### IBM WEBSPHERE 6.1 – LAB EXERCISE

# Modeling human tasks with WebSphere Business Modeler V6.1

1
1
1
2
2
3
3
24
5

## What this exercise is about

The objective of this lab is to provide you with an understanding of the new feature in WebSphere Business Modeler V6.1 for modeling human tasks. The human tasks defined in WebSphere Business Modeler V6.1 can then be imported into WebSphere Integration Developer V6.1 where the business process implementation can be completed and tested.

This exercise will demonstrate how to create a human task in WebSphere Business Modeler V6.1 and the close integration with WebSphere Integration Developer V6.1.

## Lab requirements

List of system and software required for the student to complete the lab.

- WebSphere Business Modeler V6.1
- WebSphere Integration Developer V6.1

## What you should be able to do

At the end of this lab you should be able to:

- Create a local human task in WebSphere Business Modeler.
- Export the project and then import it into WebSphere Integration Developer V6.1 and understand the mapping between the WebSphere Business Modeler and WebSphere Integration Developer.

### Introduction

Human interactions are key components of many business processes. Modeling the human interactions in a business process involves roles, such as, who is going to do a task, security, ensuring that only authorized personnel are permitted to do each task and escalations. Escalations are a way to determine what to do, when a task is not completed within the allotted timeframe.

Capturing this information is a valuable step in the understanding and creation of business processes for an enterprise. If the business processes are being modeled with the intention of implementing them using WebSphere Integration Developer, then its essential that the information gathered during the business analysis is propagated accurately to the implementation stage. The features for modeling and specifying the human tasks in WebSphere Business Modeler V6.1 are designed to work seamlessly with WebSphere Integration Developer V6.1. The business analyst may choose to model the human interactions very simply and leave the details to the integration developer or they can specify the human task in detail, knowing that the work done will be carried over to the next phase of business process development.

In WebSphere Business Modeler V6.1, a human task is a *specialized kind-of task* that has unique requirements (constrained) on the inputs and the outputs, along with special resource and security requirements. The primary owner is a staff or person resource and the groups and roles help manage the security requirements.

In this exercise you will start with a human centric business process that was originally developed using WebSphere Business Modeler V6.0.2, using the new features in WebSphere Business Modeler V6.1 you will convert the 6.0.2 style human task to the new 6.1 Human Task element and then complete the specification for the human task.

When the specification in WebSphere Business Modeler V6.1 is complete, you'll then export the model from modeler and import it into WebSphere Integration Developer V6.1 to see how the new elements are mapped to constructs in the implementation model.

## **Exercise instructions**

Some instructions in this lab are Windows operating-system specific. If you plan on running the lab on an operating-system other than Windows, you will need to run the appropriate commands, and use appropriate files ( .sh or .bat) for your operating system. The directory locations are specified in the lab instructions using symbolic references, as follows:

Reference variable	Windows location	AIX/UNIX location
<was_home></was_home>	C:\WebSphere60\AppServer	/usr/WebSphere60/AppServer
		/opt/WebSphere60/AppServer
<irad_home></irad_home>	C:\Program Files\IBM\RSDP\6.0	
<lab_files></lab_files>	C:\Labfiles60	/tmp/Labfiles60
<temp></temp>	C:\temp	/tmp

**Note for Windows users**: When directory locations are passed as parameters to a Java program such as EJBdeploy or wsadmin, it is necessary to replace the backslashes with forward slashes to follow the Java convention. For example, replace C:\LabFiles61\ with by C:/LabFiles61/

## Part 1: Creating the human tasks

- \_\_\_\_\_1. Download and extract the WBIV61\_Labfiles\_Modeler.zip from the IBM Education Assistant.
  - \_\_\_\_a. It is under the additional resources where you downloaded this document from.
  - \_\_\_\_ b. Unzip it to the root of your drive.
- \_\_\_\_\_ 2. Start WebSphere Business Modeler V6.1 using a new workspace
  - \_\_\_\_a. Call the workspace Human Tasks
  - \_\_\_\_b. Wait a few moments until the WebSphere Business Modeler opens.
  - \_\_\_\_ c. Close the welcome page
  - \_\_\_\_ d. Apply the 4-pane layout from the toolbar

