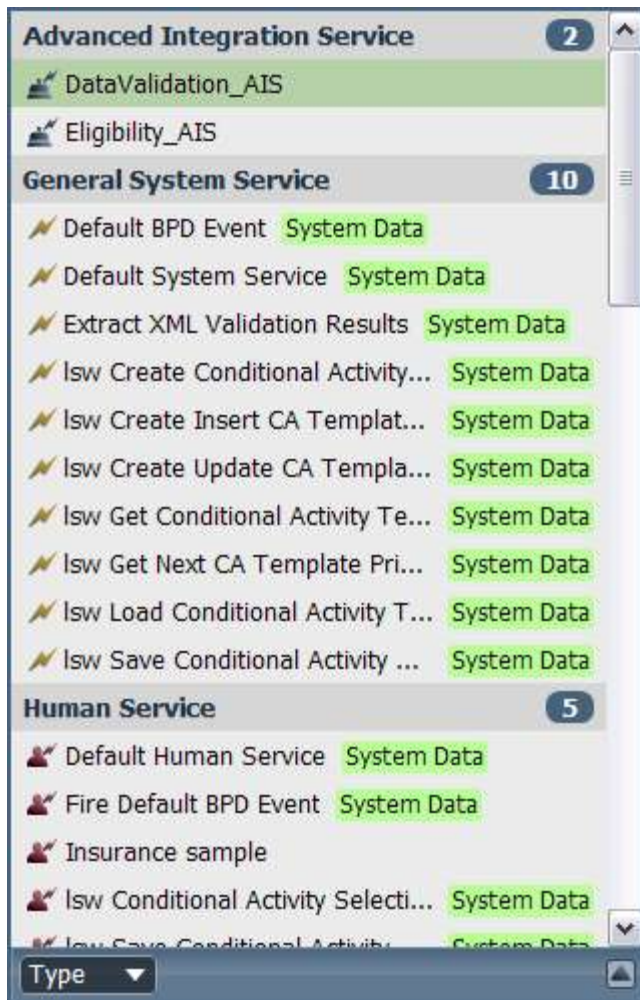
You should see that the implementation provided by development is now available.

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

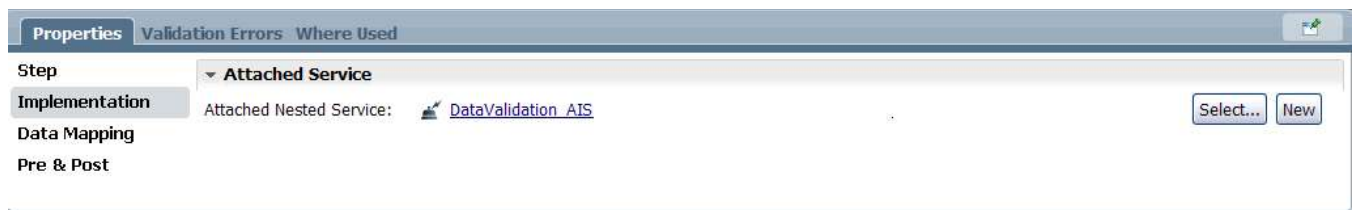
Step 2. Substitute the AIS Managed Decision Services for the embedded rule decision services

Click on the **User Interface** icon and double-click the **Insurance sample** Human Service. Select the **Data Validation** Nested Service in the diagram. 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 click on the **Select a variable** icon in the Output Mapping panel. Double-click Local > Private > validationResponse in the popup.



