Configuring the JDE Input Node to poll the events from JDE EIS

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The IBM App Connect Enterprise JDE Input Node can be used to connect to a JDE Server to poll the real time events of Address Book and Sales orders that are logged in an Event table in JD Edwards EnterpriseOne, a cloud-based Enterprise Resource Planning (ERP) and supply chain management solution.

This article has two sections.

- Section 1 describes how to configure the JDE server to subscribe and make to events populated into the event table.
- Section 2 explains how to use JDE input node in a message flow to poll the real time events populated in the JDE Server event table.

Configuration of JDE Server to poll the real time events

Setting up RTE Server (Transaction Server) with a JAVACONN Subscriber:

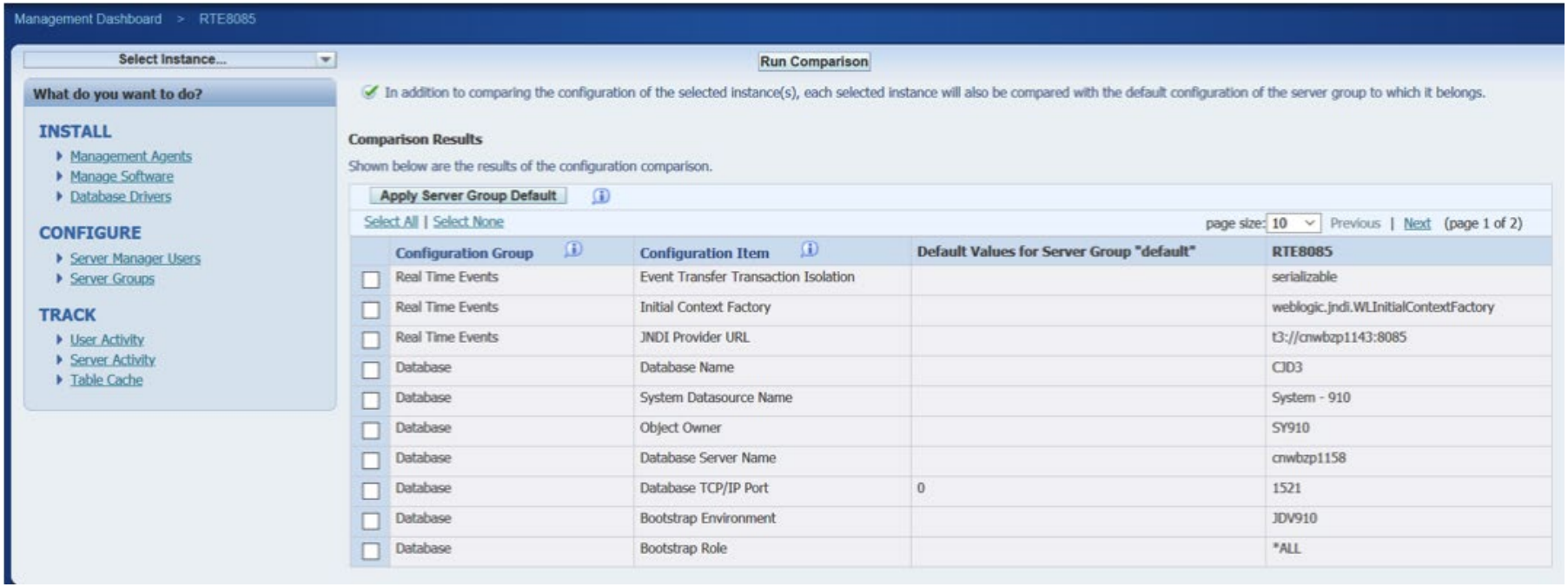
1. The Transaction Server should be installed.
2. Transaction Server Configuration in Server Manager:
    1. **Network Settings Configuration**:
       The Outgoing JDENET Port is the E1 Port to which the RTE will be communicating with the E1 server (E1 Port).

       The Incoming JDENET Port is the port the Transaction Server will be listening from for incoming messages (outgoing RTE from E1). Verify that the ‘incoming’ port is not already in use by another application running on the same server (Business Services Server for example).

2. **Real Time Events Configuration**
   The initialContextFactory and jndiProviderURL should be populated with the following values (these will differ depending on whether the RTE is configured on an OAS, WebSphere or WebLogic).

   initialContextFactory= weblogic.jndi.WLInitialContextFactory
   jndiProviderURL= t3://cnwbzp1143:8085

   Where ‘cnwbzp1143’ is the name of the Transaction Server machine (if setting up the RTE on WebLogic, you will need to first create a Managed Server that will contain the RTE application. The ‘jndiProviderURL’ port will match the RTE Managed Server port)



3. **Transaction Server Configuration in E1**
    1. Clear the E1 tables and make corrections to existing RTE definitions.

       E1 might come with data in the following table:

       F90702, F907021, F90703, F90704, F90705, F90706, F90707, F907071, F907072, F90710, F90711, F90712, F90715.

       Clear the content of the above tables before proceeding.

    2. **Run DBTemplates.exe**
       DBTemplates is an executable that is provided as part of the E1 Client installation. This performs some database operations that are key to a fully functioning Transaction Server. This needs to be executed from a E1 Development Client (where all development objects are installed).

       Prior to running 'DBTemplates.exe', make sure you assign the appropriate privileges to your E1 System tables as outlined below:

       Oracle
       Grant the following privileges to the JDE_ROLE or the database proxy user.
       GRANT CREATE ANY SEQUENCE TO JDE_ROLE;
       GRANT DROP ANY SEQUENCE TO JDE_ROLE;
       GRANT CREATE ANY TRIGGER TO JDE_ROLE;
       GRANT DROP ANY TRIGGER TO JDE_ROLE;

       From an E1 Client, run the following command from a DOS command prompt (log off E1 first).

       ```
       C:\>dbtemplates -create
       ```

       You should be prompted to log on to E1. Log on to the appropriate Environment. Once DBTemplates has run, you should see the following message in the DOS Command window:

       'Exiting the program with SUCCESS'

Look at the jde.log if any error is returned. Note that if you run DBTemplates multiple times, you will see errors in the jde.log. DBTemplates adds records to E1 tables and therefore, if you run DBTemplates multiple times, the jde.log will show errors as follows:

Error – ORA-00001: unique constraint (TESTDTA.F986112_PK) violated

These errors are no indication that DBTemplates failed: these are only indications that DBTemplates has already been executed once.
After the scripts complete successfully, you should revoke any special privileges you granted in order to create the triggers. This table lists the revocation commands by database.

Oracle
Revoke the following privileges to the JDE_ROLE or the database proxy user.
REVOKE CREATE ANY SEQUENCE FROM JDE_ROLE;
REVOKE DROP ANY SEQUENCE FROM JDE_ROLE;
REVOKE CREATE ANY TRIGGER FROM JDE_ROLE;
REVOKE DROP ANY TRIGGER FROM JDE_ROLE;

3. **Run R90705. This updates the Event Activation Table (F90705) and R90706 (Convert Event Subscription)**

   The above UBEs can be run with the default Processing Options values and can be run either locally or on the server.

   R90706 creates queue records in F90715. These are the queues where the RTE messages will be sent to. These Queues are only used in conjunction with a subscriber of type JACACONN (as describer later)/MSMQ.

   Some Real Time Event definitions as provided when installing EnterpriseOne are incorrect. You will need to make the required corrections if the Events in question are going to be used. If these Events are not going to be used, these incorrect Event definitions will not have any adverse effects other than showing errors in the logs. Here is a list of incorrect Event definitions and a detail of the changes to make. You must run P90701A to make the corrections.

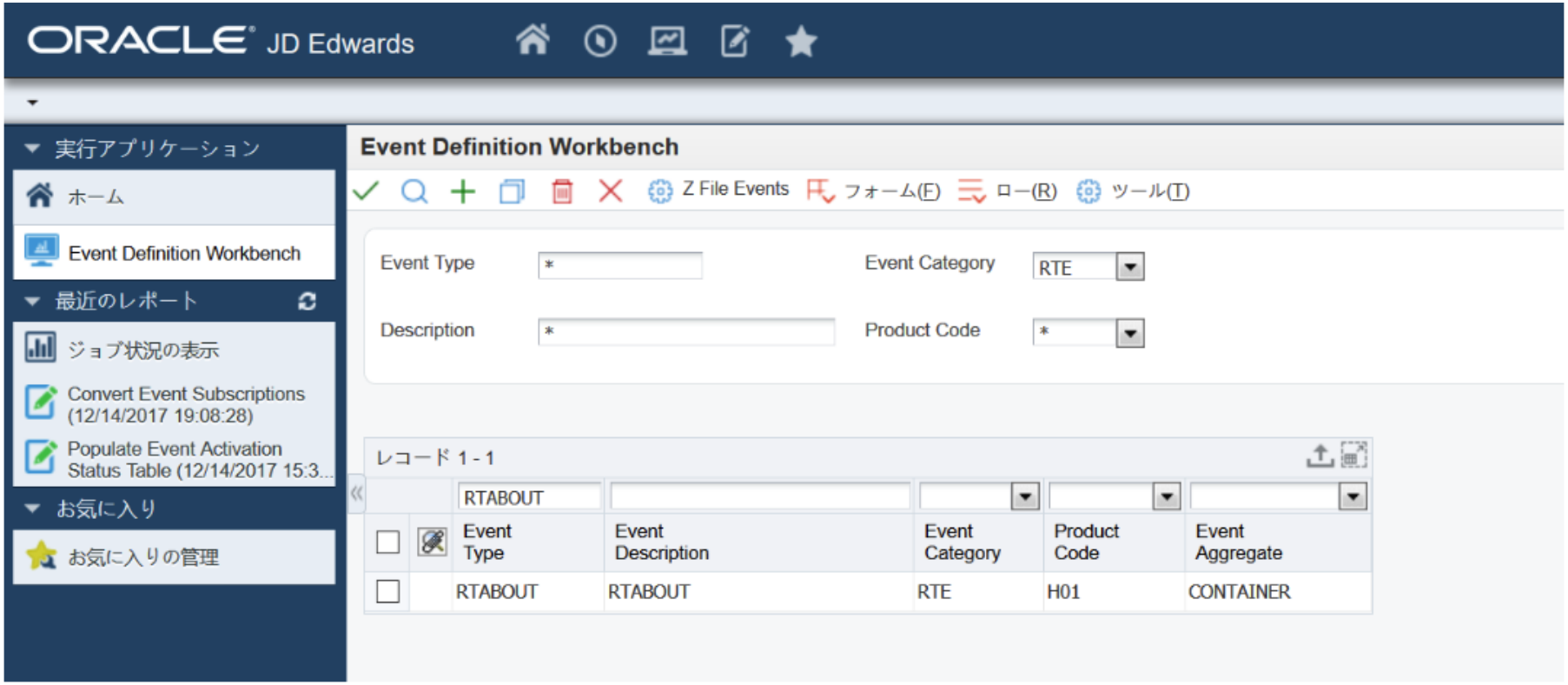
   Delete the following Event Definitions:

   RTSOAPS, RTWOAPS, RTIBAPS, RTIBDTL, RTIBOUTA, RTIBOUT

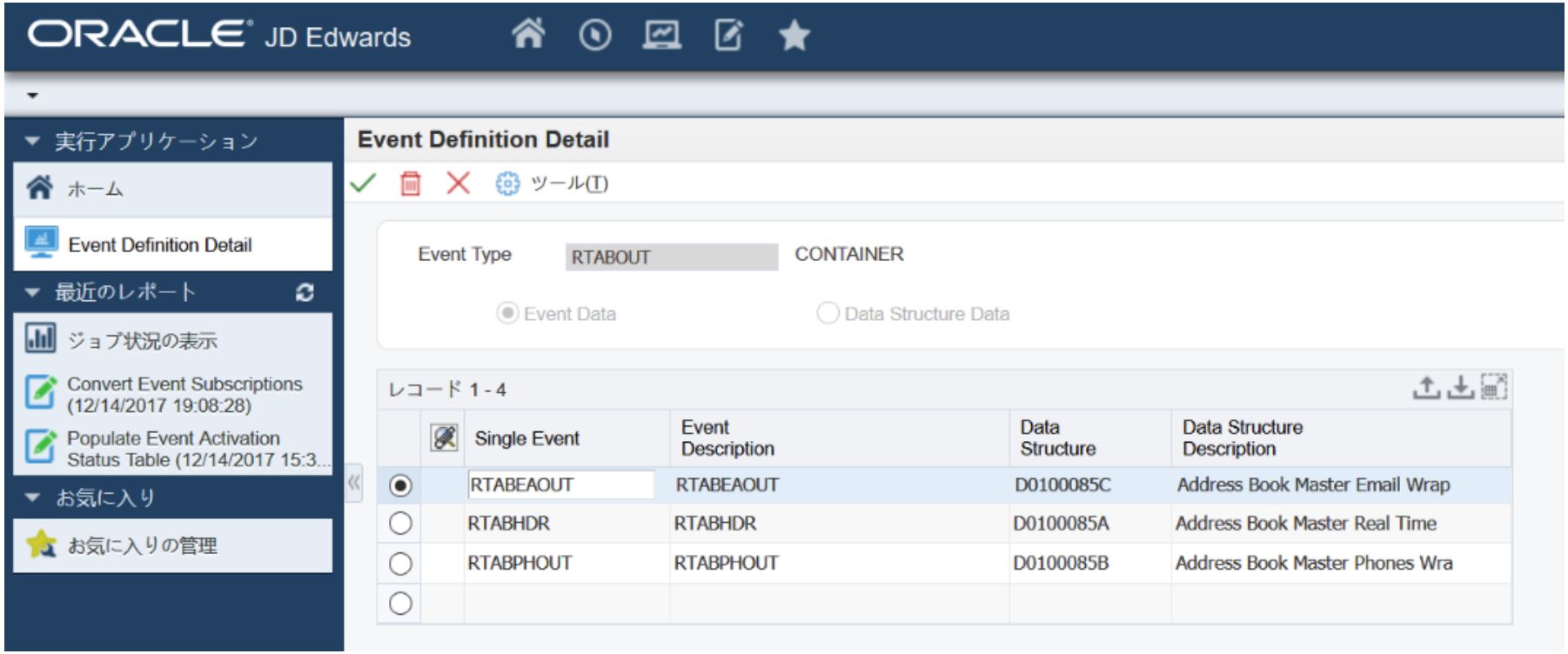
   Change the following Event Definitions (run P90701A):

   RTBUOUTB: change the Data Structure field from D4101470B to BE D4101700B
   RTINVOUTA: change the Data Structure field from D4202180B to D4202330B
   RTINVOUTB: change the Data Structure field from D4202180C to D4202330C
   RTWOHDR: change the Data Structure field from D3102290B to D3102360A
   RTSODTL: change the Data Structure field from D4202150C to D4202310B
   RTSOHDR: change the Data Structure field from D4202150B to D4202310A
   RTPOOUT: in ‘Event Details’, delete RTPOAPS
   RTSOOUT: in ‘Event Details’, delete RTPOAPS
   RTWOOUT: in ‘Event Details’, delete RTPOAPS
   RTPODTL: this Event Definition is missing in Application Release 9.1. Add the missing Event.
   RTPOHDR: this Event Definition is missing in Application Release 9.1. Add the missing Event.

