IBM WEBSPHERE 6.0 - LAB EXERCISE

Preparing a Process with WebSphere Business Modeler for WebSphere Integration Developer

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What this exercise is about

The objective of this lab is to provide you the basic steps for exporting a project from WebSphere Business Modeler V6. This lab will also guide you on how to import a project into WebSphere Integration Developer V6 and rewire the process in a best practice way to use the imports/exports.

Lab Requirements

- WebSphere Business Modeler V6
- WebSphere Integration Developer V6.0.1
- Sample code in the directory C:\

What you should be able to do

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

- Import a project into WebSphere Business Modeler V6.
- Set Implementation type to Java for the tasks in WebSphere Process Server modeling mode.
- Add customize information to the process.
- Export the project from modeler.

- Import a model into WebSphere Integration Developer V6.0.1.
- Create modules using library dependency.
- Create implementations and bindings in modules.
- Rewire the process to use imports and exports.

Introduction

In this lab exercise you will learn how to import a project into WebSphere Business Modeler V6. This lab shows you the procedures of setting the implementation type to Java for a particular task in the WebSphere Process Server modeling mode, adding customization information to the process, and exporting the project from WebSphere Business Modeler V6. When exported, the process is converted to a BPEL business process. The lab exercise will then show you how to import a project into WebSphere Integration Developer V6.0.1, create modules using library dependencies, create implementation and binding, and rewire the process to use imports/exports. The rewiring of the process to use imports/exports rather than components is a best practice which will be beneficial when it comes to modifying the process in WebSphere Business Modeler and then importing it again into WebSphere Integration Developer. With the use of the Imports/Exports, changes to the individual task implementations do not have to be modified when the process is updated.

Exercise Instructions

Some instructions in this lab may be Windows operating-system specific. If you plan on running the lab on an operating-system other than Windows, you will need to execute the appropriate commands, and use appropriate files (.sh vs..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
<lab_files></lab_files>	C:\Labfiles60	/tmp/Labfiles60

Part 1: Initialize workspace for WebSphere Business Modeler

- 1. Start WebSphere Business Modeler.
 - ____a. To start the Modeler, click Start > Programs > WebSphere Business Modeler > WebSphere Business Modeler.
 - ____b. The Modeler workspace window will appear. Click the **Browse...** button and select
LAB_FILESProcessForWIDworkspace as your workspace directory.

WebSphere Business Integration Modeler	X
WebSphere Business Integration Modeler stores your work in a directory called workspace each time you start the application. Specify the directory to use for	d a workspace. You can change the or this session:
C:\LabFiles60\PrepareProcessForWID\workspace	Browse
$\ensuremath{\overline{\mbox{I}}}$ Use this as the default workspace, and do not show this dialog box again.	
Show Details	OK Cancel

- ____ c. Click **OK**. If the Quickstart wizard opens, click **Cancel**.
- _____d. Close the Welcome view by clicking the X at the top of the view.

() E	Busin	ess Mode	ling - IE	3M Web	Sphere E
Eile	Edit	Navigate	Search	Project	Modeling
	Welco	me 🛛	1		
1	WebS	phere. E	Busine	ss Mo	deler

_____4. Import Solution.

____a. Select File > Import.

Business A	Aodeling -	Proces	ssScena	rio - IBI
File Edit View	Navigate	Search	Project	Modeling
New			Alt+Shift	+N 🕨
😭 New Business	Modeling Pr	oject		
Close			Ctrl+F4	
Close All			Ctrl+Shif	t+F4
🔡 Save			Ctrl+S	
📓 Save As				
🕅 Save All			Ctrl+Shif	t+S
Revert				
Move				
Rename			F2	
Refresh			F5	
👜 Print			Ctrl+P	
Switch Works	pace			
Open Externa	l File			
MIMport				
🛃 Export				

ielect			
WebSphere Business Modeler I	mport		2
Select an import source:			
Checkout Projects from CV	s		
Ecore to UML2			
❀ Existing Ant Buildfile			
🖆 Existing Project into Works	pace		
External Features			
Sexternal Plug-ins and Fragr	nents		
Eile system			
HTTP Recording			
🗒 Log File			
o Profiling file			
Profiling filter			
Security Certificate			
Symptom Database File			
👜 Team Project Set			
UML2 to Ecore			
WebSphere Business Mode	ler Import		
🚇 Zip file			
		1	

____b. From the Import window, select WebSphere Business Modeler Import and click Next.

WebSphere Business Modeler Import window will be opened.

