E-mail Outbound Lab

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What this exercise is about

The objective of this lab is to provide you with an understanding of the WebSphere Adapter for Email and outbound processing. In this lab you will deploy the WebSphere Adapter for Email using WebSphere Integration Developer, and integrate it with an SCA application that processes outbound requests to the remote file system.

Lab Requirements

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

- WebSphere Integration Developer V6.0.2 installed
- WebSphere Process Server V6.0 Test Environment installed
- WebSphere Adapter for EMail V6.0.2 installed
- Unzip LabFiles602.zip to your C:\ (your root) drive
- Complete WPIv602_AdapterInstallEmailServer lab successfully

What you should be able to do

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

- Import Email adapter RAR file into WebSphere Integration Developer
- Use Enterprise Service Discovery wizard to configure the Email Managed Connection Factory Properties Resource Adapter Properties to generate Business Objects and other artifacts
- Deploy the adapter application onto the WebSphere Process Server test environment

- Test the above deployed application using WebSphere Process Server test environment
- Restore the server configuration

Introduction



The adapter receives an Email BO instance from the J2EE Client during outbound. The request to the Email RA from a J2EE client would indicate information required for creating an e-mail and the same is contained in the EmailBO. The information on the mail server to connect, and the authentication details to connect can be provided both in Connection Spec and MCF properties. As a part of the Email BO request, the J2EE client needs to send the e-mail header information, like the mail addresses to which the mail needs to be sent, e-mail attachments if any, location of any files that need to be attached to the e-mail, and so on.

The Email RA transforms the Email BO into an E-mail. Based on all the provided information, the content within the mailContent attribute of the Email BO gets transformed into an e-mail with all specified attachments. You can optionally specify a set of files from the file system to be attached to the e-mail. The

Email RA would then picks the files from the file system at paths specified by the user, and attaches the files to the e-mail that would be created as response. The Email RA sends the created e-mail using SMTP to the configured server.

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 run 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 |
|---|--|-------------------|
| <wid_home></wid_home> | C:\Program Files\IBM\WebSphere\6.0 | |
| <wps_home></wps_home> | <wid_home>\runtimes\bi_v6</wid_home> | |
| <emailadapter_home></emailadapter_home> | C:\Program Files\IBM\ResourceAdapters\Email\adapter\Email | |
| <workspace></workspace> | C:\LabFiles602\EMailOutbound\workspace | |
| <lab_files></lab_files> | C:\Labfiles602 | /tmp/Labfiles602 |
| <temp></temp> | C:\temp | /tmp |

Windows users note: 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, C:\LabFiles60\ would be replaced by C:/LabFiles60/

Part 1: Import RAR into WebSphere Integration Developer

1. Start the WebSphere Integration Developer V6.0.2 with a new workspace

____a. Select Start > Programs > IBM WebSphere > Integration Developer V6.0.2 > WebSphere Integration Developer V6.0.2

____b. From the Workspace Launcher window, enter **<WORKSPACE>** for the Workspace field

| 🌆 Workspace Launcher | × |
|--|---|
| Select a workspace | |
| IBM WebSphere Integration Developer stores your projects in a directory called a workspace. Select the workspace directory to use for this session. | |
| Workspace: C:\LabFiles602\EMailOutbound\workspace Browse | |
| OK Cance | 1 |

____ c. Click on the the button on the right hand corner to close the Welcome page and proceed with the workbench.

| 💤 Business Integration - IBM WebSphere Integration Developer | |
|--|-----------|
| Elle Edit Navigate Search Project Run Window Help | |
| A Welcome X | A ← → ■ ₽ |
| WebSphere. Integration Developer | |

- _____ 2. Import Email Adapter RAR file
 - ____a. From main menu, select File > Import...