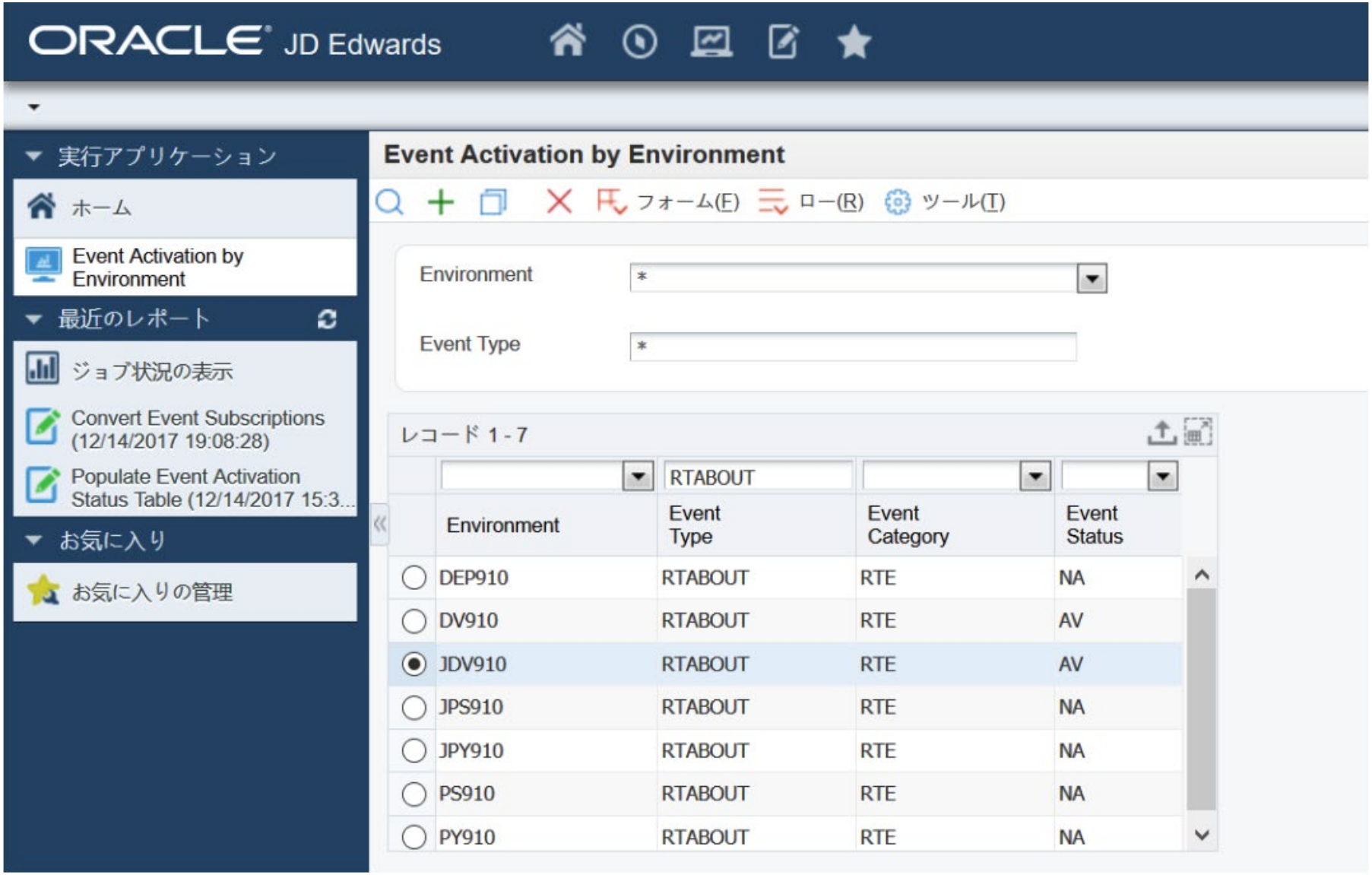
4. **Configure and Activate RTABOUT(Addressbook)**
   From an E1 Client, run P90701A. You should have a ‘Container’ RTE definition ‘RTABOUT’ as follows. RTABOUT ‘CONTAINER’ Event



RTABOUT ‘Event Details’. RTABOUT is a ‘CONTAINER’ Event which is made up of the following ‘SINGLE’ Events:

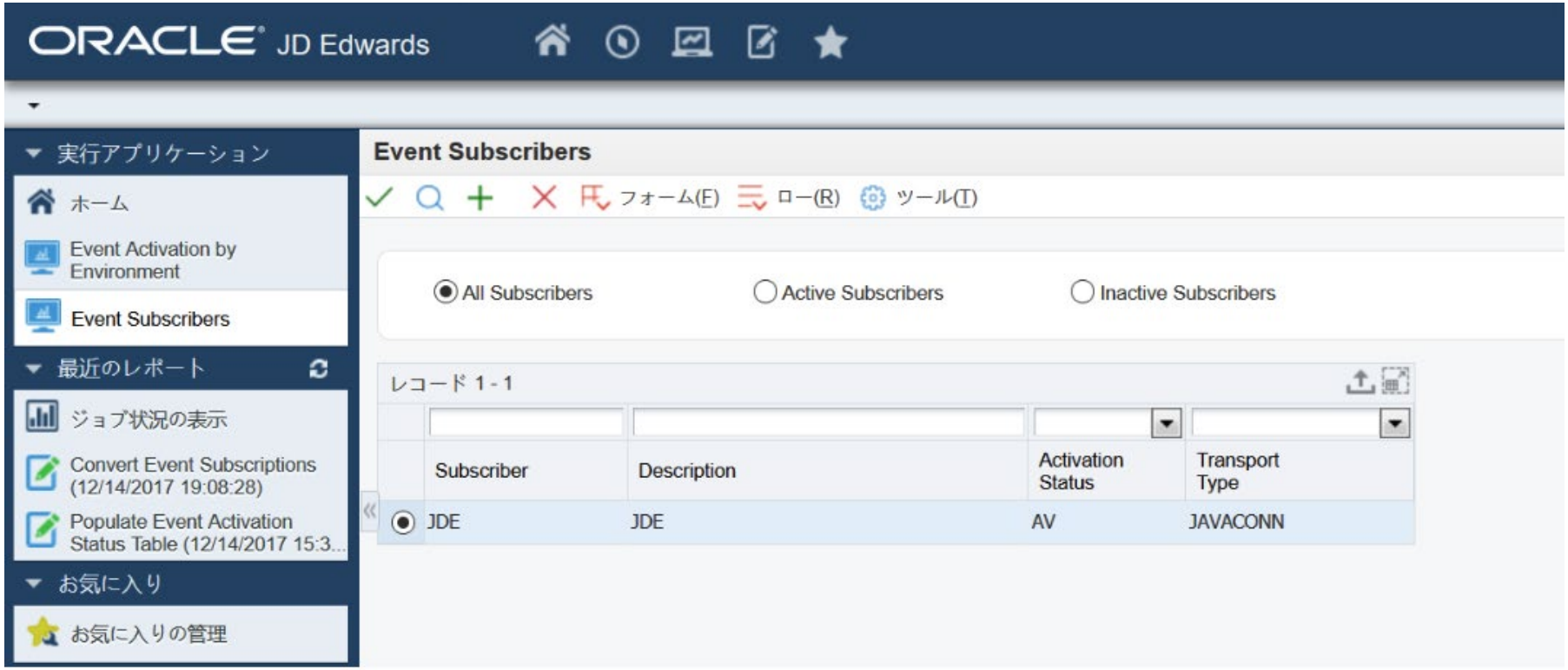


Once RTABOUT configuration has been completed and\or verified, from P90701A, take the ‘Event Activation’ Form Exit. Add a record for RTABOUT for the appropriate environment(s). Ensure the RTABOUT records are at status ‘AV’(Active)

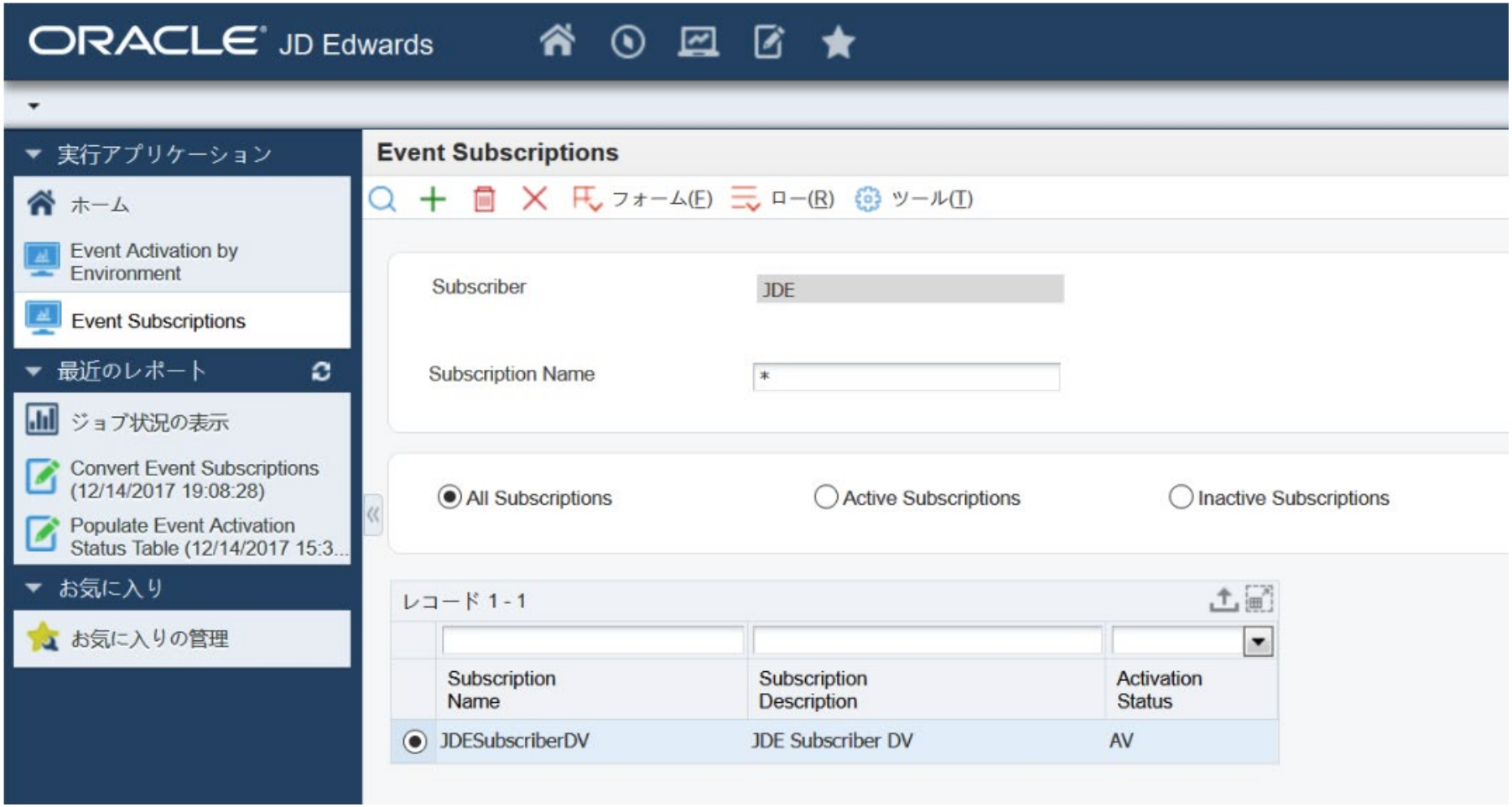


5. **Special Consideration for AS400.**
   Journaling needs to be enabled on the system table F90710 to allow the Transaction Server to insert, update and delete record from F90710.

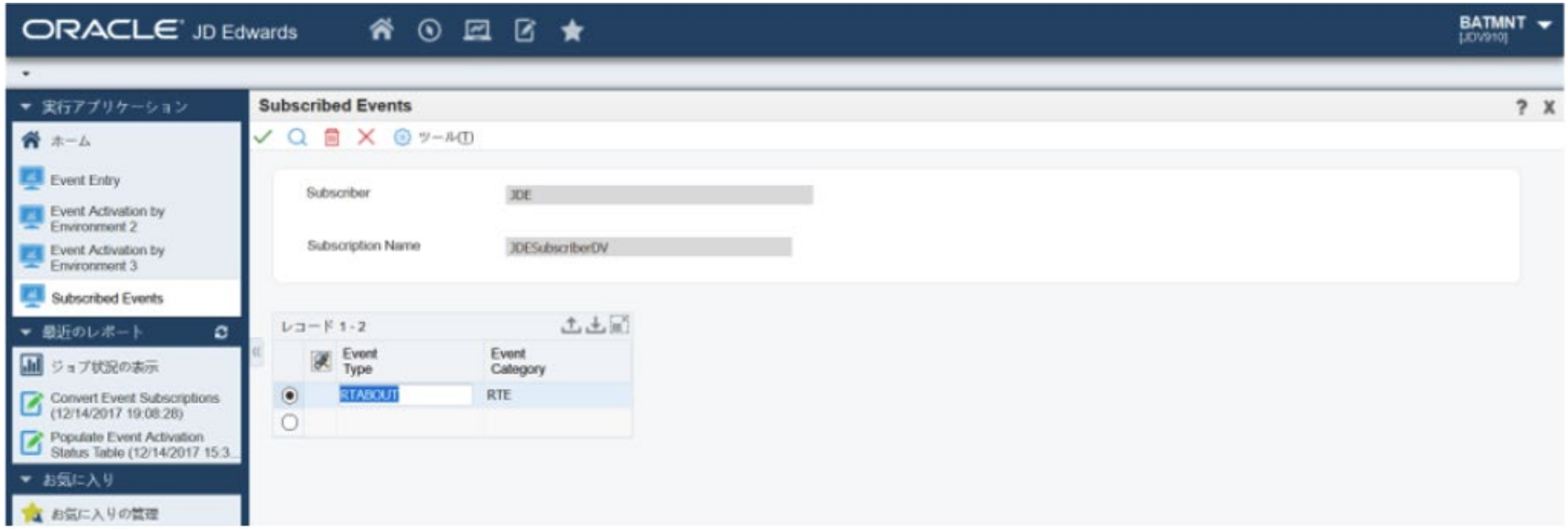
4. **JAVACONN Subscriber Configuration in EnterpriseOne**
   1. **Create a JAVACONN Subscriber.**
      Run P90702A and add a subscriber as follows. The Subscriber field must have a value matching a valid E1 User



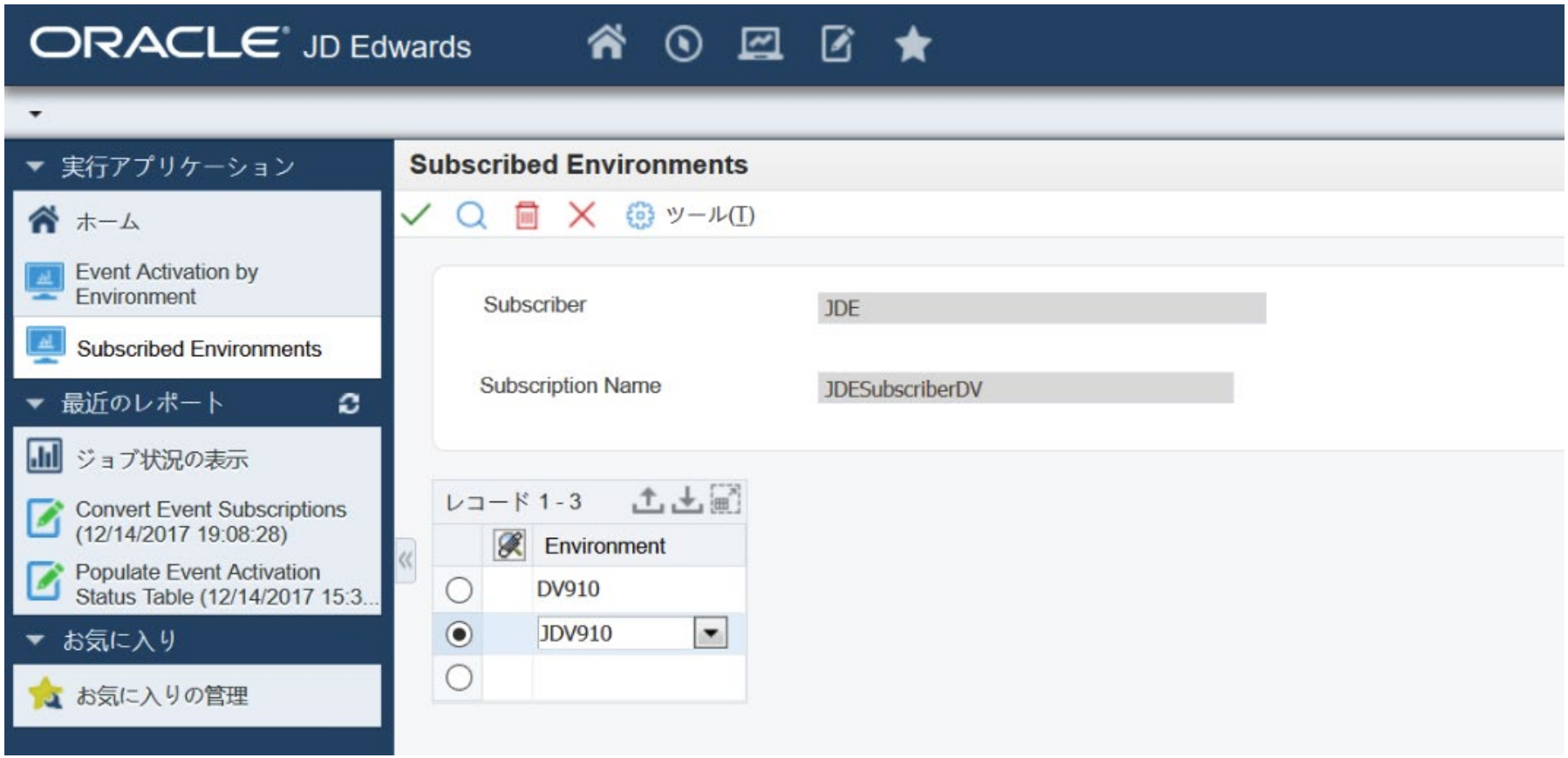
2. **Create a Subscription.**
   Run P90702A. Find the Subscriber you created in the above step. Take the ‘Event Subscriptions’ Option.



3. **Add an Event (RTABOUT) to the Subscription.**
   Find the subscription created above. Select the 'Subscribed Events' Row Exit.