File Edit	Navigate	Search	Project	Modeling	Run	Window	Help		
i <b>C3 •</b> [	a 🖲 🗉	•	28 🖆	⑦ : E	20		<b>Q</b>	1	No.
Projec	tTree 🖄			- C	Apply	4-pane l	ayout		

\_\_\_\_\_ 3. Set the modeling mode to WebSphere Process Server

Modeling Pup Window	Halp	
Modeling Run Window		
👕 Create 🔹 🕨	] • : 🖉 : 🔂 • : 🖓 • 🖓 • 🍋 🛆 • 🔿 •	-
📮 Mode 🔹 🕨	Basic	Alt+Ctrl+B
🏫 Quickstart wizard	🖫 Intermediate	Alt+Ctrl+I
- ¥> =	😡 Advanced	Alt+Ctrl+A
	🖽 WebSphere Business Integration Server Foundation	Alt+Ctrl+S
	BB WebSphere MQ Workflow	Alt+Ctrl+M
	✓ 🞇 WebSphere Process Server	Alt+Ctrl+P
	🕞 FileNet Business Process Manager	Alt+Ctrl+F

- \_\_\_\_\_4. Import the existing human resources project.
  - \_\_\_\_a. Right mouse click on in the background area of the project tree and select import.

\_\_\_b. Select the WebSphere Business Modeler project (.mar, .zip ) import type and

🔮 WebSphere Business Modeler Import			
Select type.			
Select a product or format for export and click Next.			
Types			
WebSphere Business Modeler project (.mar, .zip)			
WebSphere Business Integration Workbench V4.2.4 (.org)			
Delimited text (.csv, .txt)			
Microsoft Visio (.vdx)			
Monitoring result (.xml)			
Business services and service objects (.wsdl, .xsd)			
Type definition XML schema (.xsd)			
Rational Data Architect(.xsd)			

- \_\_\_ c. Browse to the source directory <LAB\_FILES>\Modeler 6.1
- \_\_\_\_\_d. Select the modeler archive, **HR Hiring.mar**

Note: This dialog is context sensitive and what is displayed depends on the file type selected. WebSphere Business Modeler V6.1 .mar files may or may not need to specify a target project whereas the 6.0.2 .mar files do.

- \_\_\_\_e. Create a new target project using the **New** button.
  - 1) Call the target project HR
  - 2) After the target project has been created, press Finish.

WebSphere Business Modeler Import	
urce and destination	×
ck Finish to import.	225
~	19 f
Source directory	
C:\Labfiles	Browse
Files	
HR Hiring.mar	
Target project	
HR	Mew New
✓ Include simulation snapshots	
Overwrite existing elements	
	/
()(	
< Back Next	> Finish Cancel

- \_\_\_\_f. An informational dialog is displayed.
  - 1) Press OK



2) Ignore the warnings when complete.

\_\_\_ 5. Familiarize yourself with the HR model.



- \_\_\_\_\_a. First notice the business processes. The overall business process that is captured in this model is the hiring of new employees. Interviewing the prospective employee is an integral part of the hiring process. In this exercise you will be working with the **Hiring** business process.
  - 1) Open the Hiring business process and become familiar with it. Notice the labels and the overall flow.
  - 2) There are three tasks labeled human tasks, Approve Executive Application, Approve Standard Application and Four Eyes approval. Each has the implementation type in the technical attributes set to "human task" and each is associated with a classifier called "Human Task". The classification is used in the 6.0.2 model to help identify and manage the special kind of task and provide the label on the diagram.
  - 3) In this exercise you will convert one of these tasks to the new human task element.
- 6. Convert the V6.0.2 style human task called Approve Standard Application to a first class V6.1 human task.
  - \_\_\_\_a. Select the task Approve Standard Application and right-mouse click to get the pop-up menu.



- \_\_\_ b. Select convert → Local Human Task...
- \_\_\_ c. Select "OK" on the confirmation dialog.

