

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

Getting started with IBM Business Process Manager

Task 4 – Integration Designer assembles an SCA Decision Component from the HTDS Managed Decision

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Overview

This task is to generate and test an SCA component from the decisions using web services. The test will be undertaken within the BPM Integration Designer (IID) tooling using the Hosted Transparent Decision Services (HTDS) running on Rule Execution Server (RES) created in task 2.

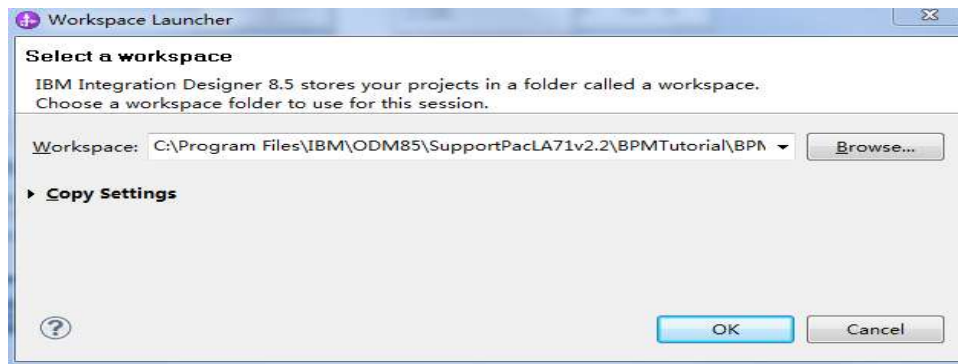
Readers who want to skip the exercise should import the solution into IID

[SupportPac LA71 Path]\BPMTutorial\task4\TestHTDSDecisionModule.zip and continue at Step 5 to test the HTDS SCA Component in the Process Server.

Step 1.Open Integration Designer

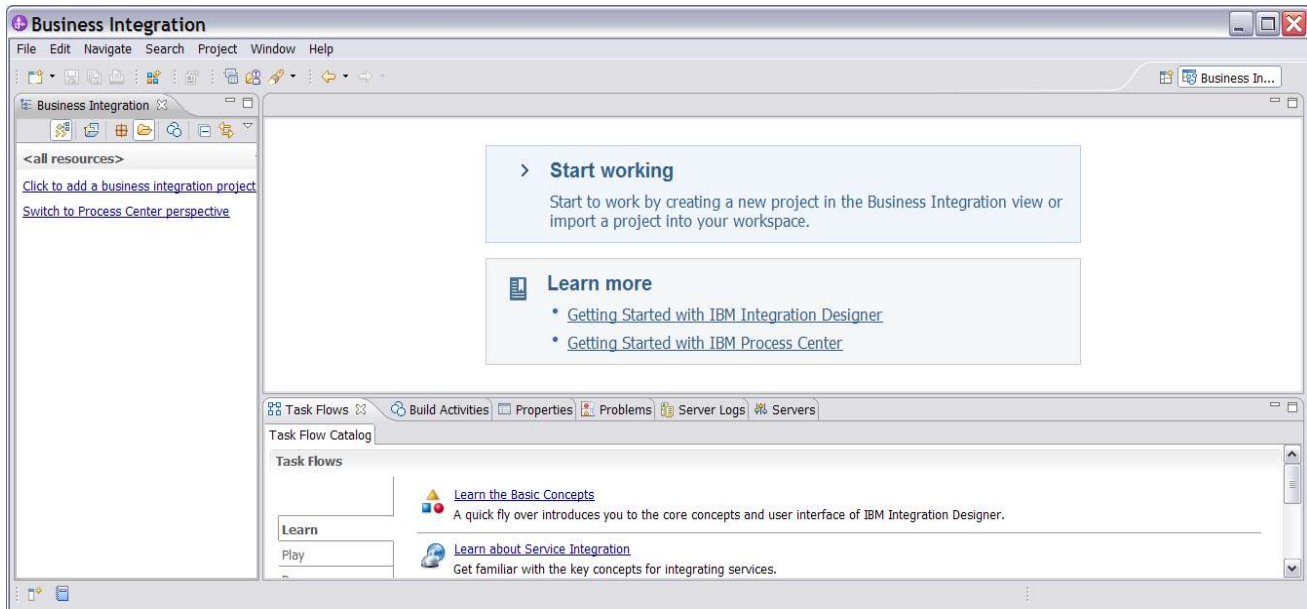
Integration Designer is the BPM tooling used by IT (specifically Integration Developers) to define and integrate Components that implement the Business Processes required by the business.