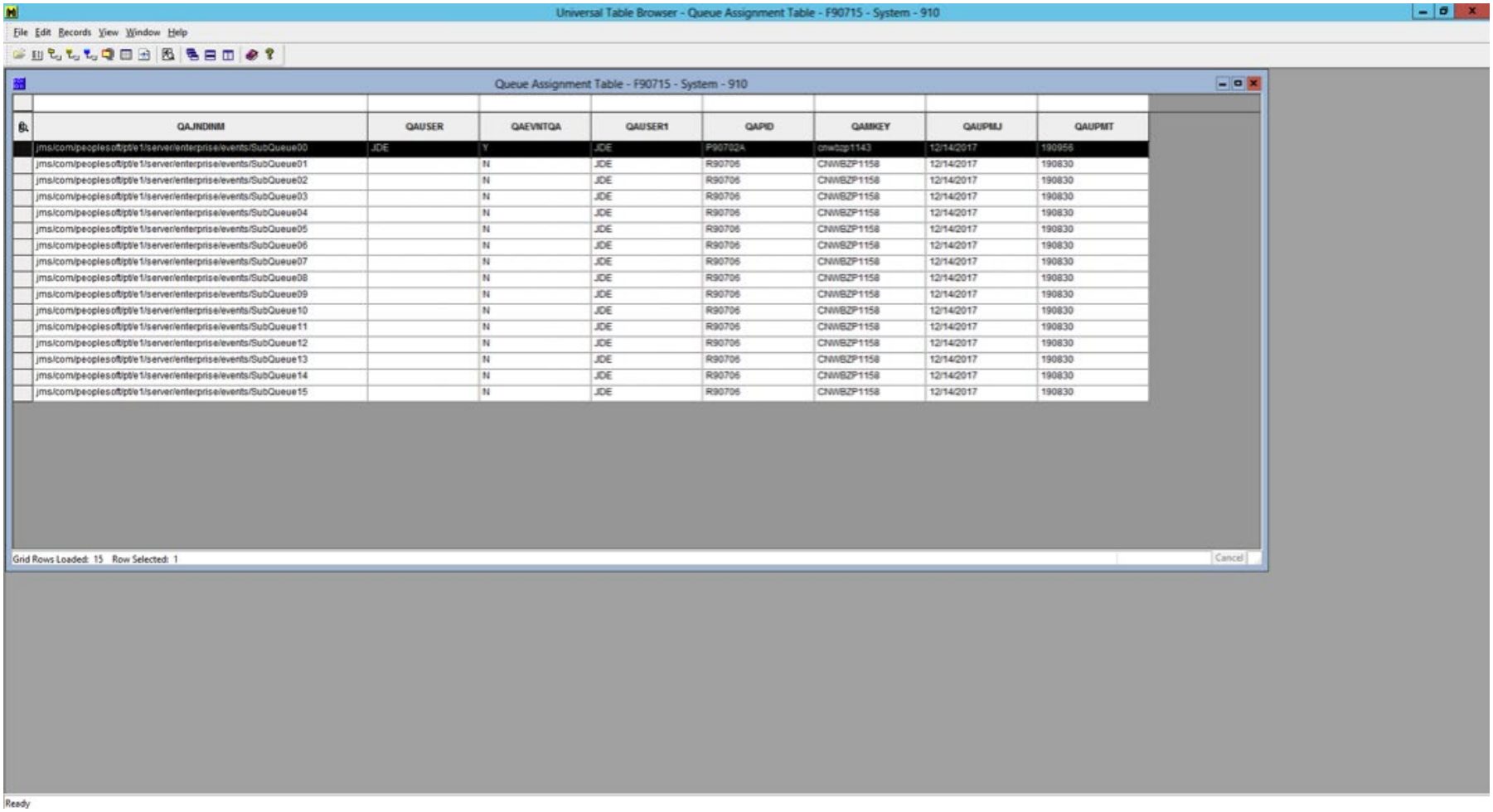


4. **Add Environment to Subscription.**
Find the subscription created above. Select the 'Subscribed Env' Row Exit.



You are now ready to test your configuration. Restart your E1 Enterprise Server and start your Transaction Server from the Server Manager console.

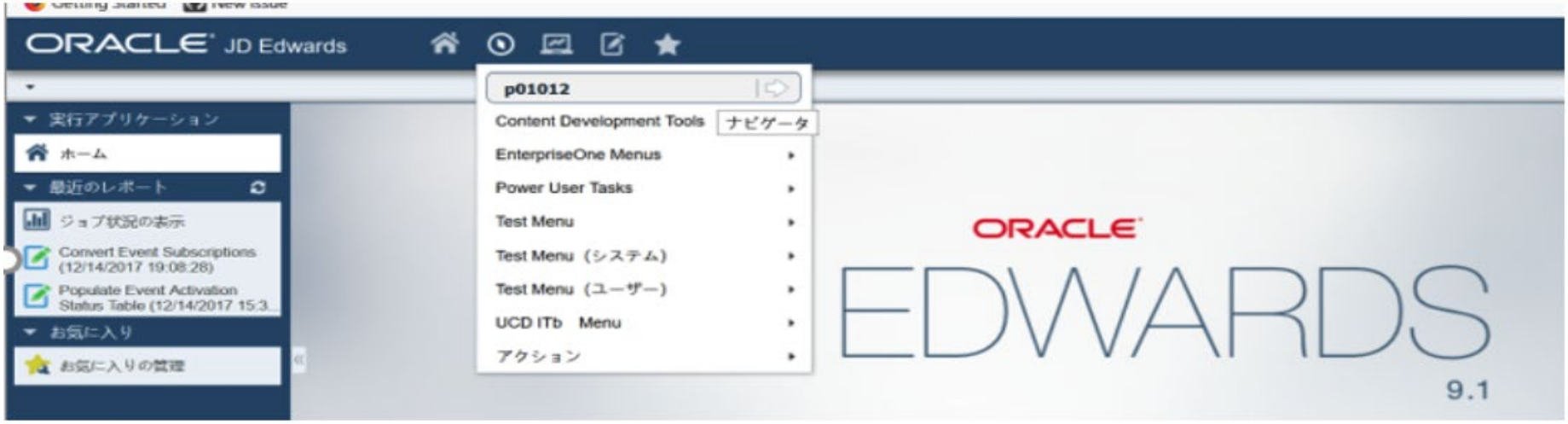
5. **Testing\Validating the JAVACONN configuration.**
   Open F90715. This shows that the JAVACONN Subscriber that was created is assigned to the 'SubQueue00' queue.



A Real Time Event will be created when Adding \ Changing or Deleting an Address Book record.

Before generating a RTABOUT, stop your Transaction Server via Server Manager Console. Once the Transaction Server is stopped, create or edit an Address Book Record.

Edit Address Book record:


ORACLE JD Edwards
p01012
Content Development Tools
ナビゲータ
EnterpriseOne Menus
Power User Tasks
Test Menu
Test Menu（システム）
Test Menu（ユーザー）
UCD ITb Menu
アクション
実行アプリケーション
ホーム
最近のレポート
ジョブ状況の表示
Convert Event Subscriptions (12/14/2017 19:08:28)
Populate Event Activation Status Table (12/14/2017 15:3...
お気に入り
お気に入りの管理
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EDWARDS
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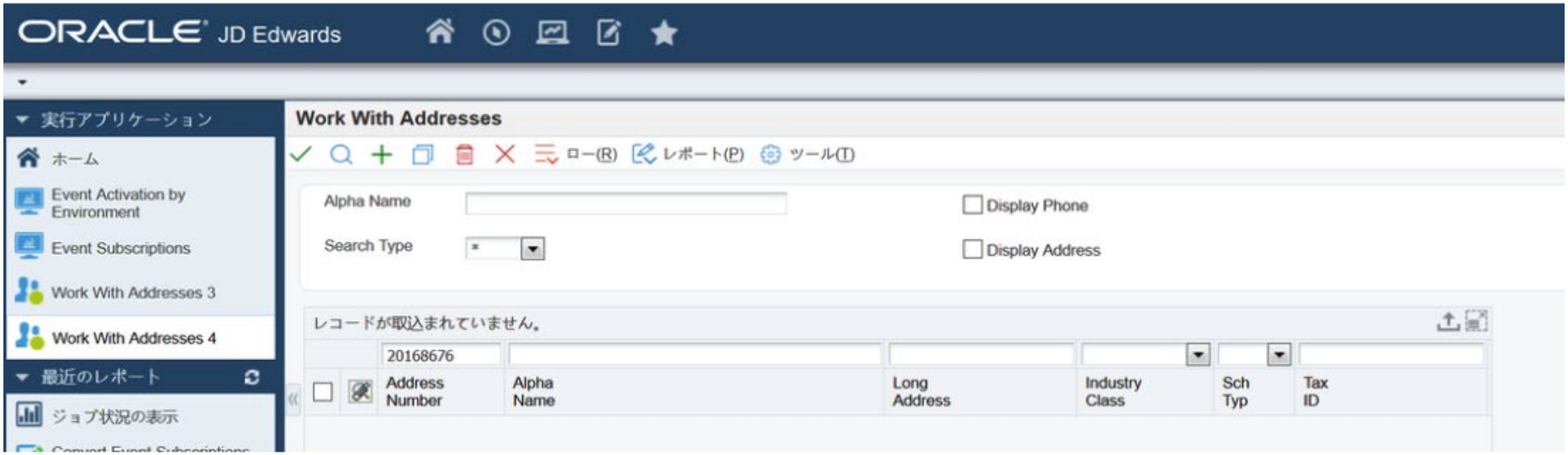
ORACLE JD Edwards
実行アプリケーション
ホーム
Event Activation by Environment
Event Subscriptions
Work With Addresses 3
Work With Addresses 4
最近のレポート
ジョブ状況の表示
Work With Addresses
ロー(R)
レポート(P)
ツール(T)
Alpha Name
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20168676
Address Number
Alpha Name
Long Address
Industry Class
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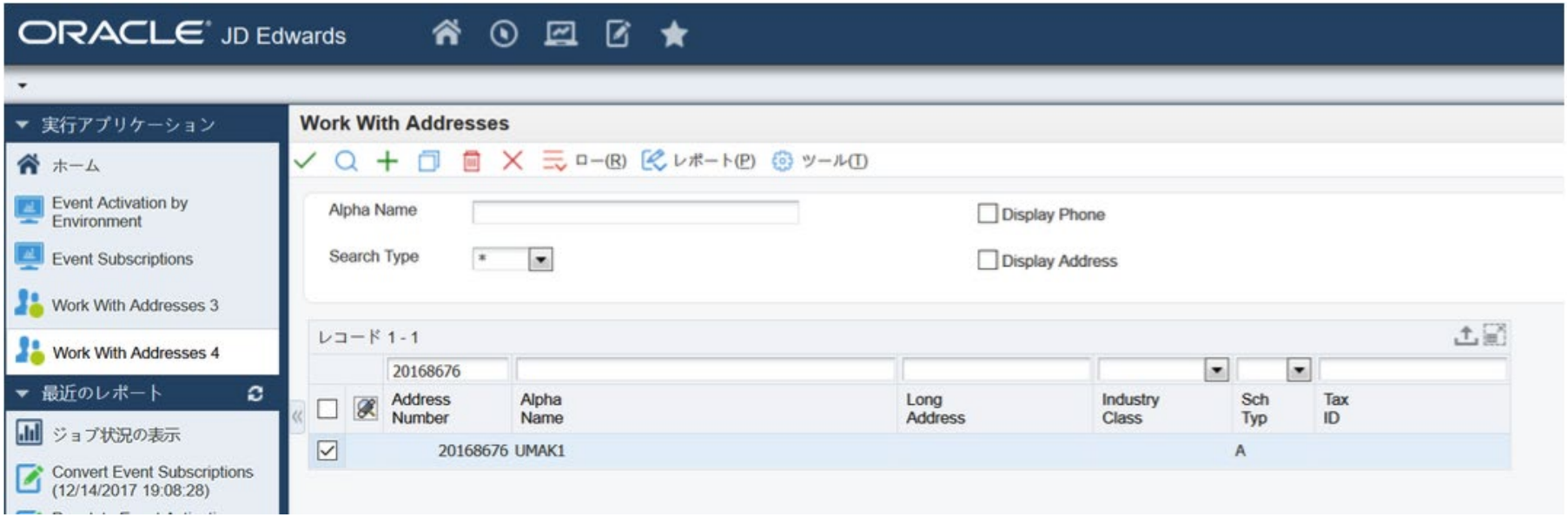
Tax ID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実行アプリケーション
ホーム
Event Activation by Environment
Event Subscriptions
Work With Addresses 3
Work With Addresses 4
最近のレポート
ジョブ状況の表示
Convert Event Subscriptions (12/14/2017 19:08:28)
Work With Addresses
ロー(R) レポート(P) ツール(T)
Alpha Name
Search Type
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Display Address
レコード 1 - 1
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Address Number
Alpha Name
Long Address
Industry Class
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Tax ID
20168676 UMAK1
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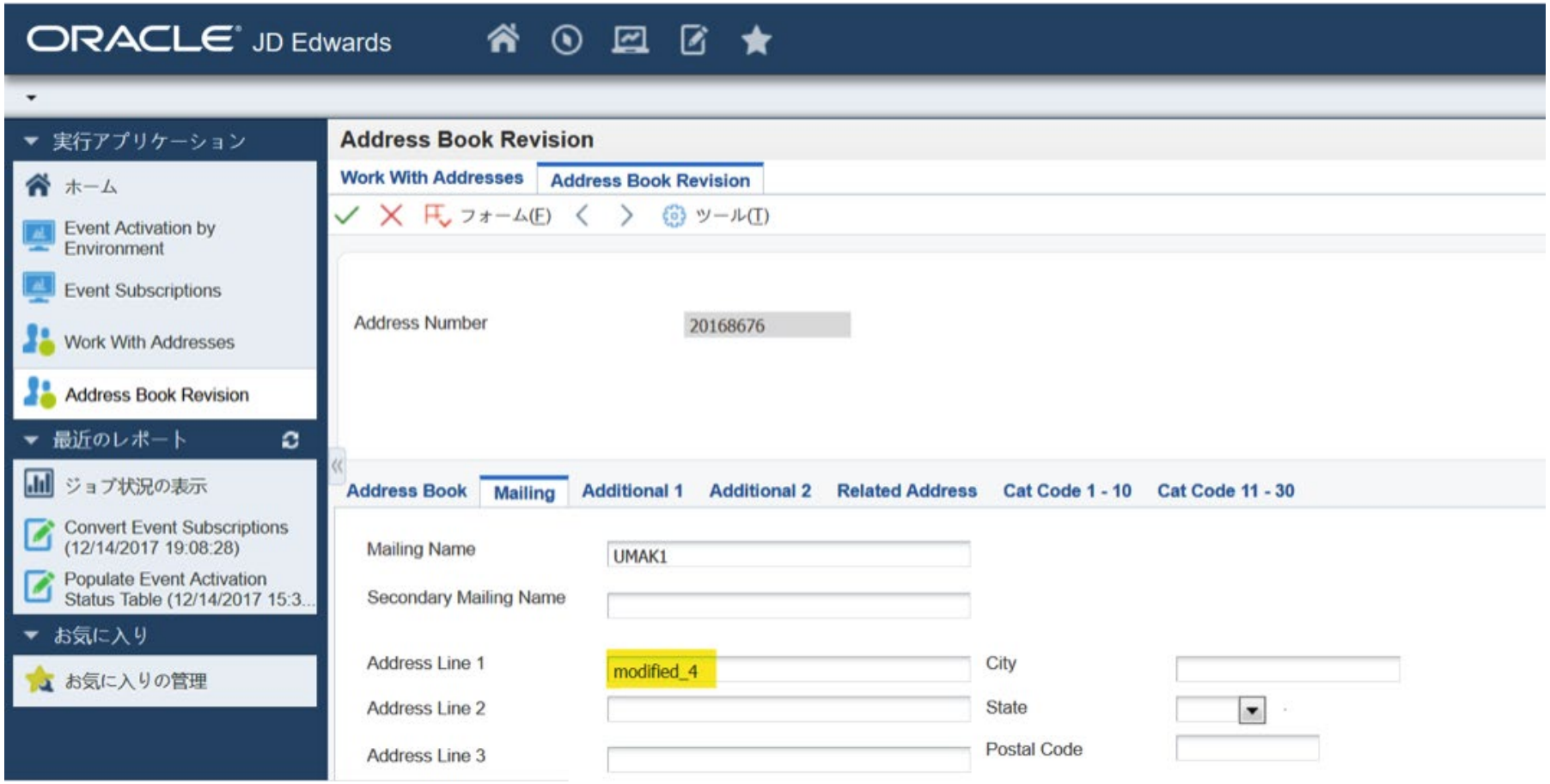
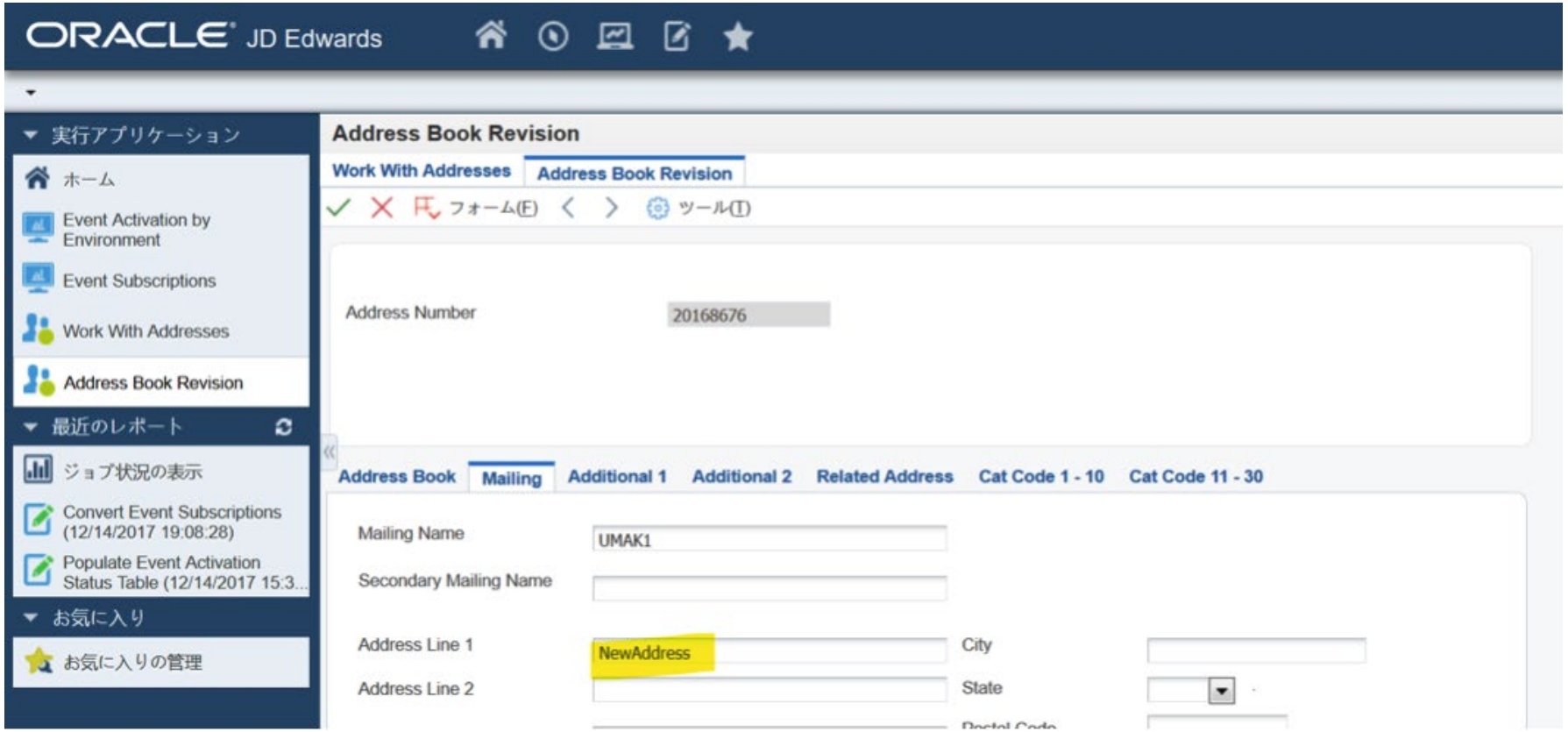
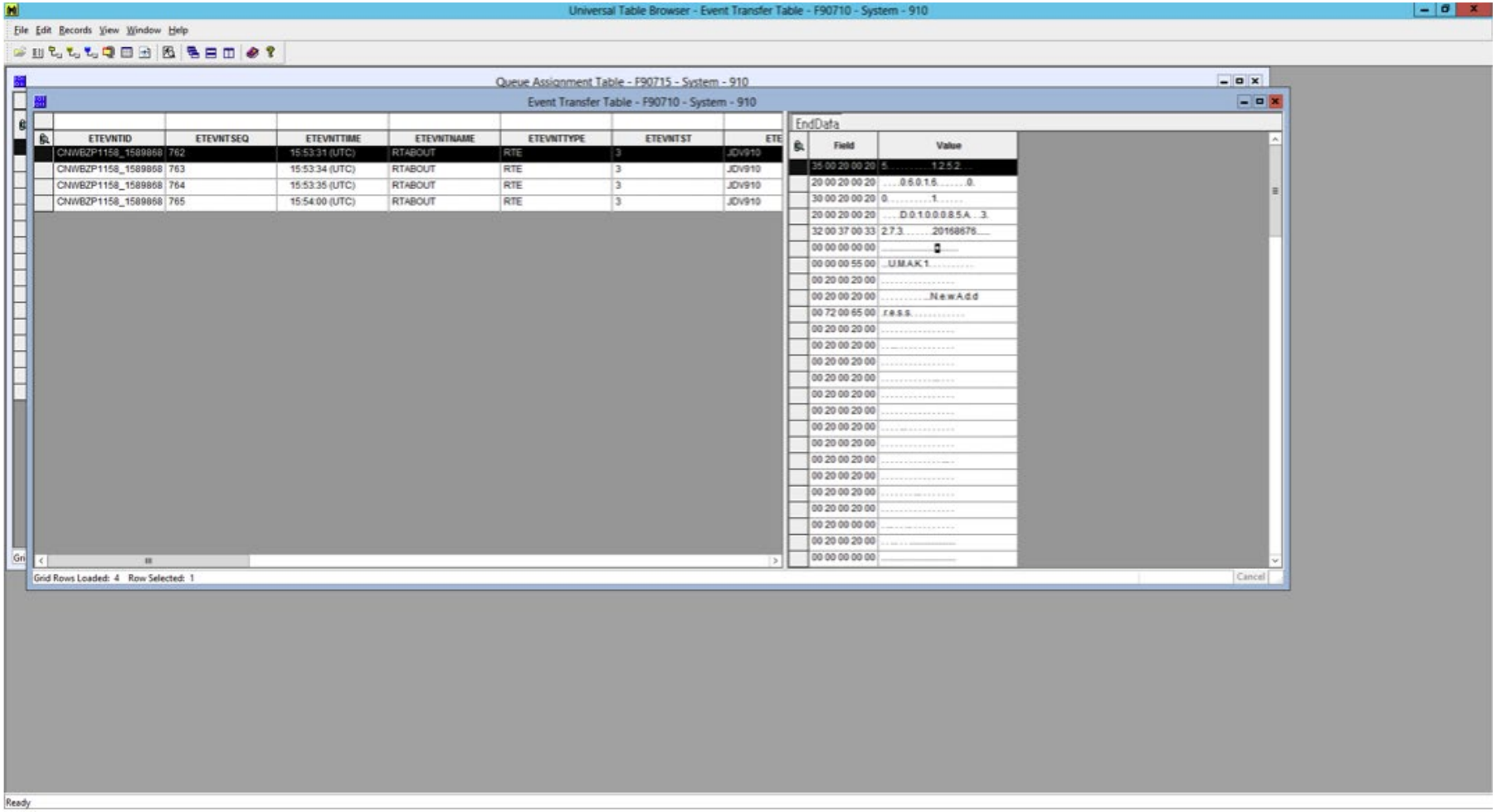