😲 Convert to a local human task	
Convert to a local human task	
Create a new human task	
Approve Standard Application	
Description of new human task	
Approval step for standard applicants only	
	/
	OK Cancel

\_ d. And the standard task is converted to a human task.



- \_\_\_\_\_7. Complete the specification of the newly created human task.
  - \_\_\_\_\_a. Select the new human task and then select the attributes tab, followed by the **Primary Owner** tab. Here you can begin to specify the details related to the human task, a short description, and the role along with additional criteria that is used to create a query against the user registry in the runtime environment.

Form	s	Primary Owner	Additional Resources	$\sim$

- 1) Fill in the description with some words indicating how this task should be handled.
- 2) You can select either an individual resource definition or a role. Roles are much more flexible and easier to maintain, therefore, for this exercise, select role and browse until you find the HR Specialist and select the HR Specialist as the role.
- 3) Next you can define the timeframe in which this task must be completed. Remember from the lecture that this is used by the WebSphere Business Modeler V6.1 for process modeling simulation but is not used by WebSphere Integration Developer V6.1.

a) Select 2 days

4) For the people assignment criteria...

- a) Select Members by role name from the Name drop down box.
- b) Select the **HR Specialist**. Select the field for the attribute value and the button for selecting the role is displayed.

<ul> <li>People ass</li> </ul>	ignment criteria	
You can spect assigned this	ify an individual to be assigned this task at runtime, or you can s task.	specify a person with a particular role or from a particular organization to be
Name	Members by role name	
Attribut	te name	Attribute value
*Name		
Name of	falternative role 1	
Name of	falternative role 2	

c) Alternative roles can also be specified for the case where no one in the primary role is available.

**Note**: For this part of the modeling to go smoothly it helps if the resources and roles have already been defined.

5) When you're done the Primary Owner should look as shown below.

Attributes - Approve Stan	🕞 Attributes - Approve Standard Application 🛛 Business Measures Errors (Filter matched 10 of 10 mems) Technical Attributes View				
General Cost an	d Revenue Duration	Inputs Outputs Fi	orms Primary Owner Additional Resources Escalations C	Irganizations Classifiers	
Primary Owner					
This section displays the prin	nary owner (the resources o	r staff role that will perform the task).			
Description	The person that is respons	ible for screening and approving the sta	andard applications is the HR Specialist. Each new application must be processed with	1 2 days.	
🔿 Individual reso	urce definition				
Role     Role		HR Specialist			
Days     Hours     Minutes     Seconds     Milliseconds       Time required     2     0     0     0     0       Veople assignment criteria					
You can specify an	individual to be assigned thi	s task at runtime, or you can specify a p	person with a particular role or from a particular organization to be assigned this task	<u>.</u>	
Name Members by role name					
Attribute nar	ne		Attribute value		
*Name			HR Specialist		
Name of alternative role 1					
Name of alter	native role 2				

6) Ctrl-S to save your work.

\_\_\_\_8. Define the escalations.

\_\_\_\_a. Select the **escalations** tab in the attributes view.



\_\_\_\_b. Create an escalation called Day 1.

1) Select the **add** button on the right at near the top.

별 🎞
Add
Remove

- 2) Name: Day 1
- 3) Description: The new standard application has not been claimed after the first day. Notify the team leader, HR Specialist B, by e-mail.

Escalations	
▼ Details	
Specify the escalation details and action	L.
Name	Day 1
Description	If the new standard application has not been claimed after the first day. Notify the HR Specialist by e-mail.
If task is	Ready
Escalate when	
Task is not	Claimed
After	DaysHoursMinutesSeconds1•0•0•••••••
After escalation	No previous escalation
Escalation action	
Notific	Percen by percen ID ("broperialisth")
Notify	
E-mail message	
	Days     Hours     Minutes     Seconds       Image: Ima

Fill in the fields as shown in the screen capture above.

\_\_\_\_ c. Create an escalation called Day 2.

1) Select the Day 1 escalation in the escalation hierarchy tree.