On launching Integration Designer select the tutorial workspace in **[SupportPac LA71 Path]\BPMTutorial\BPMWorkspace**.



If this is the first time you have used this workspace you should setup the Process Center links and the Process Center deployment environment and a process application as described in the overview and environment section of the tutorial.

Ensure that the Business Integration perspective is selected resulting in a blank workspace as shown below, otherwise you should clean your workspace.

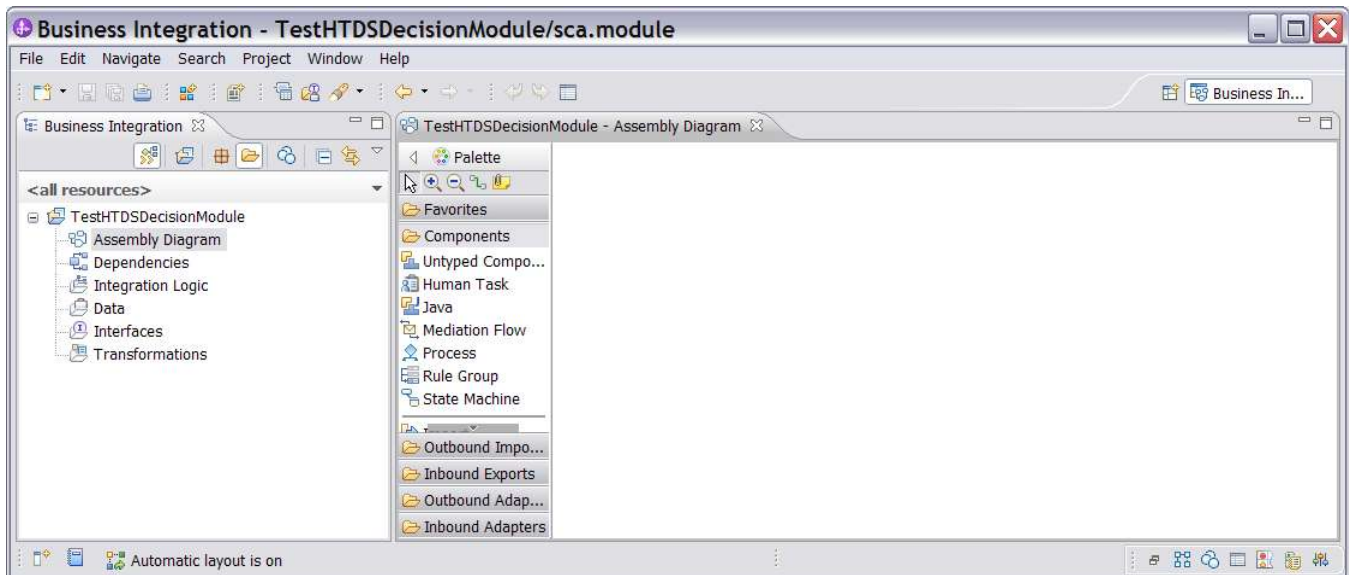


Step 2. Create a Test module for DataValidation.

Click **File > New > Module** from the menu.

Give the module the following name: **TestHTDSDDecisionModule**.

Click **Finish**.