ORACLE JD Edwards
実行アプリケーション
ホーム
Event Activation by Environment
Event Subscriptions
Work With Addresses
Address Book Revision
最近のレポート
ジョブ状況の表示
Convert Event Subscriptions (12/14/2017 19:08:28)
Populate Event Activation Status Table (12/14/2017 15:3...
お気に入り
お気に入りの管理
Address Book Revision
Work With Addresses
Address Book Revision
フォーム(F) ツール(T)
Address Number
20168676
Address Book
Mailing
Additional 1
Additional 2
Related Address
Cat Code 1 - 10
Cat Code 11 - 30
Mailing Name
UMAK1
Secondary Mailing Name
Address Line 1
modified_4
Address Line 2
Address Line 3
City
State
Postal Code

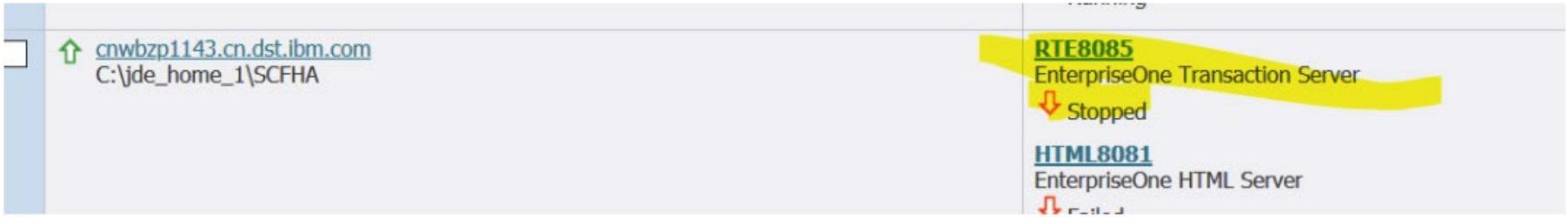
Modify addressline1 in above screen.



On creating\deleting\changing an Address Book record, a record should be written to event table F90710. If your Transaction Server is stopped, the F90710 record will remain in the table until the Transaction is activated. Note the value of the ‘ETEVNTST’ column (this should be 3 at this point).

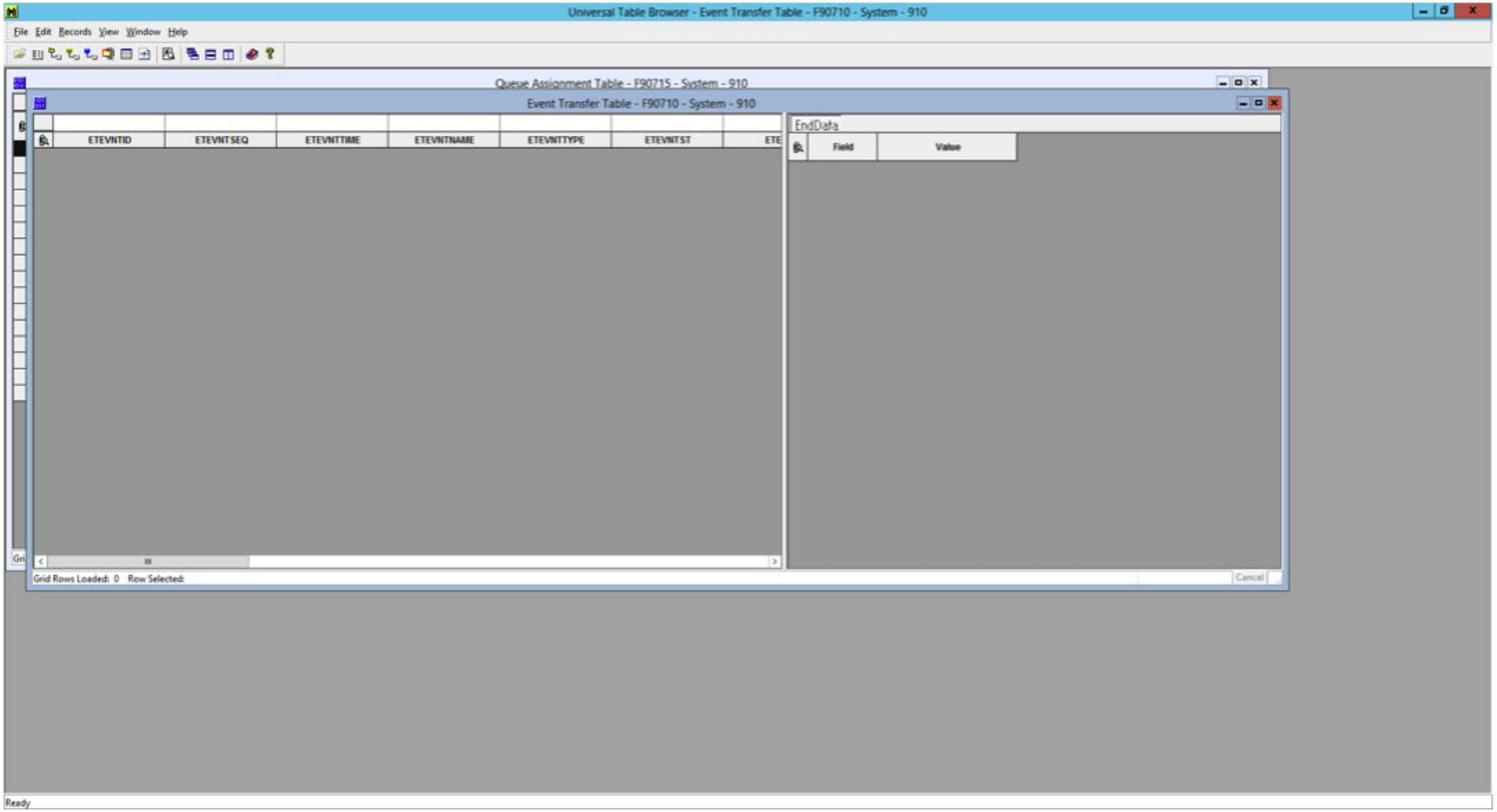


Now start your Transaction Server via Server Manager Console. After your Transaction Server is started, the F90710 record should be processed and if your configuration is correct, the record should be removed from F90710.


cnwbzp1143.cn.dst.ibm.com
C:\jde_home_1\SCFHA
RTE8085
EnterpriseOne Transaction Server
Stopped
HTML8081
EnterpriseOne HTML Server

EnterpriseOne Transaction Server: RTE8085
General
Status
Stopped
Start
Software Component Version
EnterpriseOne RTE Server 9.2.0.5 07-06-2016_05_20
Change...

cnwbzp1143.cn.dst.ibm.com
C:\jde_home_1\SCFHA
RTE8085
EnterpriseOne Transaction Server
Starting