IBM WebSphere 6.0 – Lab exercise

- 2) Select the add button on the right side of the "Escalations".
- 3) Fill in the information as shown in the screen capture below.
- 4) Description: If after the 2nd day, the work item is still in the ready state and has not been claimed, even after a previous escalation, then notify the manager by e-mail

□ Escalations □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
▼ Details	
Specify the escalation details and action	1.
Name	Day 2
Description	If after the 2nd day, the item is still in the ready state and has not been daimed, even after the previous escalation, then notify the manager by e-mail.
If task is	Ready
Escalate when	
Task is not	Claimed
After	Days     Hours     Minutes     Seconds       1     •     0     •     0     •
After escalation	Day 1
Escalation action	
Notify	Members by role name ("HR Manager")
Notification type	
E-mail message	Default e-mail message
Repeat notification	every
	Days Hours Minutes Seconds

- 5) Notice the use of the "after escalation". This is how you tell it that this escalation is based on the previous one, for Day 1.
- 6) Also notice the "notify" field. By selecting the query for "Members by role name" the query can be kept general. In this way the notification can avoid getting pinned to a particular person.
- 7) Ctrl-S to save your work.
- \_\_\_\_9. Complete the technical attributes
  - \_\_\_\_ a. When exporting the model with the intention of importing it into WebSphere Integration Developer V6.1 for elaboration of the implementation, its important to complete the fields in the technical attributes. The easiest way to get started on this is to use the tool to apply the defaults.

This will provide the pattern which can then be updated to the values that suit your particular environment.

1) From the tool bar of the technical attributes view, on the upper right, select the icon to apply the default values.

1 📄 Technical Attributes View	x - E

This will set the default technical attributes for all the elements in your model.

2) You'll be asked if you want to overwrite you existing technical attributes. Since this is your first time you want to **select yes**. If you have already set them and made modifications, this will allow you to set it for new, elements and leave the old ones as they are.

🕒 Apj	ply Default Values		
?	Would you like to over new default values?	write your existing technical attril	bute values with the
		Yes No	Cancel

\_\_\_\_\_b. Select the Interface tab and adjust the values as shown in the screen capture below.



\_\_\_\_\_ c. Select the Request tab and adjust he values as shown in the screen capture below. The names here are used when creating the implementation artifacts such as WSDL interfaces and BPEL activities. Many organizations have standard naming conventions. This is the place where those conventions should be applied.

Attributes - Approve Standar	Business Measures	Static Analysis	Errors (Filter mat	ched 9 of 9 it	🗎 Technical A
Interface Request	Response	<hr/>			
VSDL Attributes			<b>BPEL Attribut</b>	es	
Define the WSDL interface information			Define the BPEL human task activity information		vity information
Operation name			Activity di	splay name	
ApproveApplicationOp			Approve Stan	dard Application	1
VSDL Message Details			Activity name		
- Hobe Hebbage betailb			ApproveStandardApplication		
Define the WSDL message th	nat represents the i	nput of an			
Message name					
ApproveApplicationMessa	ge				
Part name					
ApproveApplicationDataIr	ı				

\_\_\_\_\_d. Select the Response tab and adjust the values as shown in the screen capture below.

Attributes - Approve Standard	Application	Business Measures	Errors (Filter m
Interface Reque	st Re	esponse	
WSDL Attributes			
Define the WSDL interface in	formation		
VSDL Message Detail	s		
Define the WSDL messag	e that repre	esents the output of	an operation
Message name			
ApproveApplicationRe	ply		
Part name			
ApplicationDataRespo	nse		

- \_\_\_\_e. Notice how the available technical attributes different from the 6.0.2 definitions; the implementation type is no longer available because it is defined by the task type.
- \_\_\_ f. Save you work; CRTL-s

## Part 2: The implementation – exporting to WebSphere Integration Developer V6.1

Capturing the basic human interactions and the business process in WebSphere Business Modeler may be all that is required. Chances are that the real goal is to create a model that will be implemented in WebSphere Integration Developer V6.1 and run in WebSphere Process Server V6.1.

To do this the next step is to export the model you've just created and then import it into WebSphere Integration Developer V6.1. Part 2 of this exercise will take you through those steps.