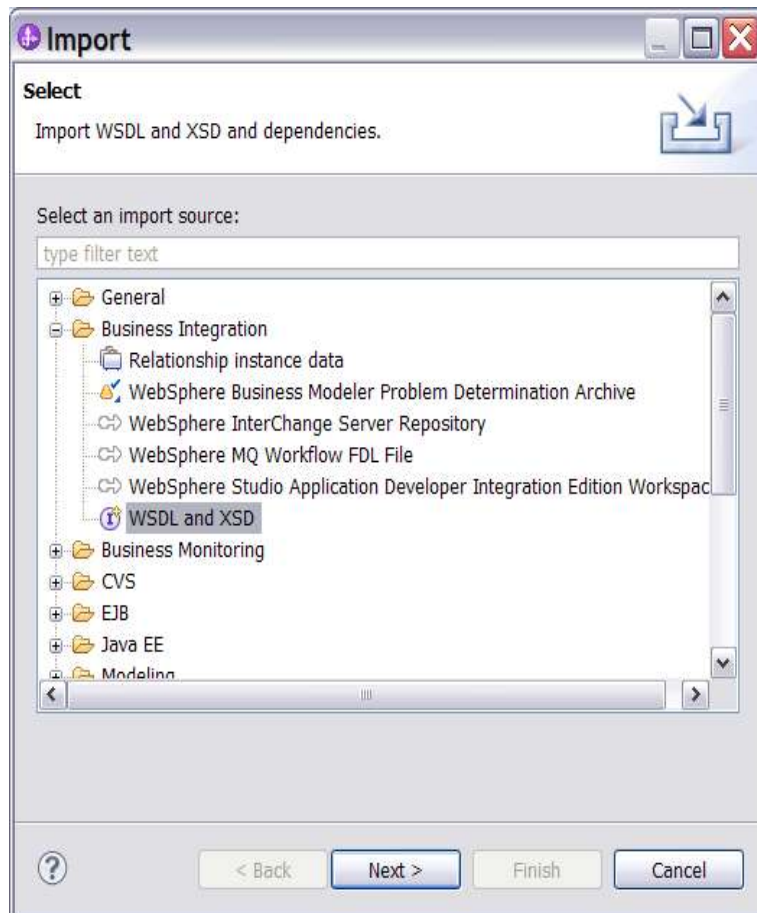


The SCA module is created and the Assembly diagram is shown to allow the implementation of the module to be defined.

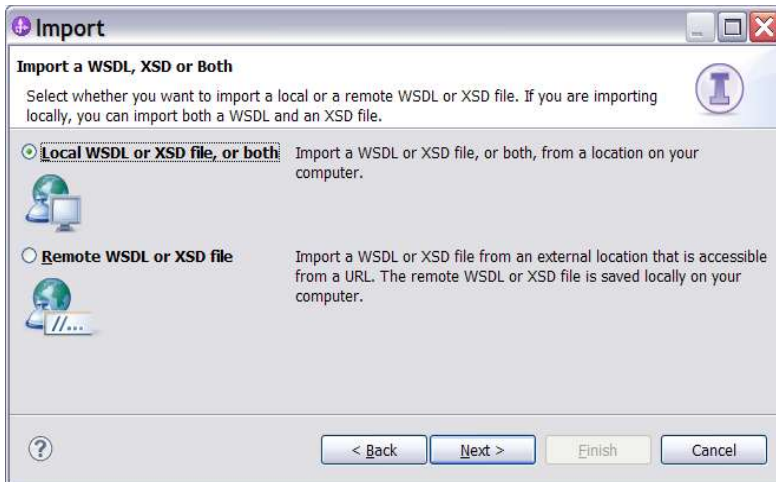
Step 3.Import the Decision Service WSDL files to create an implementation.

In this step you will import the decision service WSDL to generate an interface for the SCA Component and also import the endpoint to be invoked to implement the decision.