Universal Table Browser - Event Transfer Table - F90710 - System - 910
File Edit Records View Window Help
Queue Assignment Table - F90715 - System - 910
Event Transfer Table - F90710 - System - 910
ETEVNTID
ETEVNTSEQ
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ETEVNTTYPE
ETEVNTST
EvtData
Field
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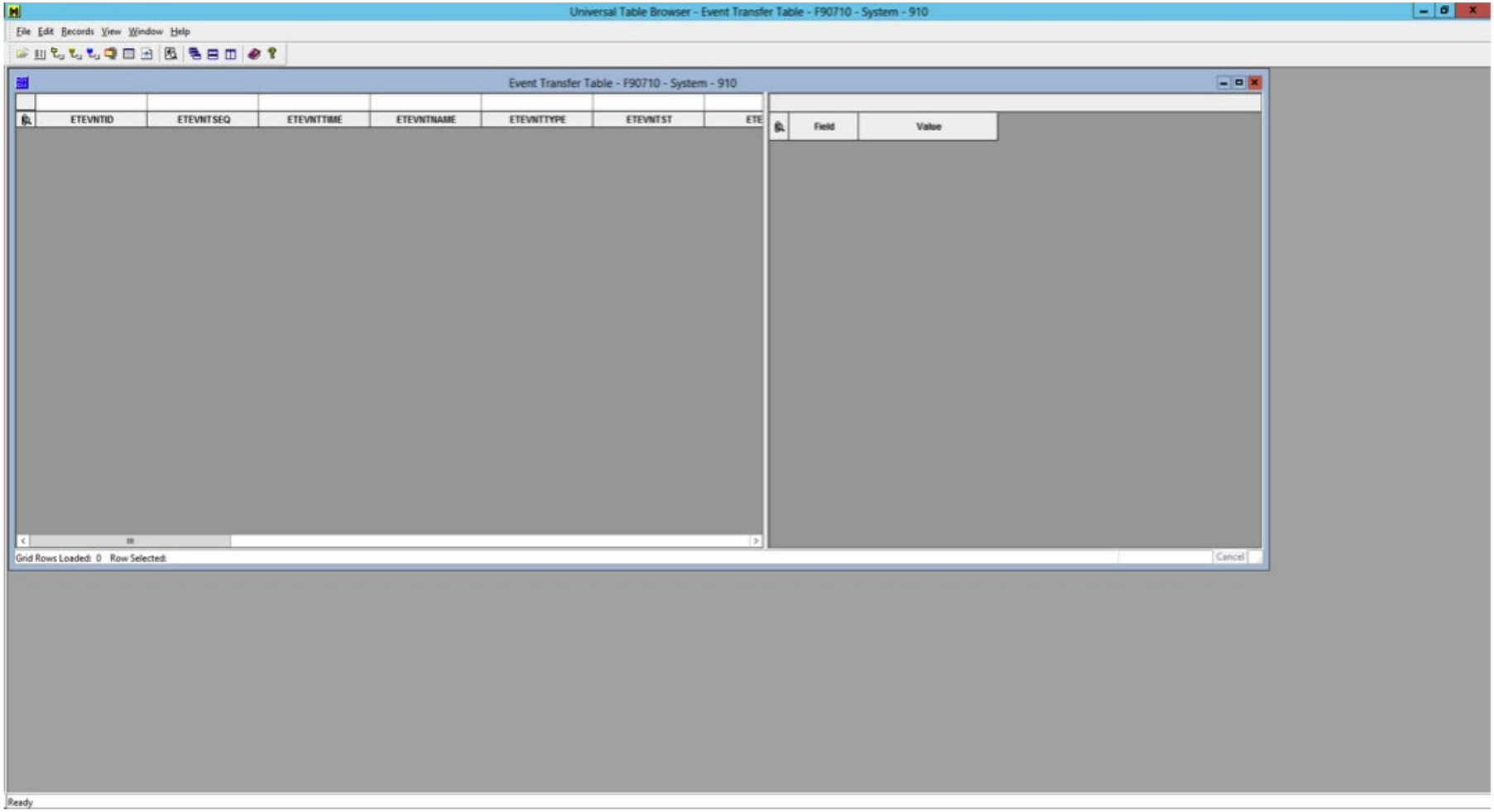
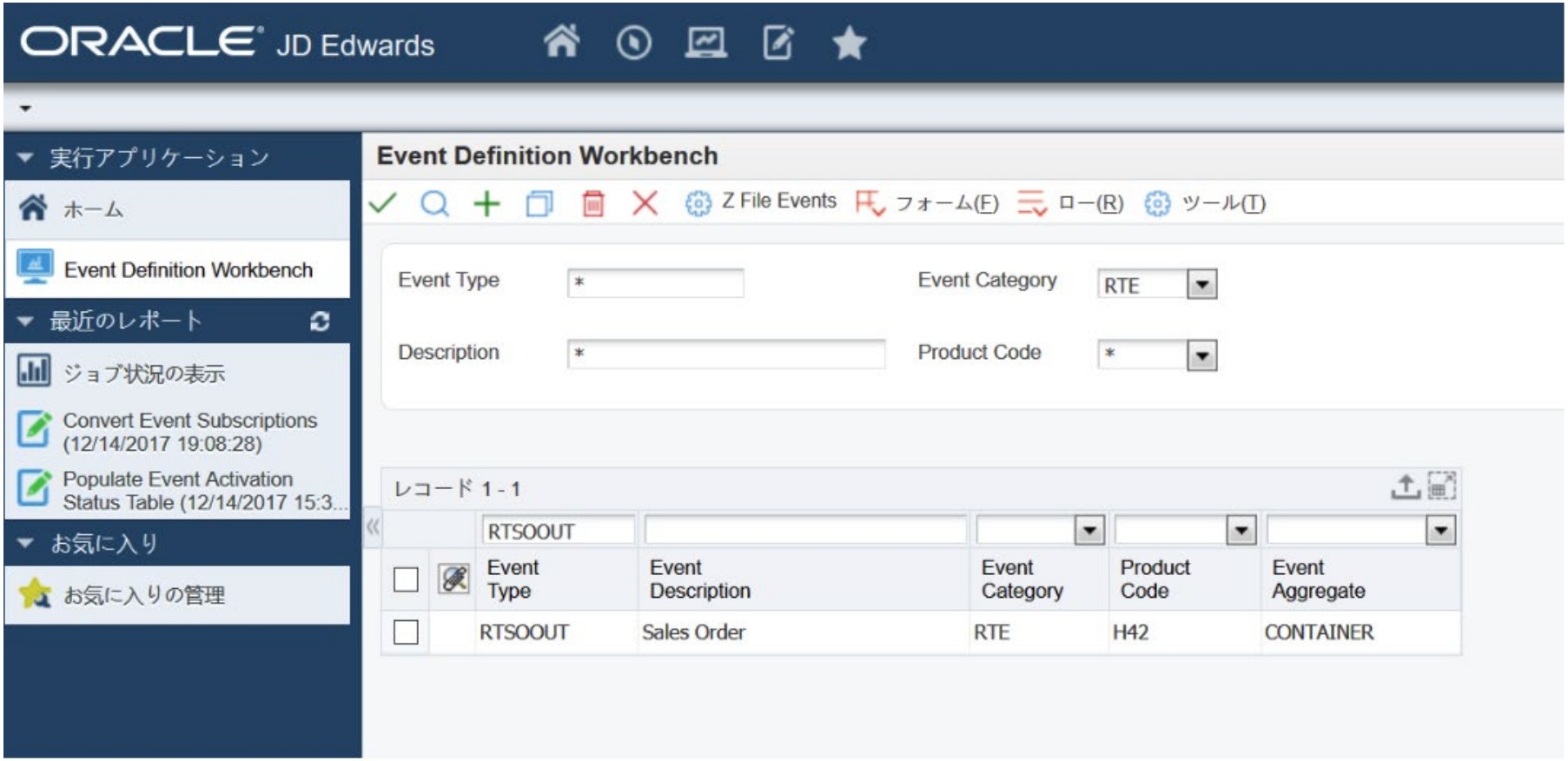
Grid Rows Loaded: 0 Row Selected:
Cancel
Ready

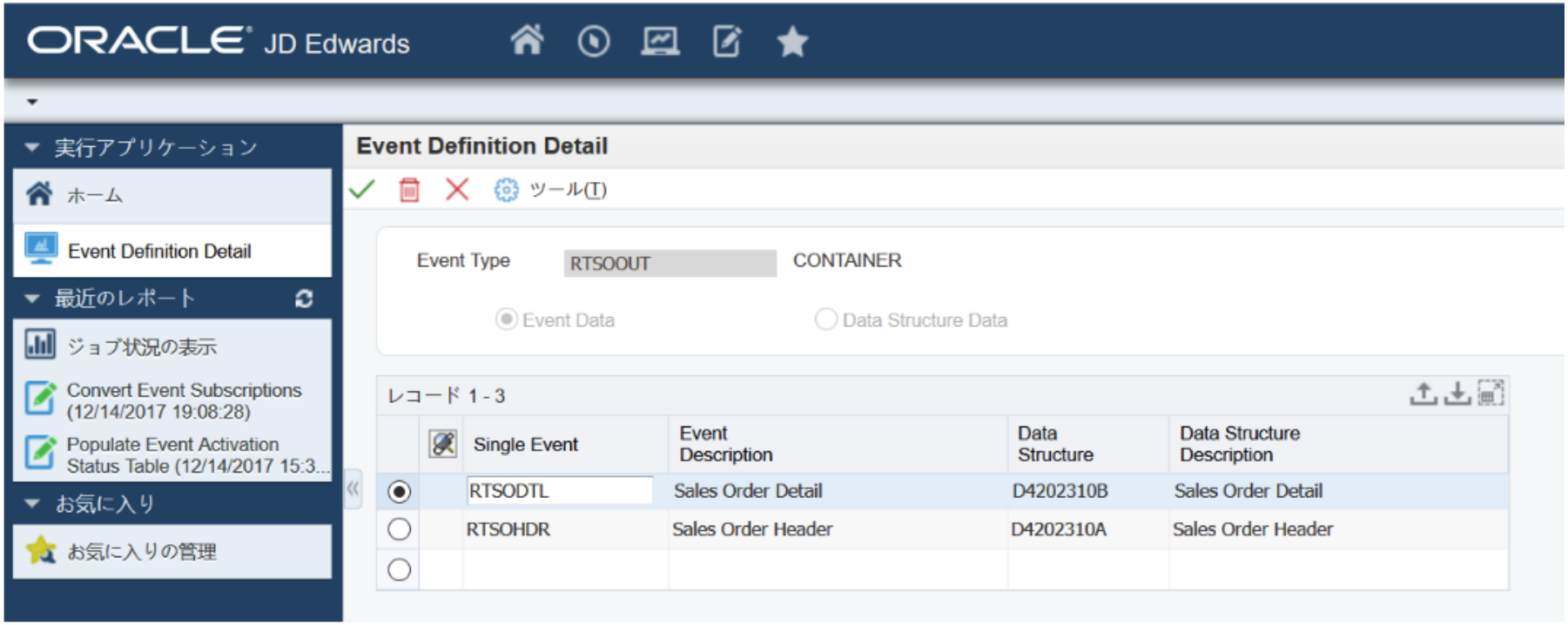


RTE Configuration for Sales Order:

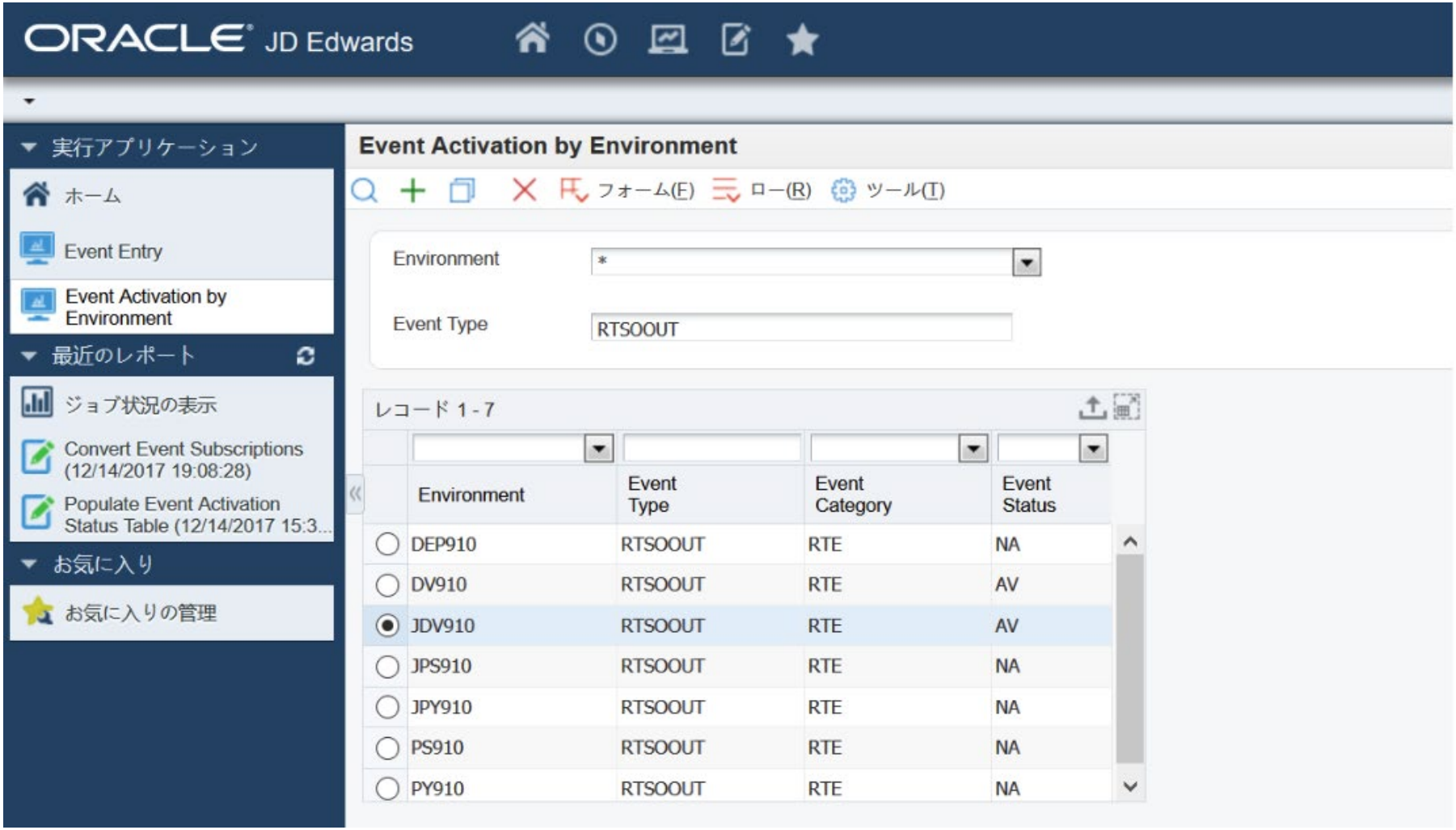
From an E1 Client, run P90701A. You should have a ‘Container’ RTE definition ‘RTSOOUT’ as follows. RTSOOUT ‘CONTAINER’ Event.



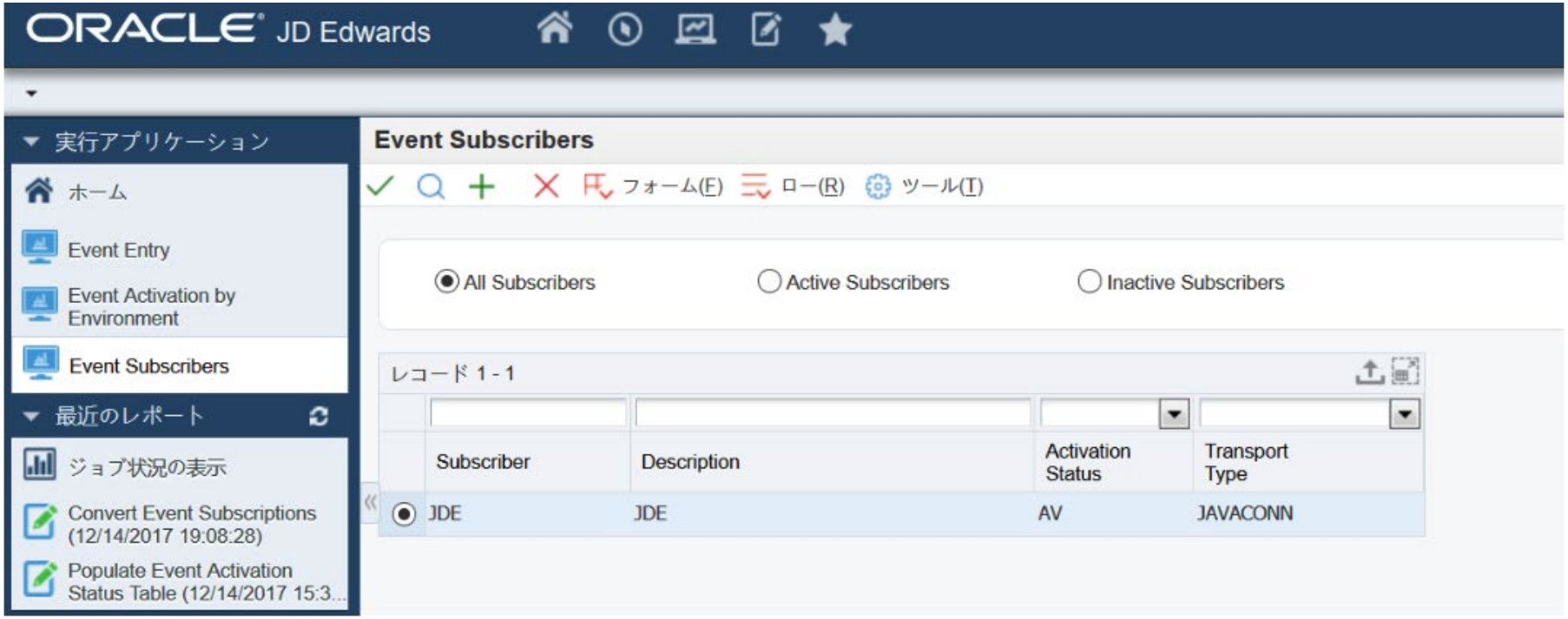
RTSOOUT ‘Event Details’. RTSOOUT is a ‘CONTAINER’ Event which is made up of the following ‘SINGLE’ Events:



Take the ‘Event Activation’ Form from P90701A, add a record for RTSOOUT for the appropriate environment(s) and change the status to AV.