| 🚯 Business Integr | ation - IBM WebSpl | |
|---|--|--|
| <u>File E</u> dit <u>N</u> avigate | : Se <u>a</u> rch <u>P</u> roject <u>R</u> | |
| <u>N</u> ew | Alt+Shift+N 🕨 | |
| ⊆lose | Ctrl+F4 | |
| Close All | Ctrl+Shift+F4 | |
| _ Save | Ctrl+S | |
| Save <u>A</u> s | | |
| Sav <u>e</u> All | Ctrl+Shift+S | |
| Revert | | |
| Mo <u>v</u> e | | |
| Rena <u>m</u> e | F2 | |
| Refresh | F5 | |
| Print | Ctrl+P | |
| Switch <u>W</u> orkspace Open External File <u>.</u> | | |
| 🔁 Import | | |
| 🛃 Exp <u>o</u> rt | | |

____b. Select RAR file from the Import window and then click Next

| 👍 Import | × |
|--|--------|
| Select Import an external Connector RAR file into a Connector project | Ľ |
| Select an import source: Log File Performance Call Graph Probe Profiling file Profiling filter Project Interchange RAR file Security Certificate | |
| < <u>B</u> ack <u>N</u> ext > Einish | Cancel |

____ c. Click on the **Browse...** button next to the **Connector file** field to select <**EMAILADAPTER_HOME>\deploy\CWYEM_EMail.rar**

____ d. Uncheck the check box next to Add module to and EAR project and click Finish

| 🚯 Import | | × |
|---------------------------------------|--|---------------|
| Connector Import Import a Connecto | : r project from the file system | |
| Connector file: | C:\Program Files\IBM\ResourceAdapters\Email\adapter\Email\deploy\CWYEM_EMail.rar | Browse |
| Connector project: | CWYEM_EMail | N <u>e</u> w |
| 🔲 Overwrite ex | isting resources without warning, | |
| 🗖 Delete proj | ect on overwrite | |
| Target server: | WebSphere Process Server v6.0 | N <u>e</u> w |
| EAR project: | Add module to an EAR project. CWYEM_EMailEAR | Ne <u>w</u> , |
| | < <u>B</u> ack <u>N</u> ext > | Cancel |

____e. Click on **No** from Confirm Perspective Switch window to continue in Business Integration perspective

| 🚯 Confi | irm Perspective Switch 🗙 |
|-----------------------|--|
| ? | This kind of project is associated with the J2EE Perspective. Do you want to switch to this perspective now? |
| <u> ∏</u> <u>R</u> em | nember my decision |
| | |

Part 2: Use ESD Wizard to Generate Business Objects and other Artifacts

- 1. Launch the Enterprise Service Discovery wizard
 - ____a. Select File > New > Enterprise Service Discovery



__ 2. Select IBM WebSphere Adapter for Email (version 6.0.2) from the 'CWYEM_EMail' Connector Project and click Next

| 🄂 Enterprise Service Discovery | × |
|---|----------------------------|
| Select an Enterprise Service Resource Adapter | |
| Select a resource adapter to use to discover a service. | |
| IBM WebSphere Adapter for Email (version 6.0.2) from the 'CWYEM IBM WebSphere Service Registry and Repository WBI Adapter Artifact Importer | M_EMail' Connector Project |
| IBM WebSphere Adapter for Email | Import Resource Adapter |
| < <u>B</u> ack. <u>N</u> ext > | Cancel |

3. Configure settings for the Discovery agent

You will specify the properties to initialize the Resource Adapter and Enterprise Service Discovery agent.

- ____a. Unzip the **XSDs.zip** file under **<EMAILADAPTER_HOME>\Samples**. You will now see a XSDs folder under **<EMAILADAPTER_HOME>\Samples**
- ____ b. Click the Browse... button next to the Folder Name field and select the folder <EMAILADAPTER_HOME>\Samples\XSDs, that contains the Wbiaddress and Wbiphone XSD files

Note: For your convenience, Wbiaddress and Wbiphone xsd files are placed under <LAB_FILES>\EmailFiles

- ____ c. Select US-ASCII from the drop down list for the Character Set field
- _____d. Select **text/xml** for the **Content Type** field. When you select the content type, the **DataBinding Type** will be automatically set to **XMLBOSerializerDataBinding**