- WebSphere Business Modeler Import

 Select type.

 Select a format and click Next.

 Types

 WebSphere Business Modeler project (.zip)

 WebSphere Business Modeler project (.zip)

 WebSphere Business Modeler project (.zip)

 WebSphere Business Integration Workbench V4.2.4 (.orq)

 < Back</td>
 Enish

 Cancel
- ____ c. Select WebSphere Business Modeler Project (.zip) and click Next.

- ____d. Click Browse and select <LAB_FILES>\PrepareProcessForWID\import\ as the Source directory.
- ____e. Select the file ProjectScenario_start.zip.
- ____f. Click **New** to create a **Target Project**.

Create a new business modeling project window will be opened.

🕑 Create a new l	business mo	deling pro	ject		×
Create a new busir	iess modeling	j project			
Click Finish to create	the new eleme	nt.			
New project nai	ne				
ProjectScenario					
Default process	catalog nam	.e			
Processes	catalog han				
Create proc	ess,				
Name					
					/
	< Back	Next >	Finis	h	Cancel

____g. Enter ProjectScenario as New project name and click Next.

____h. Accept the default Free-Form Layout and click Finish.

🚯 Quickstart wiza	rd	$\overline{\mathbf{X}}$
Specify default editor Click Finish or change	or for processes in this project the editor settings	Ę.
Specify the initial	layout used by the process editor: yout yout	
Layout by		-
Classifier		
	<back next=""> Fi</back>	nish Cancel

____i. Click Finish from the WebSphere Business Modeler Import window.

- WebSphere Business Modeler project (.zip)
- ____j. Click OK from WebSphere Business Modeler project (.zip) window.

Part 2: Prepare Process for Export

In this section, you will perform the steps necessary to prepare the process for assembly in WebSphere Integration Developer and deployment to WebSphere Process Server.

- 1. WebSphere Business Modeler provides a number of modeling modes which correspond to different destination runtimes. Each mode provides and restricts different options depending on what is supported by the runtime. Since the ProcessScenario process is destined for WebSphere Process Server, change to this mode accordingly.
 - _ a. Select the WebSphere Process Server modeling mode by selecting **Modeling > Mode >** WebSphere Process Server from the main menu.



You may notice some changes as different options are displayed or removed inline with the support available for WebSphere Process Server.

Note: You might see some warnings after changing the mode to WebSphere Process Server but you should not see any errors.

2. For a process destined for WebSphere Process Server, the different tasks in the process will be converted into activities in a BPEL business process. Set the tasks to use a Java implementation.

A resource assignment on a task can dictate what type of activity will be created in the BPEL business process. For example, if a role or person is assigned to a task and the task is local, then an inline human task will be created. If the task is global, then a participating human task that is a separate service component will be created. If the resource assigned to the task is a machine, then a Java component will be created. If no resource is specified, a Java component will also be created. Besides this behavior, you can also specify the specific implementation for a task. The implementation setting will cause an empty or skeleton component implementation to be created. The empty implementation can be completed or act as a hint for the assembler who will connect the process up to the appropriate existing component. For simplicity, a Java component will be used for this lab exercise. This will be further explained later in the lab.

- ____a. In the Project Tree view, select **ProjectScenario > Processes** and open the process by doubleclicking the **ProcessScenario** process.
- ____b. Select the **Receive Order** task.
- ____ c. From the **Attributes View** of the Receive Order task, select **Technical Attributes View**.
- ____d. Select **Implementation** in the Technical attributes view.

ributes - Receive Order Simulation Control Panel Errors (Filter matched 2 of 2 i	tems) 🛗 Technical Attributes View 🖾
terface Request Response Implementation	
Component Attributes	
efine the component information that represents the target implementation	
Component display name	
Component name	
Component description	
Implementation type	
[none]	
[none]	
State Machine	
Human Task	

____e. Select **Java** as the **Implementation Type** from the drop down list.

- _____f. Select the **Package and Ship Order** task in the process diagram and repeat steps from 3-b through 3-d to change the Implementation type to Java.
- ____g. Save your work (Ctrl+S).
- _____ 3. Convert the tasks of the ProcessScenario to Global tasks.