\_\_\_\_1. Right mouse click on the HR project to get the pop-up menu and select export.



2. Export the HR modeling project using the WebSphere Integration Developer export type.

ту	pes
Web	Sphere Business Modeler project (.mar)
Web	Sphere Integration Developer
Web	Sphere MQ Workflow Buildtime (. 👌
Web	Sphere Business Monitor Development Toolkit (.mm)
Web	Sphere Business Modeler XML (.xml)
Web	Sphere Studio Application Developer Integration Edition
FileN	let Business Process Manager (.xpdl)
Ratio	onal Data Architect
UML	Business Modeling Profile
Delin	nited text (.csv, .txt)

\_\_\_\_a. Set the target directory = <LAB\_FILES>

stination and source sure that the reference groups for the selected projects are correct and click Next to continue	Ľ
Target directory	
C: Labfiles	Browse
O Export entire project and related projects O Export specific elements	
-VG HR	
Enable default events	
	/

- \_\_\_ b. Press Next.
- \_\_\_\_ c. Use the recommended export option. This is selected by default. When this option is used three projects are created for you in WebSphere Integration Developer V6.1 based on the separation of concerns principle discussed in the lecture.

Recommended Export Opt	ion 🖌		
Recommended Export Opt Module + Library Module Library None	brojects. It separates the busine working iteratively between We	ss logic from the implementation det bSphere Business Modeler and Web	ails. Choose this option Sphere Integration
Export using the	standard project interchange	. Tormae for ource entrionin	icites
Project Interchan	ge Name		
Project Interchan HR.Model.HumanTask.	ge Name		
Project Interchan HR.Model.HumanTask. Project Namest	ge Name 1 amp to project interchange n	ame	
Project Interchan HR.Model.HumanTask. Append timesta rget Project Names Modeler Project Name	ge Name 1 amp to project interchange n Business Logic Module Name	ame Implementation Module Name	Library Name

 Business Logic Module: This project will contain all of the generated BPEL and any concrete processing elements such as the business rules and human tasks that represent the business model.

- a) BPEL, inline TEL files, WSDL files related to the BPEL, exports and imports.
- 2) **Implementation Module:** This project will contain the implementations for the Web services or other tasks for which there is no concrete implementation. The implementations are linked to the BPEL activities in the business logic module through SCA import/exports.

This separation between the Model and the Implementation will help preserve the implementations when there are changes in the model.

**Note**: A regular task in modeler with an implementation type set in the technical attributes will have a skeleton of the specified type created in the integration module project.

- 3) **Library Module:** This project contains the supporting interfaces and data definitions shared by the business logic and the implementation modules.
  - a) Artifacts included in the library are BOs and WSDL interfaces for all elements (global and local).
- \_\_\_\_ d. Export using the standard project interchange format
- \_\_\_\_e. For the Project Interchange Name: HR.Model.HumanTask.1
- \_\_\_\_ f. Append the timestamp.
- \_\_\_g. Press Finish.
  - 1) There will be a warning about a missing correlation id. This is ok. The correlation is something the integration developer will be able to take care of.
- \_\_\_\_\_ 3. Start WebSphere Integration Developer V6.1 using a new workspace.
- \_\_\_\_\_4. Import the HR.Model.HumanTask.1 \_yyyy-mm-ddThh.mm.ss.zip
  - \_\_\_\_a. Locate the Project Interchange import type in the "Other" folder.

🚯 Import 🛛 🗙
Select Import a project and its dependent projects from a Zip file.
Select an import source:
type filter text
General     Business Integration     CVS     CVS     Description     Desc
(?) < Back Next > Finish Cancel

- \_\_ b. Press **Next**.
- \_\_\_ c. Notice the three type of project that are available. Ensure that all three are selected.

import Projects	
Import Projects from a	a zip file.
From zip file:	C:\Labfiles\Labfiles61\HR.Model.HumanTask.1_2008-
Project location root:	C:\Documents and Settings\Administrator\Desktop\My W
Select All Deselect	ct All Select Referenced

\_\_\_ d. Press Finish.