From the top menu click **File > Import**

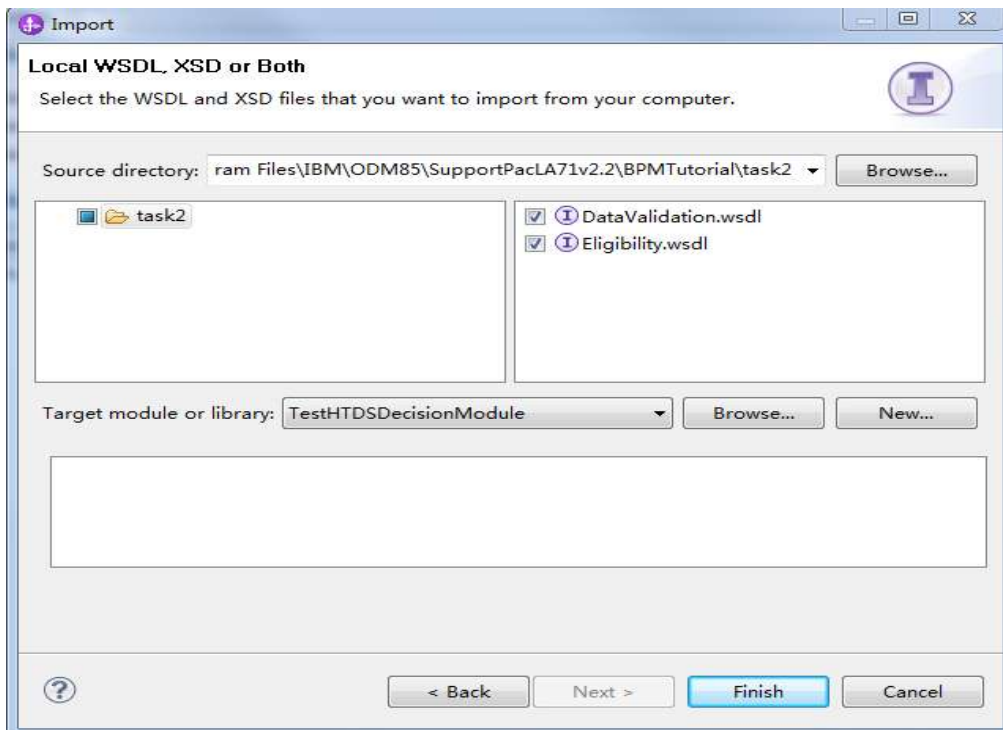


Select **Business Integration > WSDL and XSD** and click **Next** to import an interface defined by the WSDL.