When preparing a process for WebSphere Process Server, it is a best practice to make your tasks global tasks; this will cause the interfaces for the tasks to be packaged into a library and available to other components in other modules. This will be further emphasized once you import the process into WebSphere Integration Developer. It is a best practice to have a backup of your process prior to this step.

____a. Right click on the **Receive Order** task.

____b. Select Convert to > Global Task.



____ c. The window Create a new task will be opened. Make sure that the Name of new task is Receive Order and click Finish.

🕀 Create a new task	$\overline{\mathbf{X}}$
Create a new task	
Click Finish to create the new element.	
ProjectScenario	
Processes	
	/
Name of new task	
Receive Order	
Description of new task	
	/
<u> </u>	Cancel

____d. Right click on the **Package and Ship Order** task and repeat steps b and c to convert it to global task. Click **OK** if you get the following window:



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e. Observe the difference between the local and global task in the process diagram:

____f. From the Project Tree, you can observe two new global tasks under the ProcessScenario.



__g. Save your work (Ctrl+S).

Note: You will not set the implementation on the Approve Order task or convert it to a global task. The Approve Order task has a Role (Account Manager) defined as a resource and will be implemented as a human task. If the task is local, then the human task will be an inline human task inside the BPEL process. For the process, this tight integration will be used since the human task step is a critical part of the process. There is no need to make the task a separate service component that will be called outside of a business process. Converting the Approve Order task to a global task would generate a separate human task service component which would have to be managed separately from the BPEL process.

- 4. The interfaces and BPEL activities that will be generated for the process can be customized prior to exporting the project. It is recommended that careful consideration is used when specifying these values since they will be exposed as part of the service definition for the implementation.
 - ____a. Open the **ProcessScenario** process diagram and click on the white space on the diagram.
 - ____b. Select **Technical Attributes View** from the Attributes View.

____ c. Select **General** tab and enter the following under **BPEL Attributes**:

- Target namespace: http://com/asdfparts/projectscenario
- Process display name: OrderProcessScenario
- Process name: OrderProcessScenario

Attributes - ProcessScenario Simulation Control Panel Errors (Filter matched 2 of 6 items) 🗮 Technical Attributes View 🔀
General Interface Request Response Implementation
BPEL Attributes
Define BPEL process information below
Target namespace
http://com/asdfparts/projectscenario
Process display name
OrderProcessScenario
Process name
OrderProcessScenario

____d. Select Interface tab and enter the following under WSDL Interface Attributes:

- Target namespace: <u>http://com/asdfparts/projectscenario/OrderProcessScenarioInterface</u>
- PortType name: OrderProcessScenario

General Interface Request Response Implementation
WSDL Interface Attributes
Define WSDL interface information below
Target namespace
http://com/asdfparts/projectscenario/OrderProcessScenarioInterface
PortType name
OrderProcessScenario
Callback PortType target namespace
Callback PortType name

___e. Select **Request** tab.

- ____f. Select the **Input criterion** and enter the following:
 - Operation name: ReceiveOrder
 - Message name: InputMessage
 - Part name: CustomerOrder
 - Activity display name: OrderReceived
 - Activity name: OrderReceived

These settings customize the interface of the BPEL process.

General Interface	Request Response	Implementation			
Input criterion section					
Select an input criterion in the t	table to see the WSDL and BPEL ir	nformation in the sections below			
Input criterion name	Corresponding output crit	Valid operation type	Selected operat	ion type	
Input Criterion	Output Criterion	Request / response, one	Request / respo	nse	
Operation type					
Select the type of operatio	n				
Request / Respon	se operation				
O One way operation	n				
VSDL Attributes				BPEL Attril	butes
Define the WSDL interface	information			Define the BP	PEL receive activity information
Operation name				Activity d	lisplay name
ReceiveOrder				OrderRece	eived
VSDL Message Deta	VISDI Message Details				
	ails			_	lane
Defective WEDL mean	alls			OrderRece	eived
Define the WSDL mess	ails age that represents the input of a	an operation		OrderRece	eived
Define the WSDL mess	ais age that represents the input of	an operation		OrderRece	eived
Define the WSDL mess Message name (InputMessage) Part name	ais age that represents the input of	an operation		OrderRece	sived

___g. Select **Response** tab.

____h. Select **Output criterion** and enter the following:

- Message name: OutputMessage
- Part name: CustomerOrder
- Activity display name: OrderReply
- Activity name: OrderReply

These settings customize the response portion of the interface.