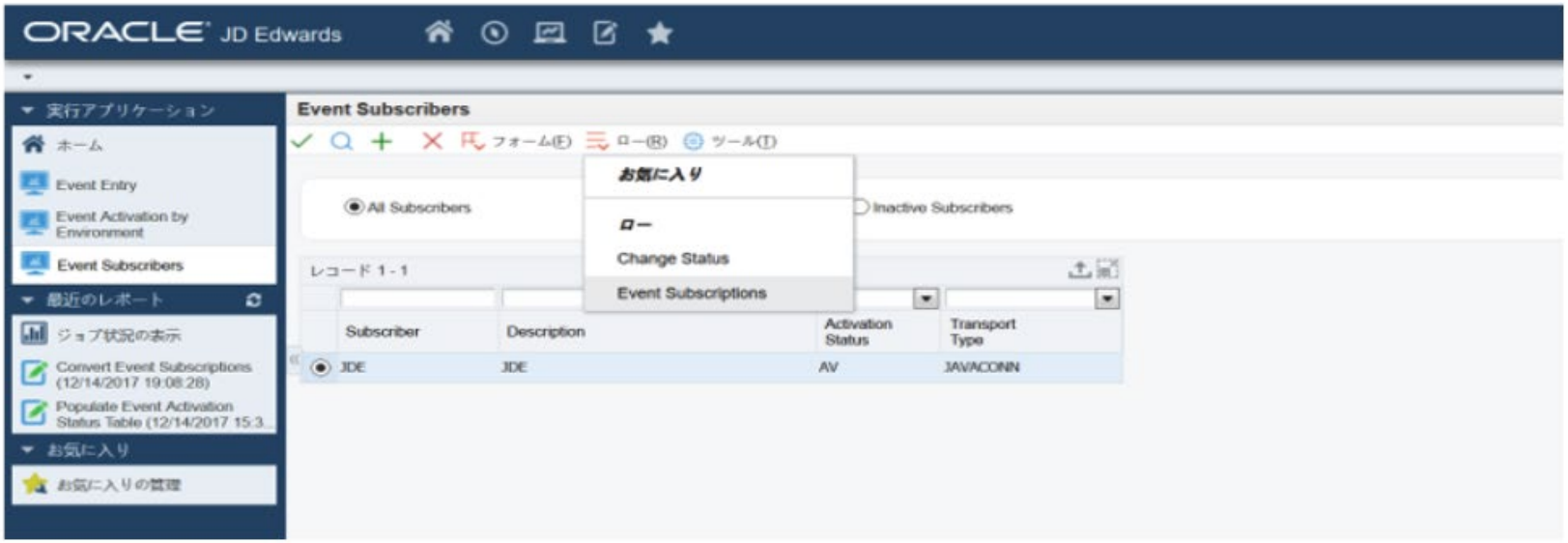


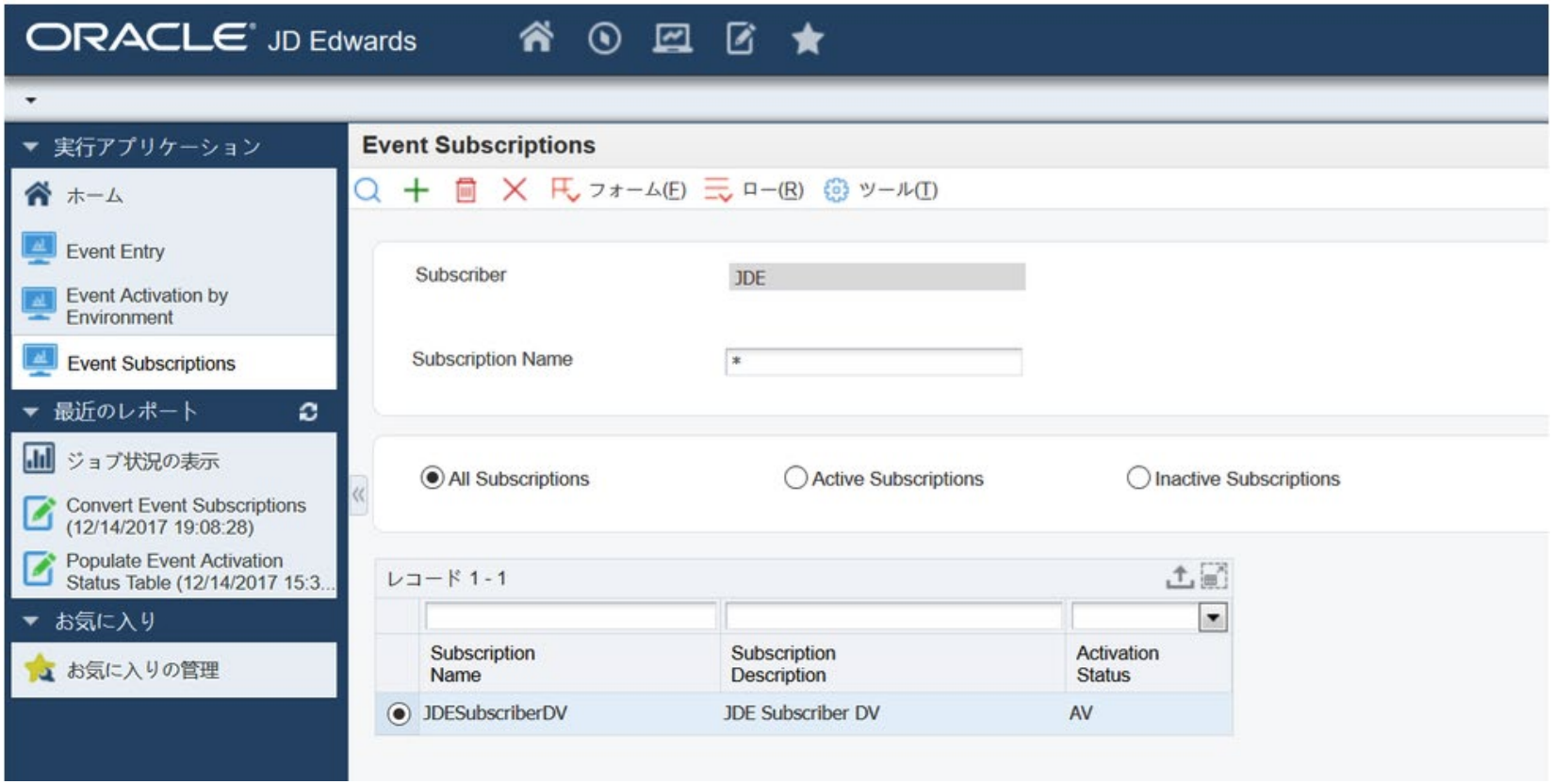
Create a JAVACONN Subscriber
Run P90702A and add a subscriber as follows. The Subscriber field must have a value matching a valid E1 User.



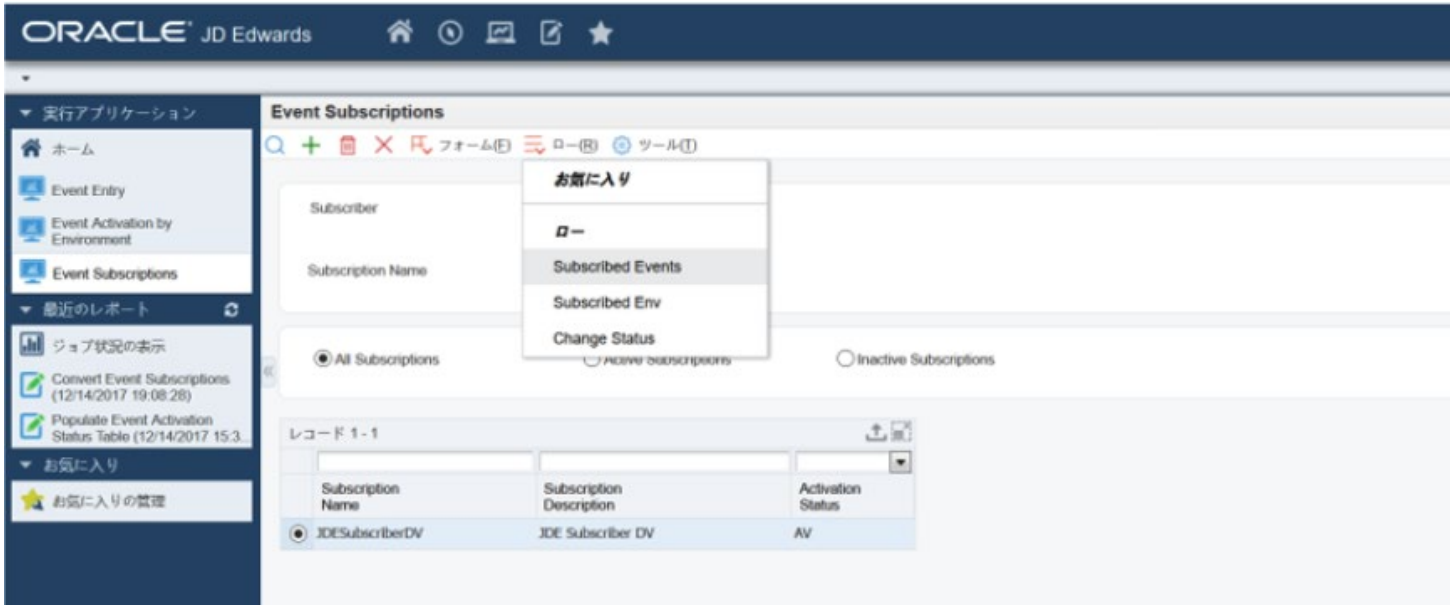
Create a Subscription

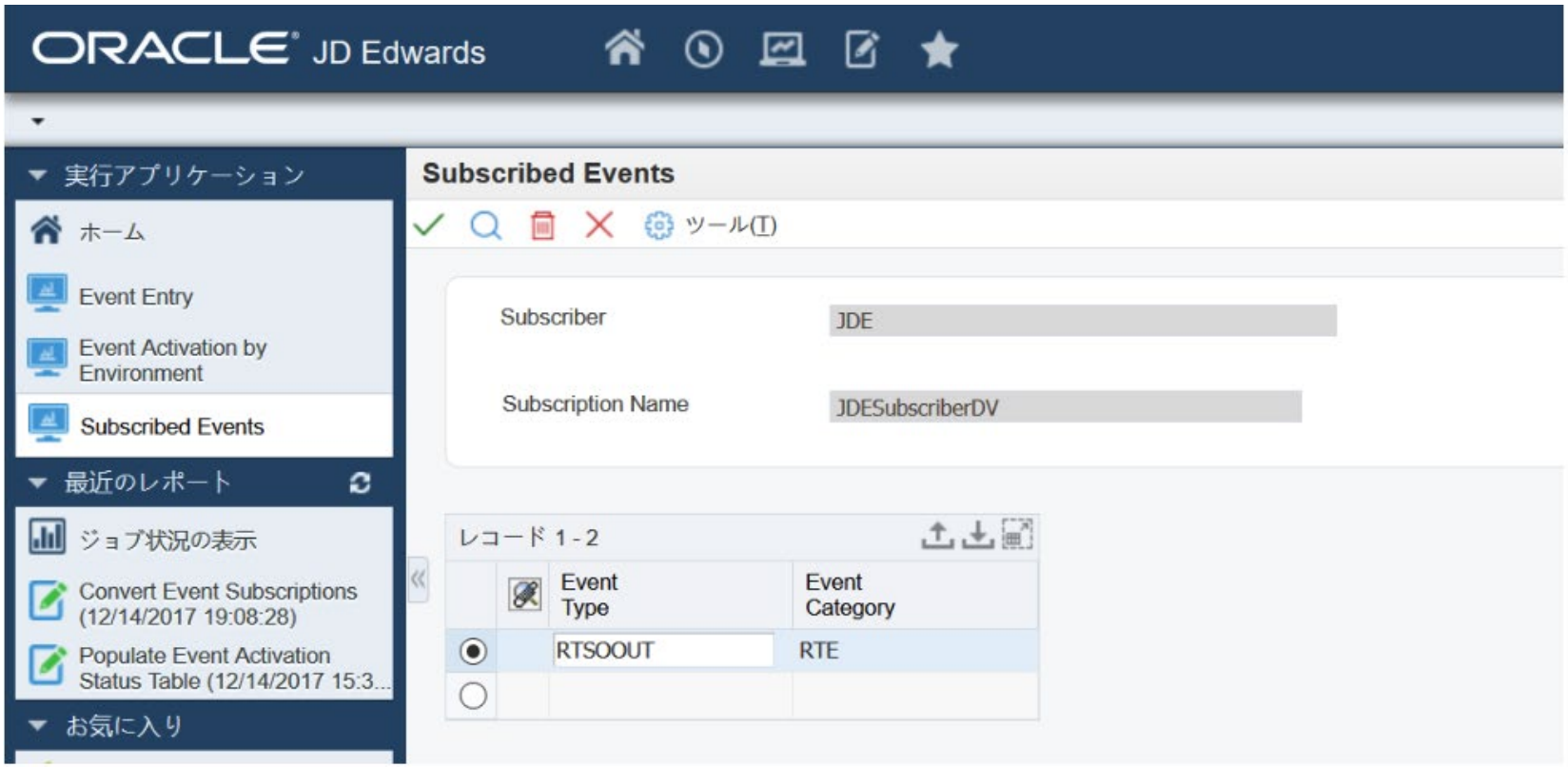
Run P90702A. Find the Subscriber you created in the above step. Take the ‘Event Subscriptions’ Option.



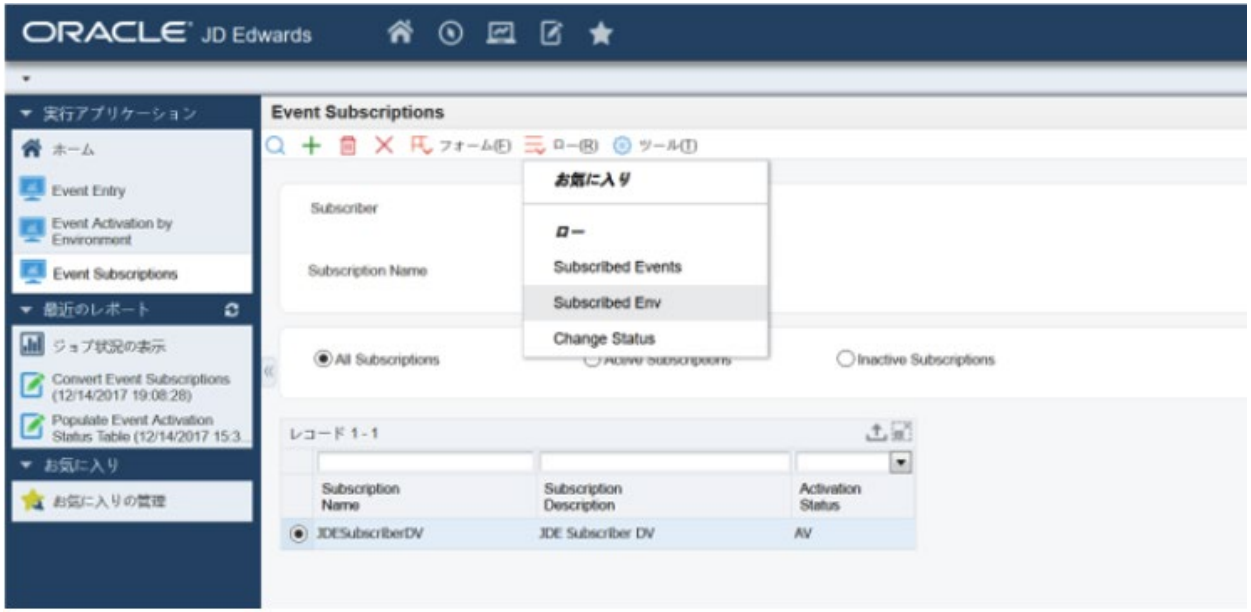


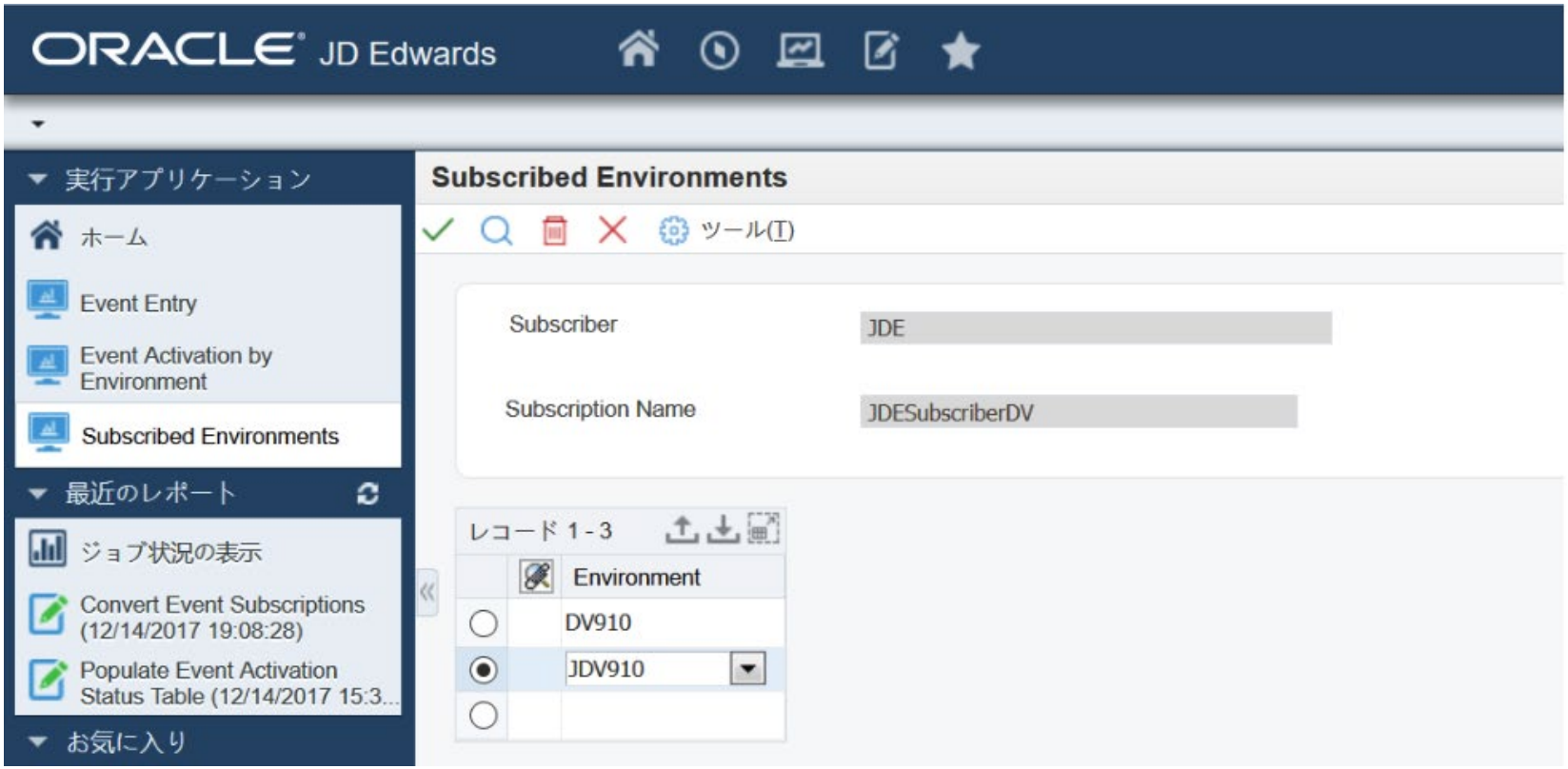
Add an Event (RTSOOUT) to the Subscription
Find the subscription created above. Select the 'Subscribed Events' Row Exit.