- \_\_\_\_e. Wait for the projects to finish building. The progress indicator is at the bottom right, in the message bar at the bottom of the window.
- \_\_\_\_\_f. There should only be one error in the problems list, regarding a correlation set in the interviewing business process. This is ok for the purpose of this exercise.
- \_\_\_\_5. Browse the projects keeping in mind that the focus here is on the Human tasks in the **Hiring** business process.
  - \_\_\_a. HR (business logic module) expand the Business Logic folder



\_\_\_\_ b. It is the Hiring business process that we're interested in; double click on the hiring business process.



- \_\_\_\_ c. All of the tasks with the exception of the Approve Standard Application are mapped to BPEL invocation activities. The Approve Standard Application has been mapped to a in-line human task.
  - 1) Select the *Approve Standard Application* and then select the properties tab in the view pane below.
- \_\_\_\_\_d. Notice the name of the component and the display name are the same as specified in the technical attributes of WebSphere Business Modeler V6.1

Build Activities Properties 🕴 Problems Servers				
Description	👌 Human Task -	Approve Standard Application		
Details	Name:*	ApproveStandardApplication		
Server				
Join Behavior	Display Name:	Approve Standard Application		
Expiration	Description:	Approval step for standard applicants only		
Environment	Documentation:			
Event Monitor				
· Global Event Settings				

\_\_\_\_\_e. Select the details tab in the right navigation bar of the properties view. Here you see the names of the input and output variables, which happen to be one and the same in this case. They are

created for you automatically as part of the import process and are based on the business items defined in WebSphere Business Modeler.

Build Activities 🔲 Properti	es 🛛 Proble	ems Serve	ers	
Description	🐉 Human	Task - A	Approve Standa	ard Application
Details	The Staff Action	n is implem	ented by a Human Ta	ask.
Server	Human Task:	Hirir	ng ApproveStandard	Application Open Remove
Join Behavior	🔽 Use Data Tyj	pe Variabl	es	
Expiration		Name	Variable	]
Environment	Dl Input(s)	Input	ApplicationVariable	
Event Monitor	(C) Output(s)	Output	ApplicationVariable	
· Global Event Settings			1	

- \_\_\_\_f. To see the details of the in-line human task component, select the Open... button.
- \_\_\_\_g. Expand the service interface twisty. The interface and service operation names are as defined in the technical attributes in WebSphere Business Modeler V6.1.

A Hiring Miring_ApproveStandardApplication 🛛						
▼To-do Task 🔲						
Name	Name Hiring_ApproveStandardApplication			ay Name	<not applicable=""></not>	
▼Service Interface						
(I) Interface	ApproveStandardApplication					
🎲 Operation	ApproveAppli	ApproveApplicationOp				
DI Input	Input		App	Application		
📫 Output	Output	Output		Application		
▼User Interface						
✓Escalation Final Second Subtask started						

- Build Activities 🔲 Properties 🖾 Problems Servers Ataff role: Potential Owners Assian People People assignment criteria: Role Members ~ Test... Assigns members of a role. Supported by default configurations for: Virtual Member Manager, LDAP. Define a role name as a: uniqueName (VMM), DN (LDAP). If only one person gualifies, claim task automatically. Name Value RoleName \* HR Specialist IncludeNestedRoles false Domain AlternativeRoleName1 AlternativeRoleName2
- \_\_\_h. Select the Potential Owners and the details below will change....

This should be very familiar to you, since it is what you specified in WebSphere Business Modeler. At this point an experienced integration developer might start to make changes. Be aware that changes made to the human task component are not incorporated into the delta file that can be provided to WebSphere Business Modeler V6.1 for change analysis.

\_\_\_\_\_i. To view and inspect the escalation chain, select Day 1 and then the details tab in the properties view below. Again this should be very familiar.