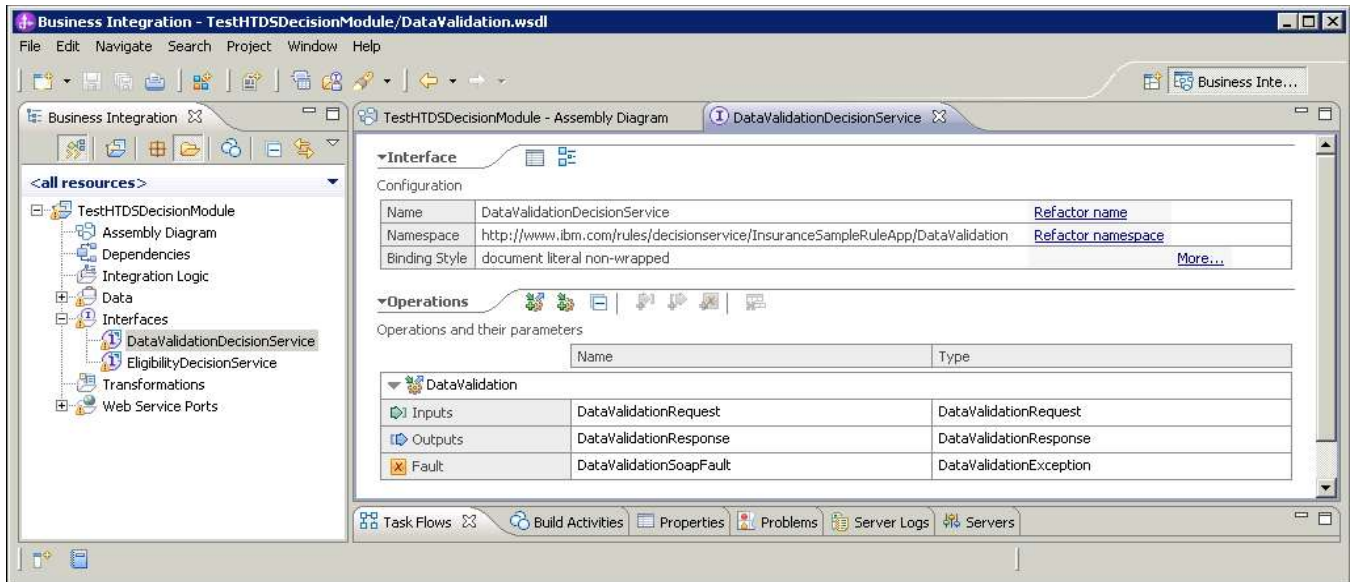


Select **Local WSDL or XSD file, or both** and select **Next**.

Click **Browse...** to define the path to the directory containing the two WSDL files that you saved in task 2. Check the boxes next to each of the .wsdl files and then select **TestHTDSDDecisionModule** from the Target module or library combo box.



Click **Finish** and the interfaces and all associated Business Objects are created in the Module.

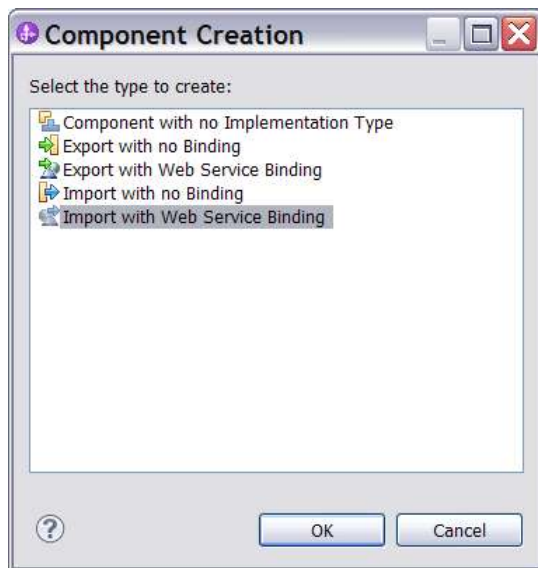


If the same business objects are imported from different WSDLs, you may see warnings due to duplicated Business Objects.

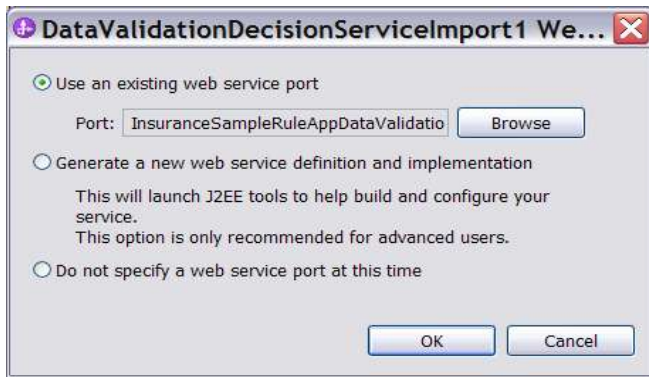
Step 4. Implement the Web Service Import.

In this step you will create an interface for the SCA Module and link it to the endpoint defined in the WSDL.