Attributes - ProcessScenario Simulation Cont	rol Panel Errors (Filter matched 2 of 6 it	tems) 📄 Technical Attribute	es View 🔀			
General Interface Request Response Implementation						
▼ Output criterion section						
Select an output criterion in the table to see	Select an output criterion in the table to see the WSDL and BPEL information in the sections below					
Output criterion name	Corresponding input criterion name	Response type				
Output Criterion	Input Criterion	Response				
VSDL Attributes			BPEL At	tributes		
Define the WSDL interface information			Define the	BPEL reply activity information		
	Activity display name					
VSDL Message Details	VSDL Message Details					
Define the WSDL message that repr	Define the WSDL message that represents the output of an operation Activity name					
Message name	Message name OrderReply					
OutputMessage						
Part name						
CustomerOrder						

____i. Select **Implementation** tab and enter the following:

- Component display name: OrderProcessScenario
- Component name: OrderProcessScenario

These settings customize the component that will represent the BPEL process.

General	1	Interface	Request	Response	[Implementation
Compon	ent Attribu	utes			
Define the	componen	it informati	ion that represe	nts the target imp	lementation
_					
Comp	onent dis	splay nan	ne		
Comp Order	onent dis ProcessSce	splay nar enario	ne		
Comp Order Comp	onent dis ProcessSce onent na	splay nan enario I me	ne		

___j. Save your work (Ctrl+S).

Note: You can also customize each task of the process individually. Click the Receive Order or Package and Ship Order task in the ProcessScenario process diagram. From the Technical Attributes View select General, Interface, Request, Response, and Implementation tabs and enter the required information as explained in step 4.

- 5. In order to correctly export out the process, the default business measures will need to be created. Create business measures.
 - ____a. From Project Tree, select **Processes > ProcessScenario**.
 - ____b. Right click on ProcessScenario and select Create Business Measures....



____ c. Click **OK** to accept all selected elements for creating business measures.

Telect Process Elements	×
Create Business Measures Select the process elements to measure. Only elements that can have business measures are shown.	-
ProcessScenario Approve Order Package and Ship Order Receive Order S Receive Order S S Order Less Than \$500?	
OK Cancel	

😵 ProcessScenario 🛛 🐴 ProcessScenario) Business measure	es X								
KPIs and Aggregate	Metrics									
KPIs Making	 KPIs This section pro 	vides informat	ion about key ner	formance indic	ators (KDIs) ca	lculated acro	se multiple rupe o	f the process		
	Name		Angregat	Angregat	Use Target	Target	Lower tar	Unner tar	Lower limit	Linner limit
		1.700	nggrogaenn	- inggrogatin	coo raigot	Targot		oppor carm	Lottor mile	
									Ad	d Remove
	 Situation even Ontionally, spec 	ents tify situation et	vents that are se	nt when the va	lue of the sele	cted busines	s measure change	95.		
	Event defi		Event att	it montane ra	Attribu	ite type	Attri	bute calculatio	n ()	
										Add
										Remove
	O Send o	nly once (or	, if "On conditi	on" is set, se	nd only whe	en the cond	lition changes	from false to	true)	
	O Send e	very time (or	r, if "On condit	on" is set, s	end every tir	ne the con	dition is true)			
	Un Conditi	on								
										Clear Edit

____d. ProcessScenario Business measures window will be opened. Review and close that window.

____e. ProcessScenario Business measures will be added under the ProcessScenario process in the Project tree:



6. The process is customized and ready to be imported into WebSphere Integration Developer. Export the ProjectScenario project from Modeler.

____a. Select File > Export.

____b. From the Export window select WebSphere Business Modeler Export and click Next.

C Export	
Select WebSphere Business Modeler Export	Z
Select an export destination:	
 Datapool Deployable features Deployable plug-ins and fragments File system JAR file Javadoc Profiling filter Symptom database file Team Project Set WebSphere Business Modeler Export Zip file 	
< Back Next >	Finish Cancel

____c. The WebSphere Business Modeler Export window is opened. Select Type as **WebSphere** Business Monitor and development tool and click Next.