____ e. Click the Show Advanced >> button to see the Log file location and Logging level options for discovery log and click Next leaving the default log file location

| 🚯 Enterprise Service Disc | overy | × |
|--------------------------------|--|--------|
| Configure Settings for Di | scovery Agent | |
| Specify the properties to init | ialize the resource adapter and the enterprise service discovery agent. | 5 |
| Connection Configuration - | | |
| Folder Name: | C:\Program Files\IBM\ResourceAdapters\Email\adapter\Email\Samples\XSDs | Browse |
| Charater Set: | US-ASCII | [|
| Content Type: | (text/xml) | |
| DataBinding Type: | XMLBOSerializerDataBinding | |
| 🔲 Specify BO Propertie | rs | |
| BiDi Properties | | |
| 🔲 Bidi transformat | ion | |
| Bidi ordering schema | a; Implicit | |
| Text direction: | LTR | |
| 🔽 BiDi SymmetricS | wapping | |
| Bidi shaping; | Nominal | |
| Bidi numeric shaping | ; Nominal | |
| [Hide Advanced <<] | | |
| Logging options | | |
| Log file output location: | * (C:\Labfiles602\EMailInbound\workspace\.metadata\EmailMetadataDiscovery.log) | Browse |
| Logging Level: | SEVERE | |
| | | |
| | | |
| | | |
| | < <u>B</u> ack <u>N</u> ext > <u>Finish</u> | Cancel |

- 4. Find and discover the enterprise services. In this step you will select the business objects and services to be used with the adapter
 - ____a. From the Enterprise Service Discovery window, click on **Execute Query** button. You will see a **Wbiaddress** and **Wbiphone** business object under **Objects discovered by query**

| 👍 Enterprise Service Discovery | × | |
|--|--------------|--|
| Find and Discover Enterprise Services | | |
| To discover objects on the enterprise system, create a query by pressing "Edit Query" and then press "Execute Query". Once discovered, press "Add to import list" to specify the objects to be imported. | | |
| Query: | - | |
| k execute default query > | Edit Query | |
| Execute Query | | |
| Objects discovered by query: | | |
| | Filter | |
| wbiphone | Clear Filter | |
| Add to import list | Details | |
| Objects to be imported: | | |
| | Remove | |
| | _ | |
| | | |
| < <u>B</u> ack <u>N</u> ext > <u>Finish</u> | Cancel | |

- ____ b. Select Wbiaddress business object and click Add to import list button. The Wbiaddress business object will now be displayed under the Objects to be imported
- ____ c. Repeat the above step to add Wbiphone business object

____d. You should now see the two business objects – Wbiaddress and Wbiphone under Objects to be imported area

| 🚯 Enterprise Service Discove | sià | × | |
|--|--------------------------------------|--------------|--|
| Find and Discover Enterprise Services | | | |
| To discover objects on the enterprise system, create a query by pressing "Edit Query" and then press "Execute Query". Once discovered, press "Add to import list" to specify the objects to be imported. | | | |
| Query: | | - | |
| < execute default query > | | Edit Query | |
| Execute Query | | | |
| Objects discovered by query: | | | |
| ⊕ | | Filter | |
| I wolphone | | Clear Filter | |
| Objects to be incented. | Add to import list | Details | |
| Wbjects to be imported: | | | |
| Wbiphone | | ▼ | |
| · | | _ | |
| | | | |
| | < <u>B</u> ack <u>N</u> ext > Einish | Cancel | |

___e. Click Next

- 5. Configure the objects that will be imported by the discovery agent
 - ____a. From the Configure objects window, select **Outbound** from the dropdown menu for the **Service Type**. Note the operations available for the selected Service Type

____b. Enter the **BO Location** as **EmailOutBO** and click **Next**

| 🚯 Enterprise Serv | vice Discovery | × |
|--|--|----|
| Configure Objects Specify the propert | s ties for the objects that will be imported by the discovery agent. | |
| ServiceType: NameSpace: * Service Functions: | Outbound * http://www.ibm.com/xmlns/prod/websphere/j2ca/email | |
| Create | Ad | d |
| BO Location: | EMailOutB0 | |
| Function Selector: | WBIFunctionSelector | |
| | < <u>B</u> ack <u>N</u> ext > Einish Canc | el |