Add Environment to Subscription
Find the subscription created above. Select the ‘Subscribed Env’ Row Exit.





You are now ready to test your configuration. Restart your E1 Enterprise Server and start your Transaction Server from the Server Manager console.

Testing\Validating the JAVACONN configuration

A Real Time Event will be created when Adding \ Changing or Deleting a Sales order record.

Before generating a RTSOOUT, stop your Transaction Server via Server Manager Console. Once the Transaction Server is stopped, create or edit a Sales Order Record. Then a record should be written to event table F90710. If your Transaction Server is stopped, the F90710 record will remain in the table until the Transaction is activated. Now start your Transaction Server via Server Manager Console. After your Transaction Server is started, the F90710 record should be processed and if your configuration is correct, the record should be removed from F90710.

Reference Doc – https://support.oracle.com/knowledge/JD%20Edwards%20EnterpriseOne/656248_1.html

How to use IBM Integration Bus (IIB) JDE input node in a message flow to poll the real time events populated in the JDE Server event table when an update to an address book record happens

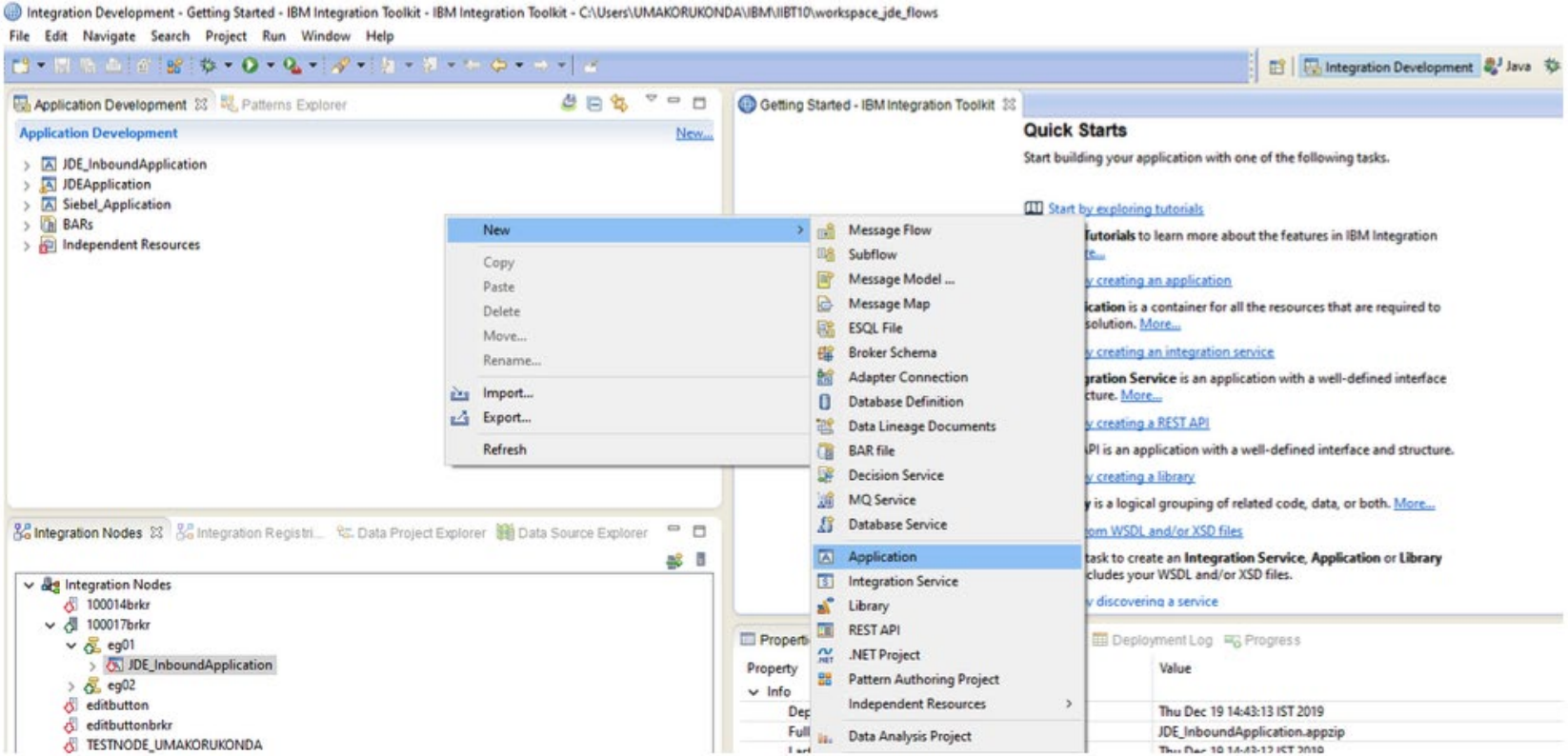
To have real time events of address book or sales order in the event table we should first create an account or sales order in the JDE server either using JDE Enterprise Server One or using JDE Request Node. Then updating the record.

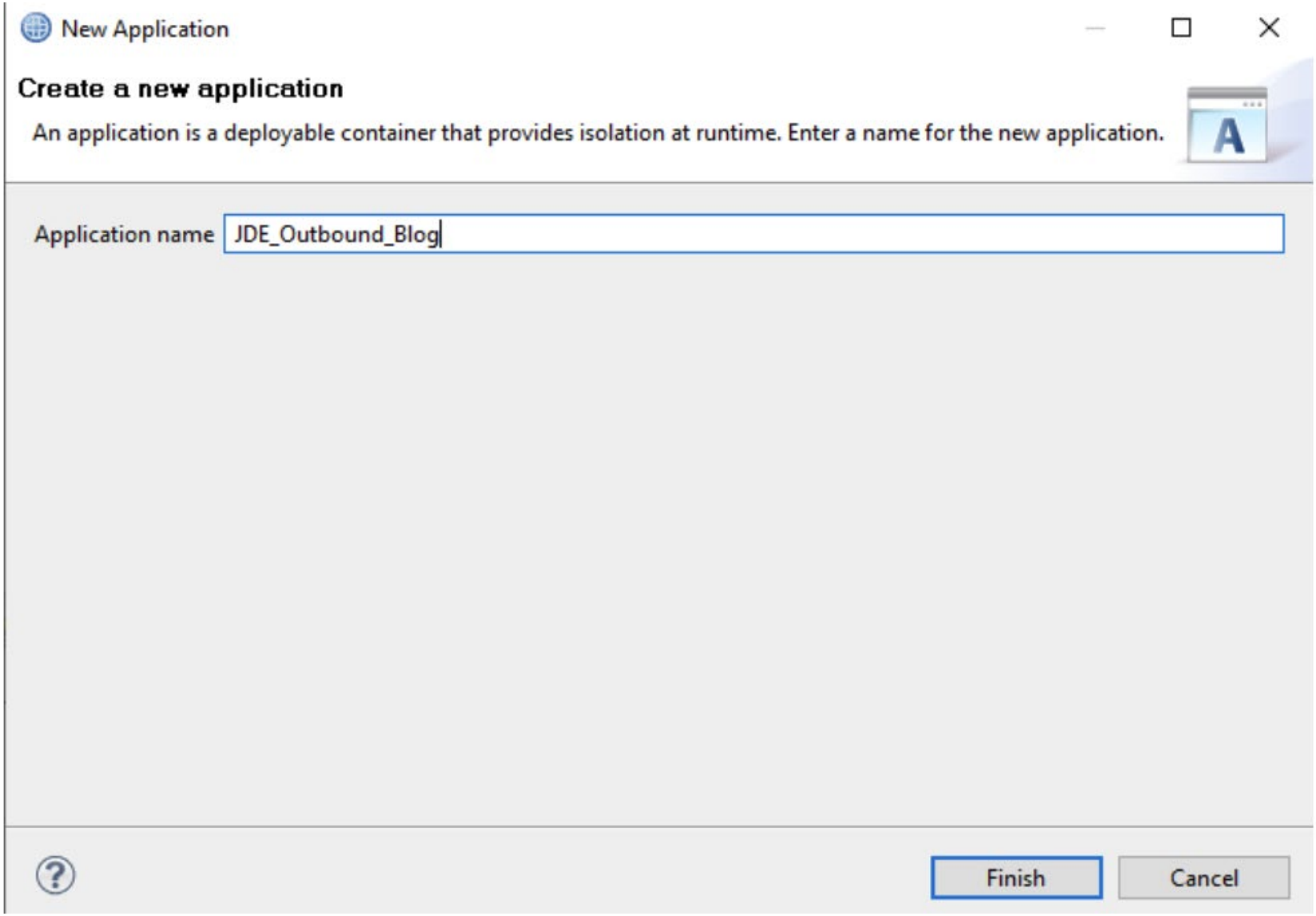
This part is divided into two sections

- Firstly, we will show you how to create an Outbound message flow using the IIB toolkit and deploy to the IIB Integration node to update an Address Line in the Address Book record using the JDE request node provided by IIB.
- Secondly, we will show you how to create an Inbound message flow using the IIB toolkit and deploy to the IIB Integration node to poll the updated record mentioned above using the JDE Input node provided by IIB.

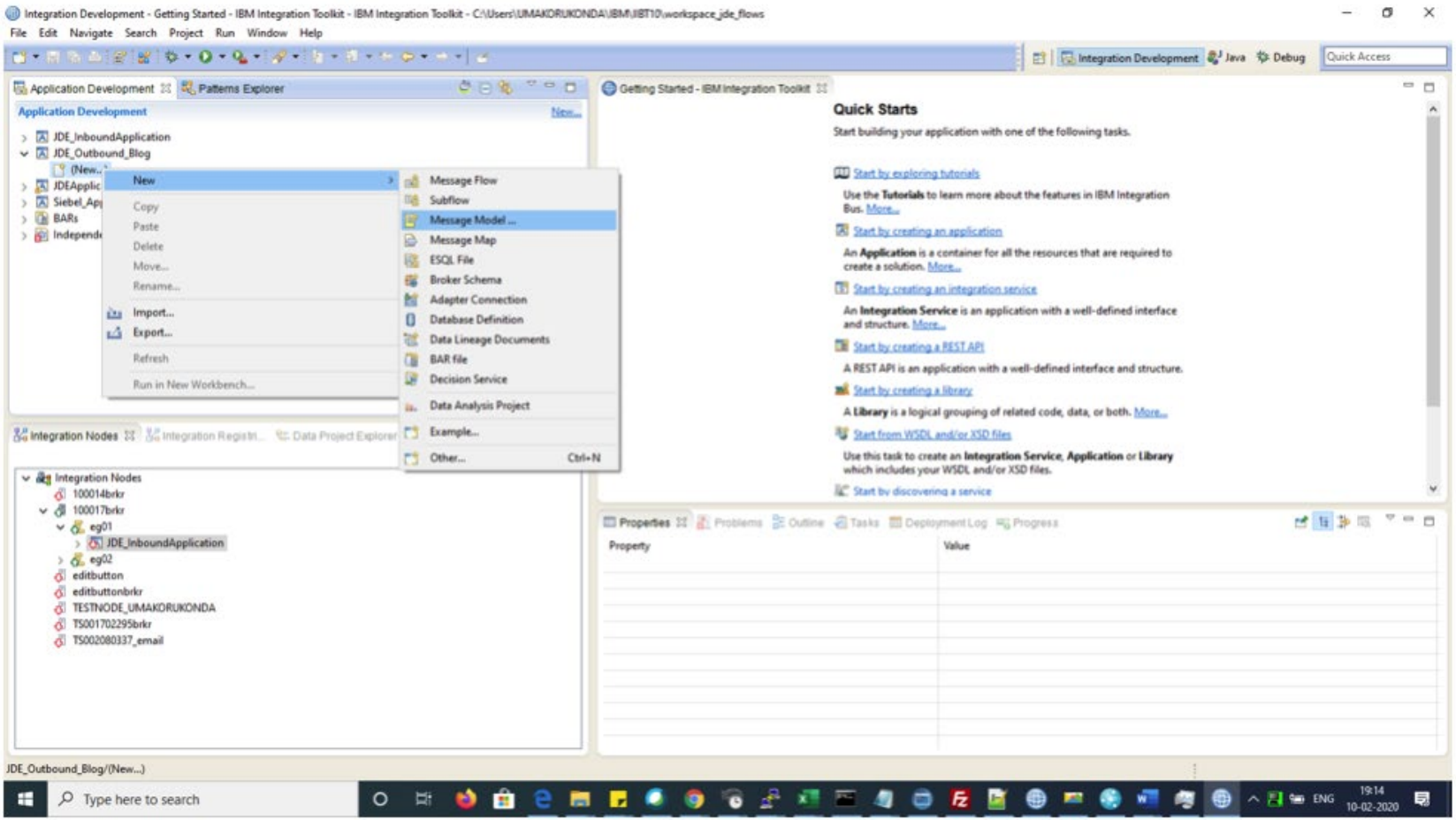
Creating an outbound message flow using IIB toolkit and deploy to the IIB Integration node to update an Address Line in the Address Book record using the JDE request node provided by IIB.