WebSphere Business Modeler Export	
Select type. Select a format and click Next.	
Types	
 WebSphere Business Modeler project (.zip) UML Business Modeling Profile WebSphere MQ Workflow (.fdl) WebSphere Business Integration Server Foundation Delimited text (.csv, .txt) WebSphere Business Modeler XML (.xml) WebSphere Business Monitor and development tool WebSphere Process Server CEI Event Catalog WebSphere Business Monitor (from BPEL process) 	
< <u>B</u> ack <u>N</u> ext > Einish C	ancel

- ____d. Click Browse... and select C:\<LabFiles60>\PrepareProcessForWID\ as the Target directory.
- ____e. Select the **Project** as **ProjectScenario**.



- ___f. Click Next.
- ____g. Click Module project name and enter ProjectScenario.
- ____h. Click **Library project name** and enter **ProjectScenarioLibrary**. All interfaces for the process and global tasks will be placed in the library and available for use by other components not in the module containing the process.
- ____i. Click **Project interchange name** and enter **ProjectScenario**.

WebSphere Business Modeler Export	
WebSphere Process Server export details	_
Click Finish to export.	
Module project name	
ProjectScenario	
Library project name	
ProjectScenarioLibrary	
Project interchange name	
ProjectSceanrio	
WID Workspace location	
Brov	vse

____j. Click **Finish** from the **Export finished** window.



____7. Select File > Exit to exit from the modeler.

Part 3: Initialize workspace for WebSphere Integration Developer

- 1. Start WebSphere Integration Developer V6.0.1.
 - ____a. Select Start > Programs > IBM WebSphere > Integration Developer V6.0.1 > WebSphere Integration Developer 6.0.1.
 - ____b. Workspace Launcher window will be displayed. Click the **Browse** button and select b. Workspace Launcher window will be displayed. Click the **Browse** button and select b. Workspace Launcher window will be displayed. Click the **Browse** button and select button and select b. Workspace b. Workspace button and select > button and select > b. Workspace b. Workspace button and select > b. Workspace b. Workspace directory.

Workspace Launcher	×
Select a workspace	
IBM WebSphere Integration Developer stores your projects in a directory Select the workspace directory to use for this session.	called a workspace.
Workspace: C:\LabFiles60\PrepareProcessForWID\workspace	<u>B</u> rowse
Use this as the default and do not ask again	
[OK Cancel

___ c. Click **OK**.

- 2. Import the Model into WebSphere Integration Developer.
 - ____a. Select **File > Import** from the IBM WebSphere Integration Developer.
 - ____b. From the **Import** window select **Project Interchange** and click **Next**.

🚯 Import				×
Select				
Import a project and its dep	endent projec	ts from a Zip file		
Select an import source:				
🛃 Log File				-
Performance Call Graph				
Probe				
Profiling filter				
Project Interchange				
	< <u>B</u> ack	<u>N</u> ext >	Einish	Cancel

Import Project Interchange Contents window will be opened.

- ____ c. Click Browse... and select C:\<LabFiles60>\PrepareProcessForWID\ProjectScenario.zip as source zip file.
- ____d. Click Select All and click Finish.

🚯 Import Project Interchange Contents 🛛 🛛 🔀
Import Projects Import Projects from a zip file.
From zip file: C:\LabFiles60\PrepareProcessForWID\ProjectScenar Browse Project location root: C:\LabFiles60\PrepareProcessForWID\workspaceWID Browse
Select All Select Referenced
< <u>B</u> ack <u>N</u> ext > <u>F</u> inish Cancel