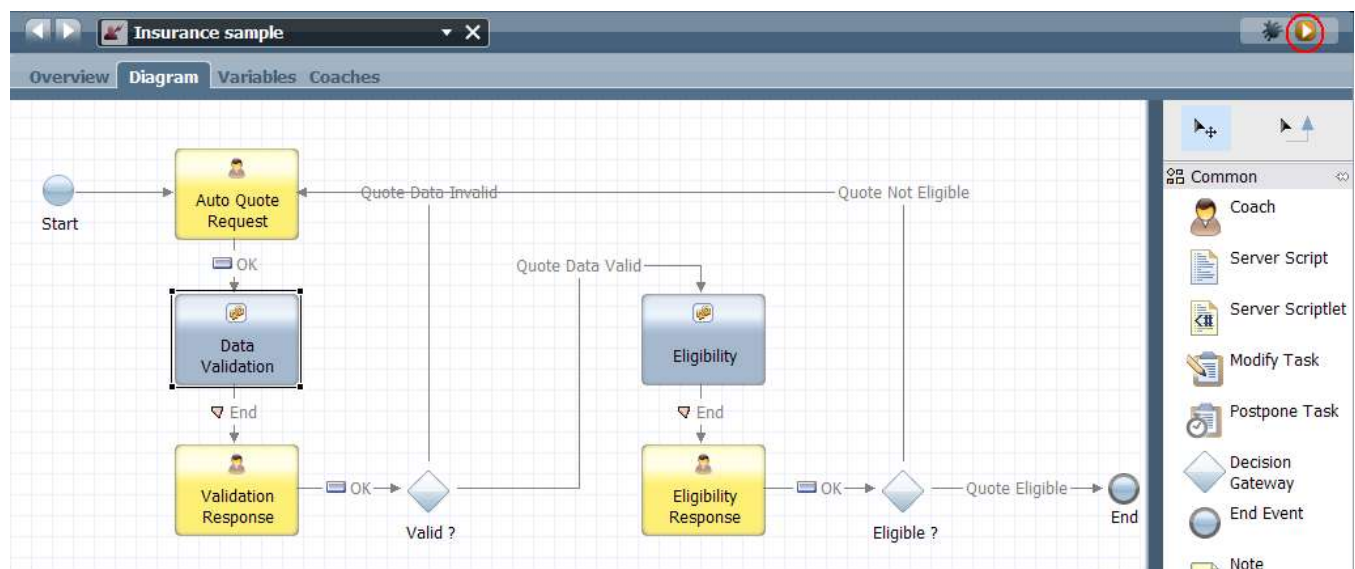
Repeat the process for the Eligibility decision service.

Select the **Eligibility** Nested Service in the diagram. In the Properties screen select the Implementation tab to show the current use of the Eligibility decision service based on embedded rules. Click the **Select...** button and select the **Eligibility_AIS** Advanced Integration Service from the pulldown.

Use the menu option **File > Save All** to save your changes.

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:

OK

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

Validation Response

Validation Response

Validated: ☐

Main Message:

OK

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:

Last Name:

Age:

Gender: 

Number Of Accidents:

Vehicle

Vehicle Identification Number:

Make:

Model:

Value:

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

Validation Response

Validation Response

Validated: ☒

Main Message:

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

Eligibility Response

Eligibility Response

Eligible: ☐

Main Message:

OK

Click **OK**.

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

Auto Quote Request

Driver

First Name:

Last Name:

Age:

Gender: ▼

Number Of Accidents:

Vehicle

Vehicle Identification Number:

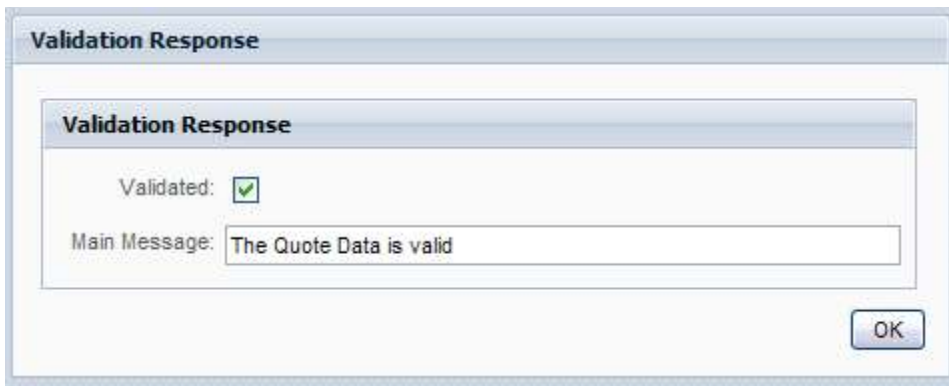
Make:

Model:

Value:

OK

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

A screenshot of a 'Validation Response' dialog box. The dialog has a title bar 'Validation Response'. Inside, there is a section titled 'Validation Response' containing a 'Validated:' label with a green checkmark icon and a 'Main Message:' label with a text box containing 'The Quote Data is valid'. An 'OK' button is located at the bottom right.