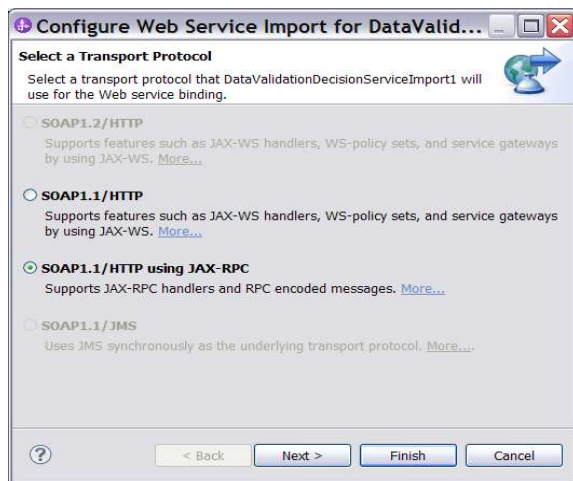
Drag the **DataValidationDecisionService** interface onto the assembly diagram (you may need to expand the tree to see it) and select **Import with Web Service Binding** in the dialog box:



Click **OK**, and in the next panel click **Browse** to select the existing endpoint.

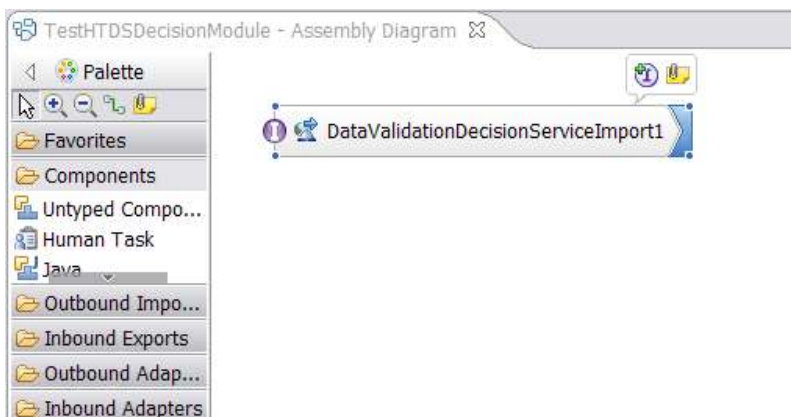


Select **InsuranceSampleRuleAppDataValidationPort** and click **OK**.



Select the **SOAP1.1/HTTP using JAX-RPC** option and click **Finish**.

Click **OK** in the Web Service Import panel that is still open and the import appears in the Assembly Diagram.



It is left as an exercise for the reader to repeat this for the Eligibility decision.

Step 5. Test the HTDS Decision Module.

Note: if you skip the exercise and import the existing **TestHTDSDecisionModule** project directly, make sure to modify the **Web Service Port**(InsuranceSampleRuleAppDataValidationPort and InsuranceSampleRuleAppEligibilityPort) from “localhost” to the hostname where your process center is installed.



To test the HTDS Decision Module you must make sure you have associated the decision module to a process application. See the overview and environment setup section of the tutorial for further details.

Open “Insurance Sample” process application(import it from Task1 if not exist) in Business Integration view. Right click on the module **TestHTDSDecisionModule** and click on **Associate to Process Center**.

Right click on the module **TestHTDSDecisionModule** and click on **Test > Test Modules**. You can also right click on the **DataValidationDecisionServiceImport1** component in the Assembly diagram and select **Test Component**.

The Integration Test Client opens. In the Value Editor, navigate to the **NumberOfAccidents** field and set the value to **-1**.

The screenshot shows the IBM Process Center Integration Test Client interface. The left pane displays the 'TestHTDSDecisionModule' under the 'Insurance Sample Main' process application. The main pane shows the 'Events' tab with a test trace. The right pane shows the 'General Properties' and 'Detailed Properties' for the selected event. The 'Value Editor' is open, showing a table with columns 'Name', 'Type', and 'Value'. The 'NumberOfAccidents' field is highlighted with the value '-1'.