Part 4: Rewire Process for Components

- ____1. Review the imported artifacts.
 - ____a. In the Business Integration view, notice the two projects. One (ProjectScenario) is the module containing the process and the other is a library (ProjectScenarioLibrary).
 - b. Expand ProjectScenarioLibrary > Interfaces. Notice there are 3 interfaces in the library. One for the process (ProcessScenario) and one for each task (PackageandShipOrder and Receive Order). With the interfaces in the library, they can be used for components defined in other modules.
 - ____c. In the Business Integration view, expand **ProjectScenario** and then double-click **ProjectScenario**.
 - d. The Assembly editor will be opened. Notice how the different tasks of the process are exposed as Java components. The Approve Order task is not exposed as a separate component since it was a local task and it had a resource assigned to it that was a Role (Account Manager). Even though the Receive Order and Package and Ship Order tasks are separate components, they are in the same module as the process. This packaging structure is simple and fine for the testing and deployment of small applications. When processes become larger and iterative development of the process occurs, it becomes problematic to keep the component updated when they are in the same module. Many times the implementation of the component remains the same, or changes to it are independent of changes to the process. Changes to the process are also independent of changes to the individual task implementation. For these reasons, it is better to move these components and their implementation to a different module and use a SCA Import/Export to connect the components to the process. In the future, when changes are made to the process, the task implementation, which is a separate component in a separate module, can be left unchanged.

😴 *Assei	mbly Diagram: ProjectScenario 🗙	
	1 Erreceive OrderExport	1 Receive Order
డి> ఒ	ProcessScenario Export	-1 OrderProcessScenario
	Package and Ship OrderExport	🗊 🖬 Package and Ship Order

____e. Double-click on the **OrderProcessScenario** component to open the process. Notice the Approve Order task is an inline human task.

ProcessScenario Receive)
🏷 Receive Order	
😤 Approve Order 🛛 💠	
🏷 Package and Ship Order	
	-
🏷 ProcessScenario Reply	

- ____f. Close the Process editor and the Assembly editor.
- 2. In order for the Receive Order and Package and Ship Order component implementations to be isolated from changes in the process, separate modules for each component should be created. Create the modules.
 - ____a. Select File > New > Project from the main menu.

わ Business Integration - IBM WebSphere Integration Developer								
(File) Edit	<u>N</u> avigate	Se <u>a</u> rch	Project	<u>R</u> un	<u>W</u> indow	Help		
New		Alt+Sh	iift+N	<u>ات</u>	P <u>r</u> oject			
⊆lose		Ctrl+F	4	Ċ	Business C	bject		

____b. Select Module from the New Project window and click Next.

🚯 New Project				×
Select a wizard Creates a new business integra	ition module.			
Wizards: Library Mediation Module Module Module Dava Dava Dava Dava Server Dava Examples				
	< <u>B</u> ack	Next >	Einish	Cancel

____ c. From New Module window enter ReceiveOrder as Module Name and click Finish.

🚯 New Module 🛛 🗙
Module
Create a new business integration module. A module is a project that is used for development, version management, organizing resources, and deploying to the runtime environment.
- Module Location
☑ Use default
Directory; C:\WID WorkSpace\ReceiveOrder Browse
Business integration modules can be deployed and run on WebSphere Process Server. They can contain many types of components, such as business processes, assembled together for the purpose of business integration.
< <u>Back</u> Mext > Einish Cancel

____d. Repeat the above steps to create another module: PackageandShipOrder.

- _3. In order for components in the new modules to be able to provide the implementation for the different tasks, the appropriate interfaces in the ProjectScenarioLibrary task must be used. A dependency between the module and the library must be established before the interface can be used for a component. Create the dependencies and add libraries to modules.
 - ____a. Right click on the **PackageandShipOrder** and select **Open Dependency Editor**.



____b. Click Add from the PackageandShipOrder Dependencies.

🕄 Assembly Diagram: ProjectScenario	PackageandShipOrder Dependencies 🕺
Libraries Configure the required libraries.	Advanced: Deploy with Modul
Aug Remove	

____ c. Select **ProjectScenarioLibrary** from **Library Selection** window and click **OK**.

🔂 Library Selection 📃 🗖 🗙
Choose a library (? = any character, * = any String):
Matches:
Location:
C:/WID WorkSpace/ProjectScenarioLibrary
OK Cancel

- ____d. Save (Ctrl+S) and close the Dependency Editor.
- ____e. Repeat the above steps for **ReceiveOrder** module.
- _____4. Generate Implementation and Binding.
 - ____a. Double-click the **PackageandShipOrder** module and you will see an Assembly diagram for PackageandShipOrder opened on the right side window.
 - ____b. Drag the **PackageandShipOrder** interface from **ProjectScenarioLibrary > Interfaces** and drop it onto the Assembly diagram.