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

A screenshot of an 'Eligibility Response' dialog box. The dialog has a title bar 'Eligibility Response'. Inside, there is a section titled 'Eligibility Response' containing an 'Eligible:' label with a green checkmark icon and a 'Main Message:' label with a text box containing 'The Quote Request is eligible'. An 'OK' button is located 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.

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

IBM Decision Center

Options | About | Print View | Help | rtsAdmin | Sign Out

Home | Explore | Compose | Query | Analyze | Project | Configure

Project: Eligibility

Smart Folders

- Business Rules 2
- Ruleflows 1
- Templates
- Simulations
- Test Suites

Business Rules

New | Details | Edit | Delete | Copy | Lock | Unlock | Release lock | History | Help

Display by 10

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

2 Results

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

Rule Editing

Save | Cancel

Name* TooManyAccidents

Status* New

[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]

Update major version number ☐

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

Cancel Previous Next

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

Navigator

- RuleApps (2)
 - /InsuranceSampleRuleApp/1.0 (2)
 - /DataValidation/1.0
 - /Eligibility/1.0
 - /InsuranceSampleRuleApp/2.0 (2)
 - /DataValidation/1.0
 - /Eligibility/1.0
- Decision Services

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

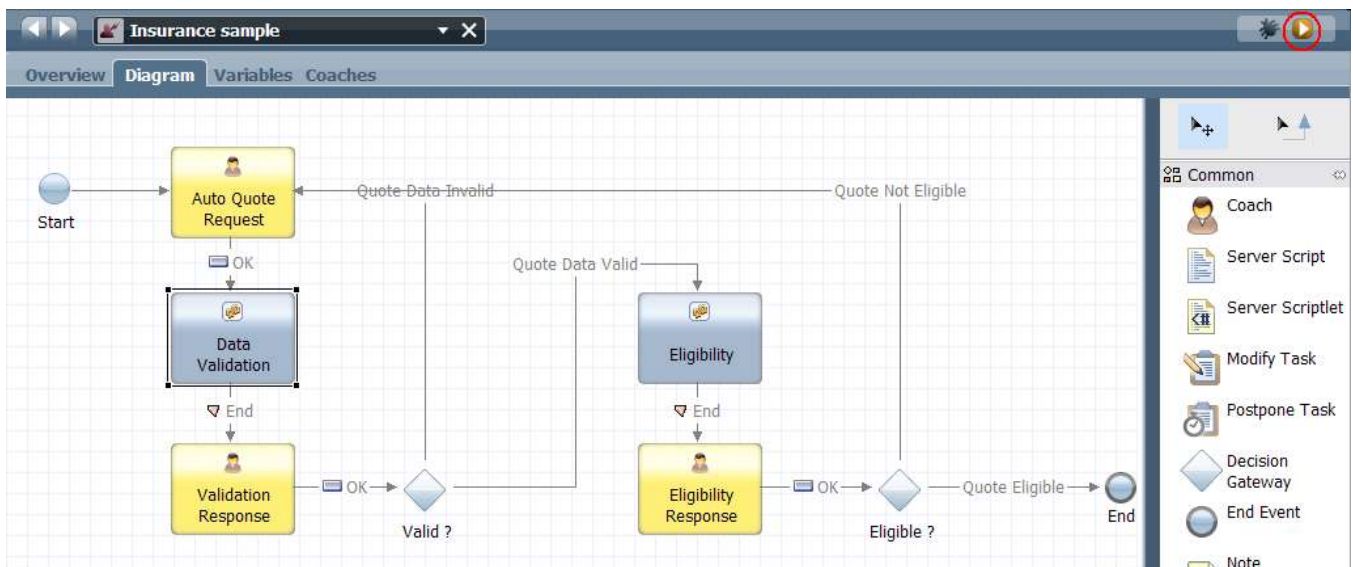
Select All	Name	Version	Creation Date	Number of rulesets	
<input type="checkbox"/>	InsuranceSampleRuleApp	1.0	Jun 13, 2011 3:03:15 PM GMT +01:00	2	Download Archive
<input type="checkbox"/>	InsuranceSampleRuleApp	2.0	Jun 16, 2011 4:29:56 PM GMT +01:00	2	Download Archive

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.