Name	Type	Value
	string	[AB]
VehicleTyp...	[AB]	
AirbagTyp...	[AB]	
boolean	[AB]	false

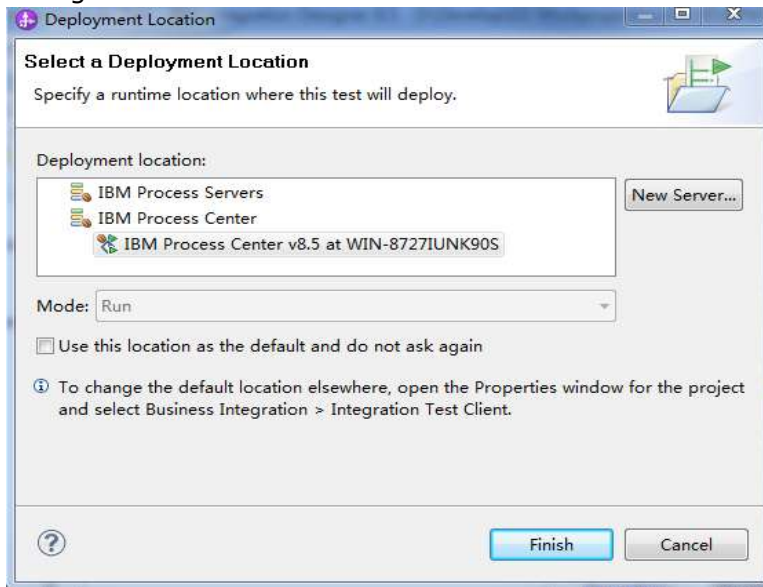
Press the Continue symbol.

Events

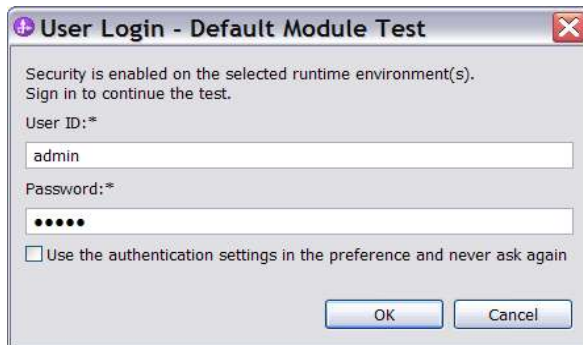
This area displays
display its properti
sections. [More...](#)



In the **Select a Deployment Location** screen, select the Process Server environment that you configured Rules to run on and click **Finish**.



When prompted enter the administrator name and password for the environment usually admin/admin.



The module is published to the server, and the request data sent to the module. The module then invokes the HTDS decision service and gets the response back which is then made available as the return business object. The rules have executed and indicated that the data is not valid because the number of accidents was negative.

Integration Test Client: TestHTDSDecisionModule_Test

Events

This area displays the events in a test trace. Select an event to display its properties in the General Properties and Detailed Properties sections. [More...](#)

- Invoke (DataValidationDecisionServiceImport1:DataValidation)
 - Invoke started
 - Invoke (DataValidationDecisionServiceImport1:DataValidation)
 - Return (DataValidationDecisionServiceImport1:DataValidation)
 - Invoke returned

General Properties

Detailed Properties

Module: [TestHTDSDecisionModule](#)

Component: [DataValidationDecisionServiceImport1](#)

Interface: [DataValidationDecisionService](#)

Operation: [DataValidation](#)

Return parameters:

Value Editor | XML Source

Name	Type	Value
DataValidationResponse...	DataValidationResponse..._type	[ab]
DecisionID *	string	[ab] 1e42aac4-dca0-4560-a94b-551896a033c4
AutoQuoteRequest *	AutoQuoteRequest	[ab]
DataValidationResponse	DataValidationResponse	[ab]
DataValidationRespc	ValidationResponse	[ab]
Validated	boolean	[ab] false
MainMessage	string	[ab] The number of accidents should not be negative
ErrorMessage	string[]	[ab]

The number of accidents should not be negative

Press 'F3' for focus

It is left as an exercise for the reader to repeat this for the Eligibility decision.

You have now successfully used an HTDS Managed Decision Service from an SCA Component within Process Server.