- 6. Specify the properties for the artifacts that will be generated in your workspace
 - ____a. Create a new module
 - 1) Click on the New... button next to the Module field
 - 2) From the New Integration Project window, ensure that the radio button next to **Create a** module project is selected and click **Next**

| 🚯 New Integration | n Project | | × |
|---|--------------------------------|---------|-------------|
| Integration Projec Select the type of ir | t ntegration project to cre | eate. | |
| Create a module Create a mediati | project. on module project. | | |
| | < <u>B</u> ack <u>N</u> e | ext > 🗄 | nish Cancel |

3) Enter EMailOutboundModule for the Module Name field 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 Name EMailOutboundModule |
| - Module Location |
| |
| Directory: C:\LabFiles602\EmailOutbound\workspace\EMailOutt Browse |
| Open module assembly diagram |
| 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>B</u> ack <u>N</u> ext > <u>Finish</u> Cancel |

- ____b. The module which is created above will appear under the **Module** field of the Generate Artifacts window
- ____ c. From Generate Artifacts window, select the radio button next to Use discovered connection properties. This will make the Managed Connection Factory and Resource Adapter Properties visible
- _____d. Enter these values for Managed Connection Factory Properties:

Note: You will use the configured details of the QPIv602_AdapterInstallEmailServer lab for this step.

- 1) HostName: localhost
- 2) PortNumber: 25
- 3) UserName: <user>@<domain_name>(Ex: Emailuser1@aimcp3x4.rchland.ibm.com)
- 4) Password: <password for the user> (Ex: password1)
- ____e. You can also enter the log and trace file locations under Resource Adapter Properties:
 - 1) Log file name[String]: C:\EmailRA\Outlog.txt
 - 2) Trace file name[String]: C:\EmailRA\Outtrace.txt
- ___f. Click Finish

| 🗄 Enterprise Service Discove | ry 🛛 🗶 |
|--|---|
| Generate Artifacts Specify the properties for the art | ifacts that will be generated in your workspace. |
| Properties for Interface | |
| Module: | EMailOutboundModule |
| Namespace: | http://EMailOutboundModule/EmailOutboundInterface |
| | Vse Default Namespace |
| Folder: | Browse |
| Name: | * EmailOutboundInterface |
| Description: | |
| | Edit operation names |
| Specify the connection properties O Use connection properties OUse discovered connection | which will be used to connect to the Enterprise Information System at runtime: s specified on server n properties |
| J2C Authentication Data Entry: | |
| Managed Connection Factory HostName: | Properties * localhost |
| PortNumber: | * 25 |
| Protocol: | smtp |
| UserName: | Emailuser1@aimcp3x4.rchland.ibm.com |
| Password: | (password1) |
| Resource Adapter Properties | |
| Logging and Tracing | * Recource@dapter |
| Adapter to [String]; | |
| Log rile size [Integer] | |
| Log file name [String] | |
| Log Files [Integer]: | |
| Trace file size [Intege | er]: 0 |
| Trace file name [Strin | ig]: (C:\EMailRA\Outtrace.txt) |
| Trace files [Integer]: | 1 |
| | < <u>B</u> ack <u>N</u> ext > <u>Einish</u> Cancel |

Part 3: Test the Adapter Application using WebSphere Process Server Test Environment

In this part of the lab, you will use the WebSphere Process Server Test Environment to test the SCA application outbound processing.

- _____1. Add the project to the WebSphere Process Server Test Environment
 - ____a. Right-click on WebSphere Process Server v6.0 under the server view and select Add and remove projects... from the popup menu

| Properties Problems 👫 Servers 🗙 | | | |
|---------------------------------|-----------|-----------------|------------|
| Server | Host name | | Status |
| 🛅 WebSphere ESB Server v6.0 | localhost | | |
| WebSphere Process Server v6.0 | localhost | New | • |
| | | Open | |
| | | Delete | |
| | | 🏂 Debug | |
| | | 🜔 Start | |
| | | 🔊 Profile | |
| | | Restart | • |
| | | 📕 Stop | |
| | | 🔄 Disconnect | |
| | | 担 Publish | |
| | | Monitoring | + |
| | | 🏪 Add and remov | e projects |