____c. Select **Component with no Implementation Type** from the **Component Creation** window and click **OK**.

🚯 Component Creation 🛛 🗙
Select the type to create:
Component with no Implementation Type
net the service Binding
🗭 Import with no Binding
🐨 Import with Web Service Binding
1
OK Cancel
OK Cancel

____d. An unimplemented component will be created.



____e. Click on the Component1 and rename it to **PackageandShipOrder**.

NOTE: You can also change the name by changing the Display name (Name field will automatically be changed filling Display name field) under the Description tab from Properties view of the Component1. If you change the name from the Assembly Diagram you should see the Display name and Name changed from Component1 to PackageandShipOrder in the Description tab of Properties View.

😽 *Assembly Diagram: PackageandShipC	rder X	٦
R→ PackageandShipOr C→→ C→→	er]	
Properties X Problems Servers		▼ □ 🗋
	t: PackageandShipOrder (No Implementation)	
Display name: Pag	kageandShipOrder Name	e: PackageandShipOrder

_____f. The component can be implemented any way as long as it uses the PackageandShipOrder interface. You could implement the component as a human task, business state machine, business rule or even a business process. For simplicity, right click on the PackageandShipOrder and select Generate Implementation > Java.

PackageandShipOr	Undo Update Display Name		
	Add Change Type Export	+ + +	
	Generate Implementation Select Implementation	Þ	👔 Human Task

____g. Accept the default package from Generate Implementation and click **OK**.

🚯 Generate Implementation		
Select the package where the Jav	a implementation will be	e generated:
(default package)		
New Package		
	ОК	Cancel

h. PackageandShipOrderImpl.java will be opened in Assembly editor. Drop down the arrow (if it [^b] is not already) and modify the java code as below:

publi	ic Data	aObject	InputCriterion(DataObject	input)	(
1	return	input;			
}					

- ____i. Save your work (Ctrl+S). Close the PackageandShipOrderImpl.java file.
- ____j. Right click on the **PackageandShipOrder** and select **Export > SCA Binding**. This will make the component available to be called from outside of the module.

PackageandShinO	dor		
	💛 Undo Add Implementation		
	🗣 <u>R</u> edo		
	Add	►	
	Change Type	•	
	Export	•	JMS Binding
	Regenerate Implementation		SCA Binding
	Merge Implementation		Web Service Binding

-

____k. Your PackageandShipOrder Assembly diagram will now look like this:

🐨 *Assembl	ly Diagram: PackageandShipOrder 🗙	
₽		
G . >	PackageandShipOrderExport	1 PackageandShipOrder

- ___I. Save your work (CtrI+S) and close the PackageandShipOrder Assembly diagram.
- ____m. Repeat the above steps for **ReceiveOrder** module.
- 4. Rewire process to components.
 - ____a. Open the Assembly editor for ProjectScenario again by double-clicking on **ProjectScenario** > **ProjectScenario** in the Business Integration view.

🐨 *Asse	mbly Diagram: ProjectScenario 🗙	
B		
G . >	1 🛓 Receive Order Export	 Receive Order
(⇒>		
&>	💷 📥 Package and Ship Order Export	 Package and Ship Order
۹.		
	OrderProcessScenario Export	

____b. Delete Receive Order, Receive Order Export, Package and Ship Order, Package and Ship Order Export components.

🐨 *Asse	mbly Diagram: ProjectScenario 🗙	
	1 Z ProcessScenario Export	• ① 文 OrderProcessScenario

____c. Save (Ctrl+S) your work.

Note: You should save your assembly diagram after deleting the above elements. Otherwise, you will see these exports while selecting SCA exports in step j and m.



____d. Right click on OrderProcessScenario and select Wire References to New > Imports.

e. Imports matching the ReceiveOrder and PackageandShipOrder interfaces will be created.



_ f. Right click on ReceiveOrderPartner and select Generate Binding > SCA Binding.

