

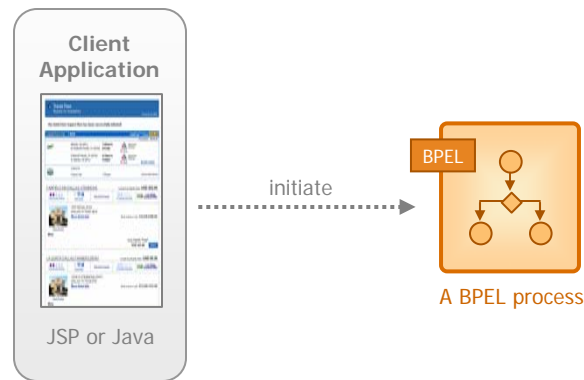
Segment #8

Invoking a BPEL Process From a JSP

Invoking a BPEL Process From a JSP

Problem/Use Case

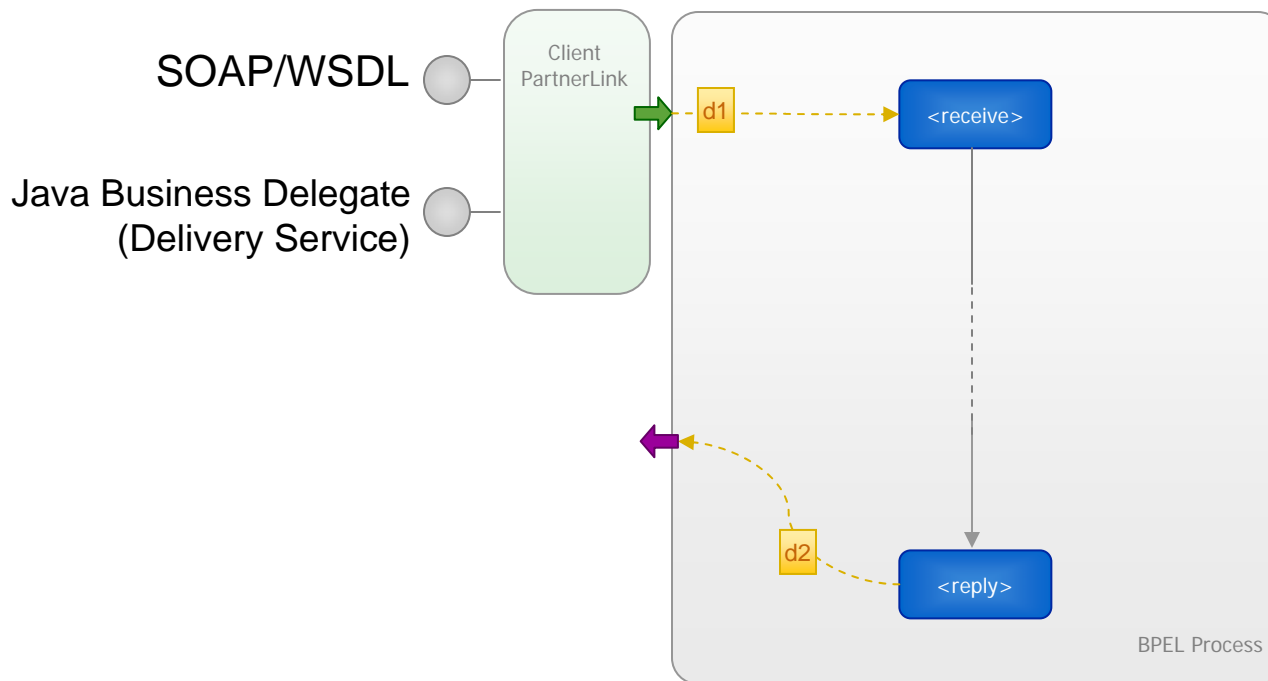
“I have implemented and deployed an asynchronous HelloWorld BPEL process. How do I initiate it from a Java/JSP application?”



Invoking a BPEL Process From a JSP

BPEL Concepts | Java Business Delegate

Each deployed BPEL process can be invoked as a Web Service through its WSDL/SOAP interface or as a Java component through its Java Business Delegate Interface (aka Delivery Service)



Invoking a BPEL Process From a JSP

BPEL Designer | Invoking a BPEL Process from a JSP

C:\orabpel\samples\tutorials\102.InvokeingProcesses\jsp\invokeHelloWorld.jsp

```
<%@page import="com.oracle.bpel.client.Locator" %>
<%@page import="com.oracle.bpel.client.NormalizedMessage" %>
<%@page import="com.oracle.bpel.client.dispatch.IDeliveryService" %>

<html>
<head>
<title>Invoke HelloWorld</title>
</head>
<body>
<%
String name = request.getParameter("name");
if(name == null)
    name = "BPEL";

String xml = "<name xmlns=\"http://samples.otn.com\">" + name + "</name>";

Locator locator = new Locator("default","bpel",null);

IDeliveryService deliveryService =
    (IDeliveryService) locator.lookupService(IDeliveryService.SERVICE_NAME);

// construct the normalized message and send to Oracle BPEL Process Manager
NormalizedMessage nm = new NormalizedMessage();
nm.addPart("payload" , xml);

deliveryService.post("HelloWorld", "initiate", nm);

out.println( "BPELProcess HelloWorld initiated!" );
%>
```

Include client API packages

Create XML representation of the payload of the message that will be posted to the BPEL Process

Note: XML Façade could have been used here if the document were more complex.

Use Locator to obtain a reference to the delivery service of the BPEL server

Create normalized message and attach payload

Post message to the HelloWorld BPEL Process.

Note: message will be queued by delivery service and processed by BPEL PM based on priority and load.

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Lab Exercise

Lab 8: Invoking BPEL Processes through SOAP and Java

1. Modify

C:\orabpel\samples\tutorials\102.InvokingProcesses\jsp\invokeHelloWorld.jsp to invoke your MyLoanFlow BPEL process through the Java API.

Extra Credit: Modify the RMI client sample to initiate your MyLoanFlow process via RMI.

What Did We Learn?

- Once deployed, a BPEL process is exposed through both a WSDL/SOAP interface and a Java business delegate interface
- The Java business delegate interface allows Java/JSP applications to initiate new instances of a BPEL process
- The Java business delegate can be used locally or remotely using RMI
- The Java business delegate is JTA aware, allowing the initiation of a process to be part of a broader transaction

Related Material

- `com.oracle.bpel.client.*` Java docs
- Invoking a BPEL process from a .NET client (VB or C#)
- Configuring the WS-Addressing header
- Instance processing and priority
- Queuing through the delivery service