____ b. From the Add and Remove Projects window, select EMailOutboundModuleApp under Available projects panel and click Add >

| 🚯 Add and Remove Projects | | | × |
|---------------------------------------|-----------------------|--|---|
| Add and Remove Projects | | | |
| Modify the projects that are configu | | | |
| | | | |
| Move projects to the right to configu | re them on the server | | |
| <u>Available projects:</u> | | $\underline{C} on figured \ projects:$ | |
| | | | |
| | A <u>d</u> d > | | |

____ c. You will now see the EMailOutboundModuleApp added to the Configured projects. Click Finish

| 🚯 Add and Remove Projects | | × |
|---|------------------------|----------------------|
| Add and Remove Projects Modify the projects that are configu | ured on the server | |
| Move projects to the right to configu | re them on the server | |
| Available projects: | | Configured projects: |
| | | |
| | A <u>d</u> d > | |
| | | |
| | < <u>R</u> emove | |
| | | |
| | | |
| | Add All >> | |
| | << Re <u>m</u> ove All | |
| , | | , |
| | | |
| | | |
| | < Back Next > | Einish Cancel |

____2. Wait until the application gets published and started. The server will be started in Debug Mode

| Properties | Prob | ems Servers | 📃 Console | × | | | 🗏 💥 🚨 🖉 📑 |
|------------|------|-----------------|-----------|-----------------|-----------------------|----|--|
| WebSphere | Proc | ess Server v6.0 | [WebSphe | re v6.0 Server] | WebSphere Process Ser | ve | r v6.0 (WebSphere v6.0) |
| [6/19/0 | 6 1 | 5:25:17:3 | 50 CDT] | 00000018 | ResourceMgrIm | I | WSVR0049I: Binding javax.resource.cci.ConnectionFactory as |
| [6/19/0 | 06 1 | 5:25:17:3 | 70 CDT] | 00000018 | ResourceMgrIm | Ι | WSVR0049I: Binding EmailOutboundModule.EmailOutboundInterf |
| [6/19/0 | 06 1 | 5:25:17:4 | 10 CDT] | 00000018 | EJBContainerI | Ι | WSVR0207I: Preparing to start EJB jar: EmailOutboundModule |
| [6/19/0 | 06 1 | 5:25:17:4 | 60 CDT] | 00000018 | EJBContainerI | Ι | WSVR0037I: Starting EJB jar: EmailOutboundModuleEJB.jar |
| [6/19/0 | 06 1 | 5:25:17:5 | 30 CDT] | 00000018 | ApplicationMg 3 | А | WSVR0221I: Application started: EmailOutboundModuleApp |
| [6/19/0 | 06 1 | 5:25:17:9 | 61 CDT] | 00000059 | SystemOut | 0 | Server is ready for debugging |
| | | | | | | | |

____ 3. Test Scenario: Unstructured Content

Note: You will use the configured details of the WPIv602_AdapterInstallEmailServer lab here.

- Assembly Diagram: EmailOutboundModule 🗄 Business Integration 🔀 🖶 🗁 🖻 🕾 100 2 EmailOutboundModu × New 🖻 🕄 EmailOutboundM EmailOutboundInterfac a EmailOutbou Open Dependency Editor 🛨 🚰 Business Logic Show Files 🛨 📇 Data Types Copy 🗄 🔝 Interfaces 🗄 🖧 Mapping Paste: Move 💢 Delete import... Export... 8 Refresh Generate Documentation... Test Module Test
- ____a. Right-click EMailOutboundModule and select Test > Test Module

- ____b. Ensure that the **Operation** selected is **createEmail**
- ____ c. Add required headers
 - 1) From Initial Request Parameters, right click on the column that contains **headerList** and select **Add Element**

- General Properties
- Detailed Properties

| Configuration: | Default Module Test | • |
|----------------|------------------------|---|
| Module: | EMailOutboundModule | • |
| Component: | EmailOutboundInterface | • |
| Interface: | EmailOutboundInterface | • |
| Operation: | createEmail | • |