ReceiveOrderPartner	↓ ↓ Undo Move ↓ Redo	
💷 🕞 PackageandShipOrderF	Add Interface	
	Generate Binding 🕨 🕨	JMS Binding
	Remove Binding	SCA Binding
	📄 Сору	Stateless Session Bean Binding Web Service Binding
	Paste	

____g. Repeat the above step for **PackageandShipOrderPartner** to generate SCA Binding.

___h. Select ReceiveOrderPartner and then from the Properties view at the bottom, select Binding.

Properties 🕅	Problems Servers	
Description	🗟 Import: ReceiveOrderPartner (SCA Binding)	
Details	Module name:	
Binding	Export name: Bro	wse

_____i. Select **Browse...**. SCA Export Selection window will be opened.

SCA Export Selection
Choose a SCA export (? = any character, * = any String):
Matches:
CrderProcessScenario Export
Qualifier:
ReceiveOrder/ReceiveOrderExport.export
OK Cancel

____j. Select ReceiveOrderExport under Matches and click OK.

- ___k. Select PackageandShipOrderPartner and select **Binding** from the Properties view.
- __ I. Select Browse....



___ m. Select Package and Ship Order Export under Matches.

- ___ n. Click **OK**.
- ____o. Save your work (Ctrl+S).
- ____p. The process is complete and ready for deployment.

🐨 *Ass	embly Diagram: ProjectScenario 🗙	
R		
. ,		
(>)	🗊 🛃 ProcessScenario Export 👘 💭 OrderProcessScenario	
\$		1 🔂 🔁 PackageandShipOrderPartner

5. Select **File > Exit** to exit from the WebSphere Integration Developer.

What you did in this exercise

In this lab, you imported a project ProjectScenario into the WebSphere Business Modeler V6. In the WebSphere Process Server modeling mode, you set implementation type to Java for Receive Order and Package and Ship Order tasks. You also converted these tasks to global tasks, and then you added customization information to the process and exported the project.

You then imported the project into WebSphere Integration Developer V6.0.1 and created Receive Order and Package and Ship Order modules for the different components. You established dependencies to the ProjectScenario library before creating components from the common interfaces. You then created SCA bindings for the components using Exports. Finally you rewired the process to use the Imports.

Solution Instructions

- 1. Import the ProjectScenario project into WebSphere Business Modeler for viewing.
 - ____a. Select File > Import...
 - ____b. Select WebSphere Business Modeler Import and click Next.
 - ____ c. Select WebSphere Business Modeler project (.zip) and click Next.
 - ____d. For the Source directory, click **Browse...** and select the folder </pr
 - ____e. Select ProjectScenarioModeler.zip.
 - ____f. To the right of the Target project field, click New.
 - ____g. Change the New project name to **ProjectScenario**.

🚯 Create a new	business mod	eling proj	ect	×
Create a new busi	ness modeling	project		
Click Finish to create	e the new elemen	t.		
New project na	me			
ProjectScenario				
Default proces	s catalog name	•		
Processes				
Create proc	:ess,			
				/
	< <u>B</u> ack	<u>N</u> ext >	<u>F</u> inish	Cancel

___h. Click **Finish**. The Target project field should be filled in with the ProjectScenario value.

____a. Click **Finish** to complete the import.

- 2. Import the Model to IBM WebSphere Integration Developer.
 - ____a. Select File > Import from the IBM WebSphere Integration Developer.

____b. From the **Import** window select **Project Interchange** and click **Next**.

🚯 Import	×
Select Import a project and its dependent projects from a Zip file.	Ľ
Select an import source: Log File Performance Call Graph Probe Profiling file Profiling filter Project Interchange	
< <u>B</u> ack <u>N</u> ext >	Einish Cancel

Import Project Interchange Contents window will be opened.

___ c. Click Browse and select

<LabFiles60>\PrepareProcessForWID\Solution\ProcessScenarioWID.zip as source zip file.

____ d. Click Select All and click Finish.

🚯 Import Project Interchange Contents	×
Import Projects Import Projects from a zip file.	
From zip file: C:\LabFiles60\PrepareProcessForWID\Solution\Proje Project location root: C:\LabFiles60\PrepareProcessForWID\workspaceWID Image: C:\LabFiles60\PrepareProcessForWID\Properties Image: C:\LabFiles60\PrepareProcessForWID\Properties Image: C:\LabFiles60\PrepareProcessForWID\Properties Image: C:\LabFiles60\PrepareProcessForWID\Properties Image: C:\LabFiles60\PrepareProcessForWID\Properties Image: C:\L	Browse
Select All Select Referenced	
< <u>B</u> ack <u>N</u> ext > <u>Finish</u>	Cancel

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