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.

The Eligibility Response show the message from the changed rule.

Eligibility Response

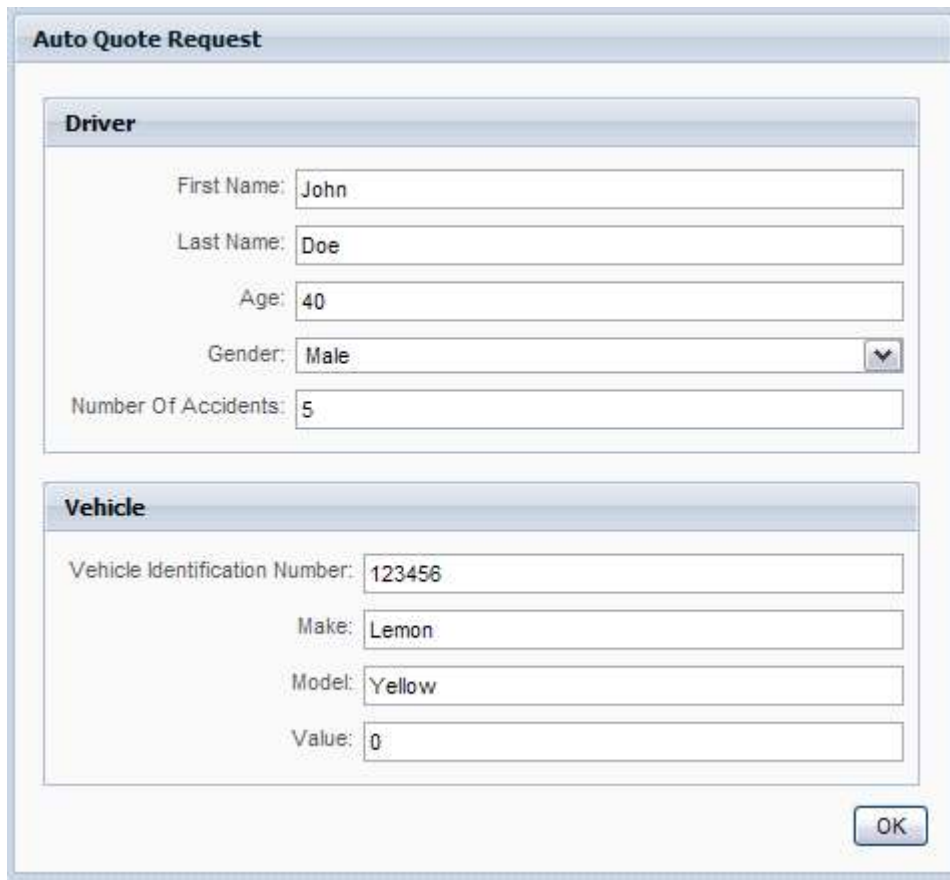
Eligibility Response

Eligible: ☐

Main Message:

OK

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



The 'Auto Quote Request' dialog box contains two sections: 'Driver' and 'Vehicle'. The 'Driver' section has fields for First Name (John), Last Name (Doe), Age (40), Gender (Male), and Number Of Accidents (5). The 'Vehicle' section has 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:	5

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

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.



The 'Eligibility Response' dialog box shows the result of the validation. It includes a section titled 'Eligibility Response' with a status 'Eligible: ☒' and a 'Main Message' field containing 'The Quote Request is eligible'. An 'OK' button is at the bottom right.

Eligibility Response	
Eligible:	<input checked="" type="checkbox"/>
Main Message:	The Quote Request is eligible

OK

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