Initial reguest parameters

| Name | Туре | Value |
|--------------------|--------------------|------------------------|
| 🖃 createEmailInput | EmailBG | |
| verb | string | <null></null> |
| 🖃 Email | Email | |
| headerList | Header [] | Call Halve |
| Encoding | string | per value, |
| mailContent | anyType [anyType] | Set to Unset |
| mailAttachments | MailAttachment [] | Set to <u>N</u> ull |
| fileReferences | string [] | Set to <u>D</u> efault |
| | | |
| | | Add <u>E</u> lement |

2) Enter 3 from the Add Element window

| 🚯 Add Element | × |
|--|---|
| Enter the number of new elements to add: | |
| 3 | |
| | |
| | |
| OK Cancel | |

- 3) Enter the following for added headerList[0]:
 - a) headerName: To
 - b) headerValue: **<user1>@<domain_name>**(Ex: Emailuser1@aimcp3x4.rchland.ibm.com)
- 4) Enter the following for headerList[1] :
 - a) headerName: from
 - b) headerValue: **<user2>@<domain_name>**(Ex: Emailuser2@aimcp3x4.rchland.ibm.com)
- 5) Enter the following for headerList[2] :
 - a) headerName: subject
 - b) headerValue: test mail

IBM WebSphere Adapter 6.0.2 – Lab Exercise

- _____d. Click on the row that contains **mailContent** in the **Type** column and click on to select a Data Type
- ____e. Select EmailBG from the Data Type Selection window and click OK

| 🥵 Data Type Selection | _ 🗆 🗙 |
|--|------------|
| Filter by type, namespace, or file (? = any character, $*$ = any | / String): |
| Matching data types: | |
| 🛱 createEmail | - |
| CreateWbiaddress | |
| CreateWbiphone | |
| Email | |
| in EmailBG | |
| 🖨 Header | |
| 🛱 MailAttachment | |
| 🛱 UnstructuredContent | |
| 💭 Wbiaddress | |
| 🛱 WbiaddressWrapper | |
| wbiaddressWrapperBG | - |
| Qualifier: | |
| the http://www.ibm.com/xmlns/prod/websphere/j2ca/email/e | emailbg - |
| 1 | |
| | |
| | |
| OK Ca | ncel |
| | |

- _____f. Click on the row that contains **mailContent** in the **Type** column, under Email and then click on
- ____g. Select UnstructuredContent from Data Type Selection window and then click OK
- ___h. Enter text/plain for the ContentType
- ____ i. Enter any data for AsText and asBinary fields

____j. Your Initial Request Parameters should look like this:

General Properties

| Detailed Pr | operties | |
|---------------------------------|------------------------|---|
| Configuration: | Default Module Test | • |
| Module: | EmailOutbound | • |
| Component: | EmailOutboundInterface | • |
| Interface: | EmailOutboundInterface | • |
| Operation: | (createEmail) | - |

Initial reguest parameters

| Name | Туре | Value | |
|-----------------------------------|-------------------------------|------------------------------------|--|
| createEmailInput | EmailBG | | |
| verb | string | <null></null> | |
| - Email | Email | | |
| headerList | Header [] | | |
| headerList[0] | Header | | |
| headerName | string | To | |
| headerValue | string | Emailuser1@rdyavana.austin.ibm.com | |
| headerList[1] | Header | | |
| headerName | string | from | |
| headerValue | string | Emailuser2@rdyavana.austin.ibm.com | |
| headerList[2] | Header | | |
| headerName | string | subject | |
| headerValue | string | Email test mail | |
| Encoding | string | | |
| - mailContent | EmailBG [anyType] | | |
| verb | string | <null></null> | |
| - Email | Email | | |
| headerList | Header [] | <null></null> | |
| Encoding | string | | |
| - mailContent | UnstructuredContent [anyType] | | |
| ContentType | string | | |
| ObjectName | string | | |
| AsText | string | Testing Email pass through 📃 🔍 | |
| AsBinary | hexBinary | 0 | |
| mailAttachments | MailAttachment [] | <null></null> | |
| fileReferences | string [] | <null></null> | |
| mailAttachments | MailAttachment [] | <null></null> | |
| fileReferences | string [] | <null></null> | |
| | | | |