Take a look at the <u>Assign People tab</u> too. In modeler, the people assignment was part of the same input screen as the escalation details. As you can see the specification interface for the human task element in WebSphere Business Modeler is nearly identical to the one in WebSphere Integration Developer V6.1

Build Activities Properties 🕱 Problems Servers					
Description	Escalation				
Details Assign People	Expected task state:	Claimed	~		
Environment	Escalate after:	O ▲ Hours 0 ▲ Minutes 0 ▲ Seconds     Seconds			
	Notification type:	E-mail			
E-mail message: DefaultMessage		DefaultMessage	Remove		
	Repeat notification every:	O			
	Increase task priority:	No			

\_\_\_\_j. Continue your inspection tour by looking at the Day 2 part of the escalation.

Build Activities Properties X Problems Servers					
Description	Escalation				
Details	Expected task state:	Claimed	<b>~</b>		
Assign People Environment	Escalate after:	O ▲ Hours 0 ▲ Minutes 0 ▲ Seconds			
		0			
	Notification type:	E-mail	~		
	E-mail message:	DefaultMessage Edit Remo	ove		
	Repeat notification every:	0 Days 0 Hours 0 Minutes 0 Seconds			
		0			
	Increase task priority:	No			

- k. This completes the tour of the human task component generated by importing the model from WebSphere Business Modeler V6.1. There are a few other points of interest that should be pointed out.
- \_\_\_\_6. Expand the HR\_impl (implementation module)



- \_\_\_\_\_a. Notice that there are no implementation types automatically generated. Inspecting the assembly diagram will reveal that generic, un-typed components have been created for you, along with their exports.
- \_\_\_\_7. Open the assembly diagram for the HR\_impl module.



Unspecified exports are linked to generic, un-typed SCA components for each of the BPEL invocations in the BPEL business process. Inspecting the assembly diagram for the HR module will reveal that there are corresponding Imports with SCA bindings for all of the BPEL invocations.

With the 3-module export pattern, the business logic is separated from the implementation. The implementations should be defined in the HR\_impl module using the interfaces and exports provided in the assembly diagram. When a new version of the business process model is imported, the new business logic is placed in the HR (business logic) module and the implementations in the HR\_impl module will be untouched. Some minor wiring adjustments in the assembly diagram may be necessary.

\_\_\_\_ 8. Next expand the HR\_lib module.



- \_\_\_\_a. Notice the use of folders. This is new with V6.1. Also notice the names are as they are defined in the technical attributes in WebSphere Business Modeler.
- \_\_\_\_b. Select ApproveStandardApplication and observe the properties, the namespace and the primary file name.

Interfaces		C Inbound Adapters	
CreateEmployeeRecords     Forcesses\hiring     ApproveExecutiveApplication     ApproveStandardApplication     CreateEmployeeRecords     AproveStandardApplication     CreateEmployeeRecords     Approvel	Bui P ⊟	Build Activities Properties 🛛 Problems Servers	<b>□</b> ≱ 風 <sup>&gt;</sup>
		Property	Value
		Artifact	
		Name	ApproveStandardApplication
		Namespace	http://Processes/Hiring/ApproveStandardApplicationInterface
		Primary File	\Hiring_lib\processes\hiring\ApproveStandardApplication360626393Interface.wsdl
Hiring		Туре	Interface
(I) SendOffer			

9. This concludes the tour.

## What you did in this exercise

In this exercise you began by importing a human centric business process model that was originally created using WebSphere Business Modeler V6.0.2. Using that as a starting point, you then converted one of the tasks that was marked as a human task to a WebSphere Business Modeler V6.1 human task.

Once the task was converted you then fully specified the details of the human task, the primary owner and escalations.

Next you set the technical attributes for the task so that they map to the standards used by the integration team.

The model was exported from WebSphere Business Modeler V6.1 and imported into WebSphere Integration Developer V6.1 and you then inspected the results to understand how the constructs are mapped from one environment to the other, using the 3-module 'best practice' export pattern.

## **Solution instructions**

The solution is in 2 parts, the WebSphere Business Modeler part and the WebSphere Integration Developer part.

The WebSphere Business Modeler part is in the file:

#### \labfiles\Modeler\solutions\HR.Model.HumanTask.1.mar

The solution for WebSphere Integration Developer is in the file:

#### \labfiles\Modeler\solutions\HR.Model.HumanTask.1.zip

This page is left intentionally blank.