___ k. Click Continue

___ I. Select WebSphere Process Servers > WebSphere Process Server v6.0 from Deployment Location window and click Finish

| 🚯 Deployment Location | | × |
|---|-------|------------|
| Select Deployment Location This server instance is currently running. | | E |
| Deployment location: | | New Server |
| Eclipse 1.4 JVM | | |
| Mode: Run | 7 | |
| Use this as the default and do not ask again | | |
| | Einis | h Cancel |

- _____4. Verify your results
 - ____a. You will see the following message in your console (or SystemOut.log file):

```
from: Emailuser2@rdyavana.austin.ibm.com
To: Emailuser1@rdyavana.austin.ibm.com
subject: Email test mail
Mime-Version: 1.0
Content-Type: multipart/mixed;
      boundary="---=_Part_7_379318589.1162854249261"
-----= Part 7 379318589.1162854249261
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Testing Email pass through
-----=_Part_7_379318589.1162854249261--
[11/6/06 17:04:09:301 CST] 0000008e SystemOut
                                                 0 250 Mail queued for delivery.
[11/6/06 17:04:09:311 CST] 0000008e ResourceAdapt I
com.ibm.j2ca.email.EmailInteraction execute CWYEM0016I: The Email resource
adapter has successfully sent the e-mail to all recipients.
      ____b. You can also check your inbox for the mail received with the subject test mail and the contents
```

- _ b. You can also check your index for the mail received with the subject test mail and the contents as given in the previous steps
- 5. Test Scenario: Wbiaddress

- ____a. Click on the Invoke ^{*} button at the right hand top corner EMailOutboundModule_Test window
- ____b. Ensure that the **Operation** selected is **createEmail**
- ___ c. Follow step 3-c to add the same three headers
- _____d. Double-click on the row that contains **mailContent** in the **Type** column and click on to select a Data Type
- ____e. Select WbiaddressWrapperBG from the Data Type Selection window and click OK

| 🥵 Data Type Selection | _ 🗆 🗙 |
|--|--------------|
| Filter by type, namespace, or file (? = any character, $* = a$ | any String): |
| Matching data types: | |
| 🛱 Email | |
| 💽 EmailBG | |
| 🛱 Header | |
| 🖨 MailAttachment | |
| DistructuredContent | |
| 🖨 Wbiaddress | |
| WbiaddressWrapper | |
| WbiaddressWrapperBG | |
| | |
| | |
| Use WbiphoneWrapperBG | • |
| Qualifier: | |
| http://www.ibm.com/xmlns/prod/websphere/j2ca/ema | il/wbiaddre |
| | |
| | |
| ОК | Cancel |

____f. Enter any data for the fields – Addressid, Addressline1, Addressline2, Customercity, Customerstate, Customerzip, Customercountry

____g. Your Initial Request Parameters should look like this:

General Properties

| Detailed Pr | roperties | |
|---------------------------------|------------------------|----------|
| Configuration: | Default Module Test | • |
| Module: | EmailOutbound | - |
| Component: | EmailOutboundInterface | ~ |
| Interface: | EmailOutboundInterface | • |
| Operation: | (createEmail) | • |

Initial reguest parameters

| Name | Туре | Value | |
|---------------------------------------|---------------------------------|------------------------------------|--|
| 🖃 createEmailInput | EmailBG | | |
| verb | string | <null></null> | |
| - Email | Email | | |
| - headerList | Header [] | | |
| headerList[0] | Header | | |
| headerName | string | Το | |
| headerValue | string | Emailuser1@rdyavana.austin.ibm.com | |
| headerList[1] | Header | | |
| headerName | string | from | |
| headerValue | string | Emailuser2@rdyavana.austin.ibm.com | |
| headerList[2] | Header | | |
| headerName | string | subject | |
| headerValue | string | WbiAddress test | |
| Encoding | string | | |
| - mailContent | [WbiaddressWrapperBG [anyType]] | | |
| verb | string | <null></null> | |
| WbiaddressWrapper | WbiaddressWrapper | | |
| - Content | Wbiaddress | | |
| Addressid | integer | | |
| Addrline 1 | string | 11501 | |
| Addrline2 | string | Burnet Rd | |
| Customercity | string | Austin | |
| Customerstate | string | TX | |
| Customerzip | string | 78758 | |
| Customercountry | string | USA | |
| Wbiphone | Wbiphone [] | <null></null> | |
| mailAttachments | MailAttachment [] | <null></null> | |
| fileReferences | string [] | <null></null> | |

__ h. Click Continue

Ignore the same exception that you got for the Unstructured content test scenario.

____6. Verify your results

____a. You will see the following message in your console (or SystemOut.log file):

```
from: Emailuser2@rdyavana.austin.ibm.com
To: Emailuser1@rdyavana.austin.ibm.com
subject: WbiAddress test
Mime-Version: 1.0
Content-Type: multipart/mixed;
      boundary="---=_Part_9_439038261.1162855192698"
-----= Part 9 439038261.1162855192698
Content-Type: text/xml; charset=us-ascii
Content-Transfer-Encoding: 7bit
<?xml version="1.0" encoding="UTF-8"?>
[11/6/06 17:19:52:718 CST] 0000009c SystemOut 0 <wbiaddress:Wbiaddress
xsi:type="wbiaddress:Wbiaddress" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xmlns:wbiaddress="http://www.ibm.com/xmlns/prod/websphere/j2ca/email/wbiaddress">
  <Addressid>1</Addressid>
  <Addrline1>11501</Addrline1>
  <Addrline2>Burnet Rd</Addrline2>
  <Customercity>Austin</Customercity>
  <Customerstate>TX</Customerstate>
  <Customerzip>78758</Customerzip>
  <Customercountry>USA</Customercountry>
</wbiaddress:Wbiaddress>
-----= Part 9 439038261.1162855192698--
```

____ b. You can also check your inbox for the mail received with the subject test mail and the contents as given in the previous steps

Part 4: Restore Server Configuration

_____1. Close the EMailOutboundModule_Test window and click No for the Save Resources window



2. Right-click on **WebSphere Process Server v6.0** under the Servers view and select **Add and** remove projects... from the context menu

| Properties Problems 👯 Servers 🗙 | | | |
|---------------------------------|-----------|-----------------|------------|
| Server | Host name | | Status |
| 🛅 WebSphere ESB Server v6.0 | localhost | | |
| WebSphere Process Server v6.0 | localhost | New | • |
| | | Open | |
| | | Delete | |
| | | 🏇 Debug | |
| | | 🜔 Start | |
| | | 🔊 Profile | |
| | | Restart | • |
| | | 📕 Stop | |
| | | 🔄 Disconnect | |
| | | 追 Publish | |
| | | Monitoring | • |
| | | 🏪 Add and remov | e projects |

3. Select **EMailOutboundModuleApp** under Configured projects and click < **Remove**.

| 🚯 Add and Remove Project | s | × |
|---|----------------------------|----------------------------|
| Add and Remove Projects Modify the projects that are c | onfigured on the server | |
| Move projects to the right to co | nfigure them on the server | |
| <u>A</u> vailable projects: | | Configured projects: |
| | | 표 🖷 EMailOutboundModuleApp |
| | Add > | |
| 1 | | 1 |

- 4. Click **Finish** after you see the application moved to Available projects. Wait until the application is unpublished.
 - __5. Right-click on **WebSphere Process Server v6.0** from the Servers view and select **Stop** from the context menu.

| Properties Problems 👯 Servers 🗙 Console | | | | |
|---|-----------|---------|---------|---|
| Server | Host name | Status | | State |
| 🛅 WebSphere ESB Server v6.0 | localhost | | | |
| WebSphere Process Server v6.0 | localhost | Started | New | - · · · · · · · · · · · · · · · · · · · |
| | | | Open | |
| | | | Delete | |
| | | | 🐝 Debug | |
| | | | D Start | |
| | | | Profile | |
| | | | Restart | • |
| | | | 📕 Stop | |

What you did in this exercise

In this lab, you imported the Email Adapter RAR file into your WebSphere Integration Developer workspace and integrated it into an SCA application that creates a file to the file system.

You made use of Enterprise Service Wizard available in WebSphere Integration Developer to specify Managed Connection Factory Properties and Resource Adapter Properties which, after deploying onto the server will generate Business Objects and other artifacts.

In the end you deployed and then tested the adapter application for the operations available.

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