1. Open the toolkit and create an applicaton.


Integration Development - Getting Started - IBM Integration Toolkit - IBM Integration Toolkit - C:\Users\UMAKORUKONDA\IBM\IIBT10\workspace_jde_flows
File Edit Navigate Search Project Run Window Help
Integration Development
Java
Application Development
Patterns Explorer
Application Development
New...
JDE_InboundApplication
JDEApplication
Siebel_Application
BARs
Independent Resources
New
Copy
Paste
Delete
Move...
Rename...
Import...
Export...
Refresh
Message Flow
Subflow
Message Model ...
Message Map
ESQL File
Broker Schema
Adapter Connection
Database Definition
Data Lineage Documents
BAR file
Decision Service
MQ Service
Database Service
Application
Integration Service
Library
REST API
.NET Project
Pattern Authoring Project
Independent Resources
Data Analysis Project
Getting Started - IBM Integration Toolkit
Quick Starts
Start building your application with one of the following tasks.
Start by exploring tutorials
Integration Nodes
Integration Registri...
Data Project Explorer
Data Source Explorer
Integration Nodes
100014brkr
100017brkr
eg01
JDE_InboundApplication
eg02
editbutton
editbuttonbrkr
TESTNODE_UMAKORUKONDA
Property
Value
Info
Thu Dec 19 14:43:13 IST 2019
JDE_InboundApplication.appzip
Deployment Log
Progress



2. Create a message model to create and configure JDE adapter.


Integration Development - Getting Started - IBM Integration Toolkit - IBM Integration Toolkit - C:\Users\UMAKORUKONDA\IBM\IBT10\workspace_jde_flows
File Edit Navigate Search Project Run Window Help
Integration Development
Java
Debug
Quick Access
Application Development
Patterns Explorer
Application Development
New...
JDE_InboundApplication
JDE_Outbound_Blog
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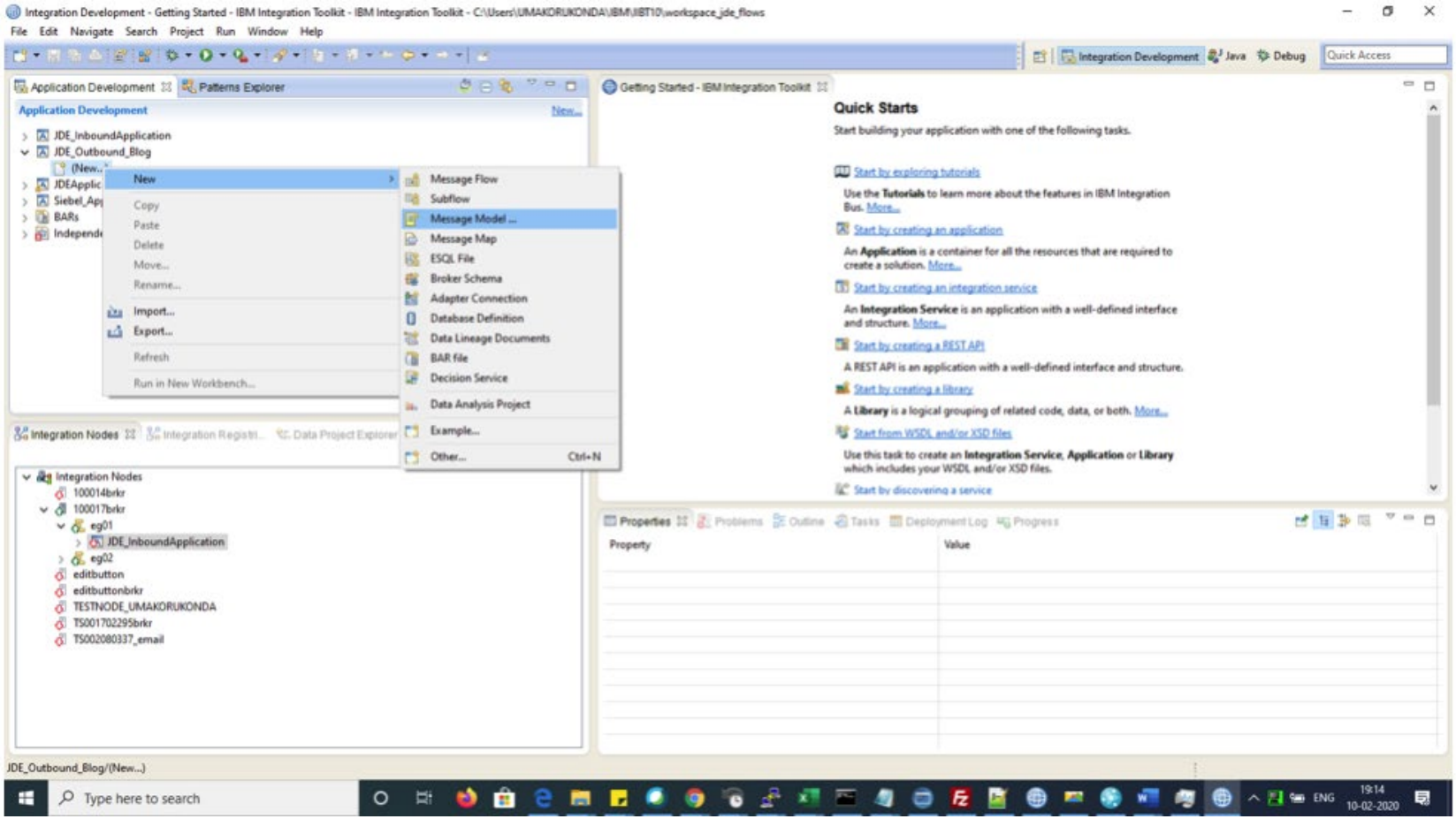
Move...
Rename...
Import...
Export...
Refresh
Run in New Workbench...
Message Flow
Subflow
Message Model...
Message Map
ESQL File
Broker Schema
Adapter Connection
Database Definition
Data Lineage Documents
BAR file
Decision Service
Data Analysis Project
Example...
Other... Ctrl+N
Getting Started - IBM Integration Toolkit
Quick Starts
Start building your application with one of the following tasks.
Start by exploring tutorials
Use the Tutorials to learn more about the features in IBM Integration Bus. More...
Start by creating an application
An Application is a container for all the resources that are required to create a solution. More...
Start by creating an integration service
An Integration Service is an application with a well-defined interface and structure. More...
Start by creating a REST API
A REST API is an application with a well-defined interface and structure.
Start by creating a library
A Library is a logical grouping of related code, data, or both. More...
Start from WSDL and/or XSD files
Use this task to create an Integration Service, Application or Library which includes your WSDL and/or XSD files.
Start by discovering a service
Integration Nodes
Integration Registri...
Data Project Explorer
Integration Nodes
100014brkr
100017brkr
eg01
JDE_InboundApplication
eg02
editbutton
editbuttonbrkr
TESTNODE_UMAKORUKONDA
TS001702295brkr
TS002080337_email
Properties
Problems
Outline
Tasks
Deployment Log
Progress
Property
Value
JDE_Outbound_Blog/(New...)
Type here to search
ENG
19:14
10-02-2020


Integration Development - Getting Started - IBM Integration Toolkit - IBM Integration Toolkit - C:\Users\UMAKORUKONDA\IBM\IIBT10\workspace_jde_flows
File Edit Navigate Search Project Run Window Help
Application Development
Patterns Explorer
JDE_InboundApplication
JDE_Outbound_Blog
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Siebel_Ap
BARs
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New
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Run in New Workbench...
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Message Model ...
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eg02
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editbuttonbrkr
TESTNODE_UMAKORUKONDA
TS001702295brkr
TS002080337_email
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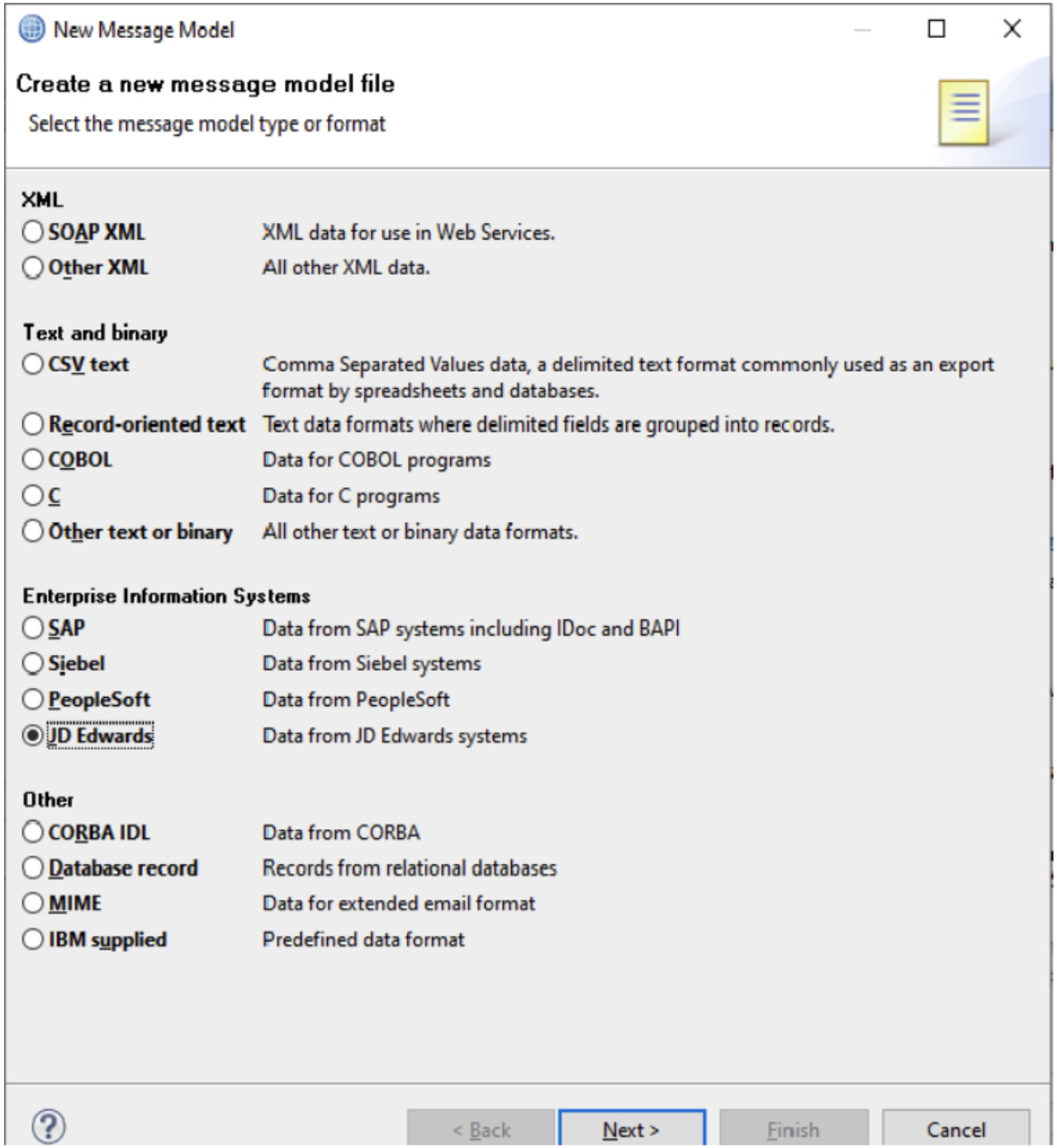
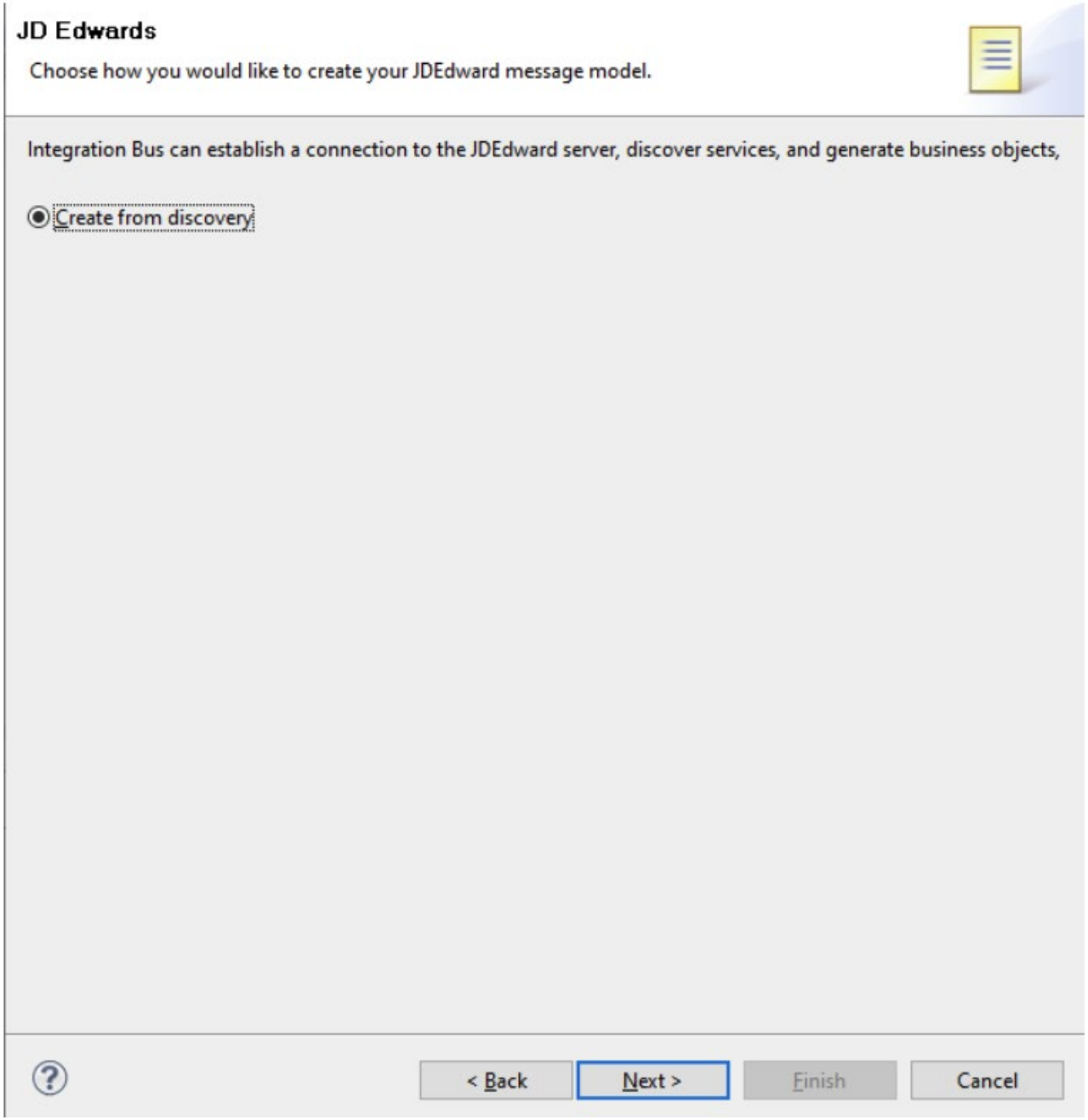
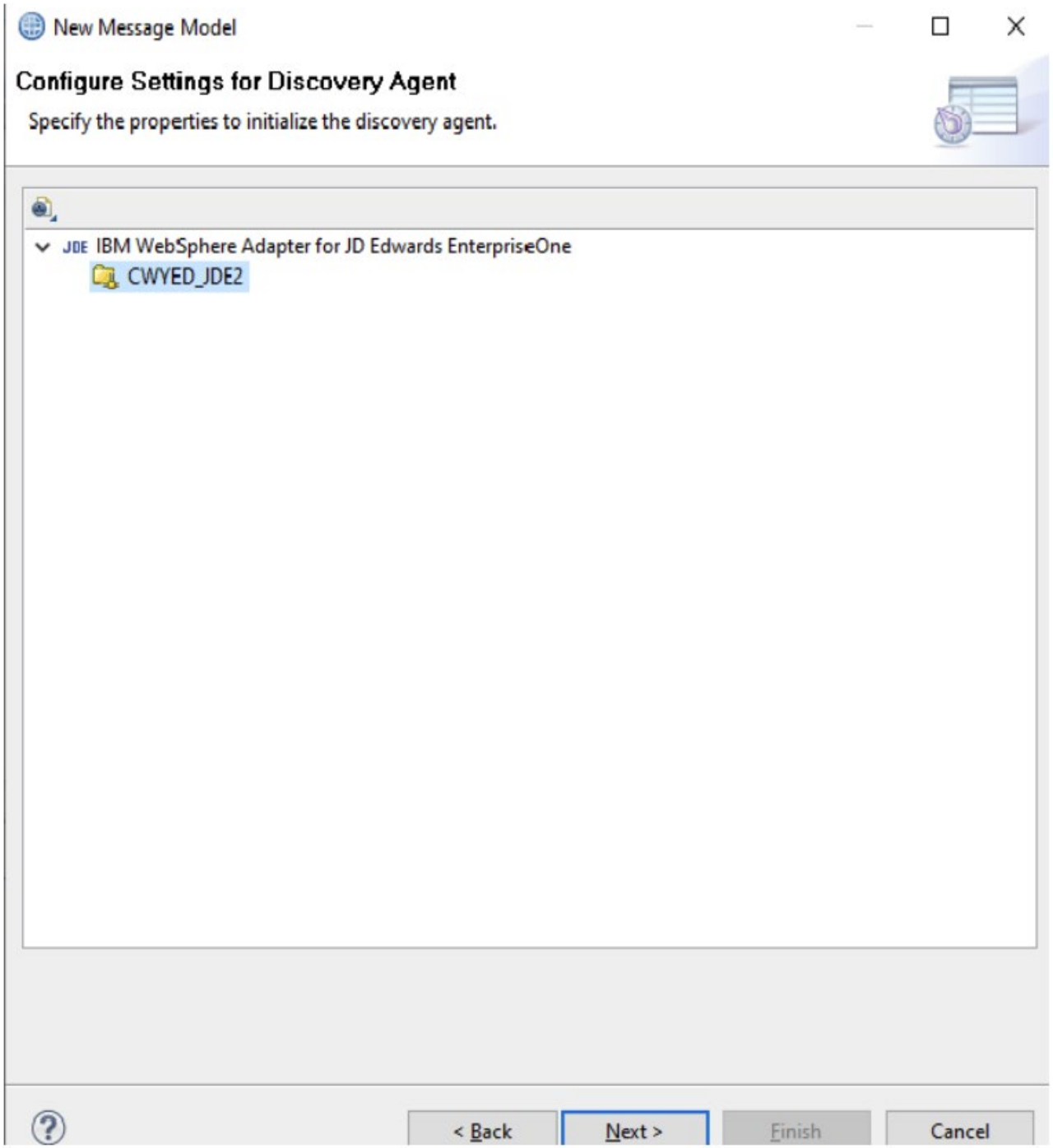
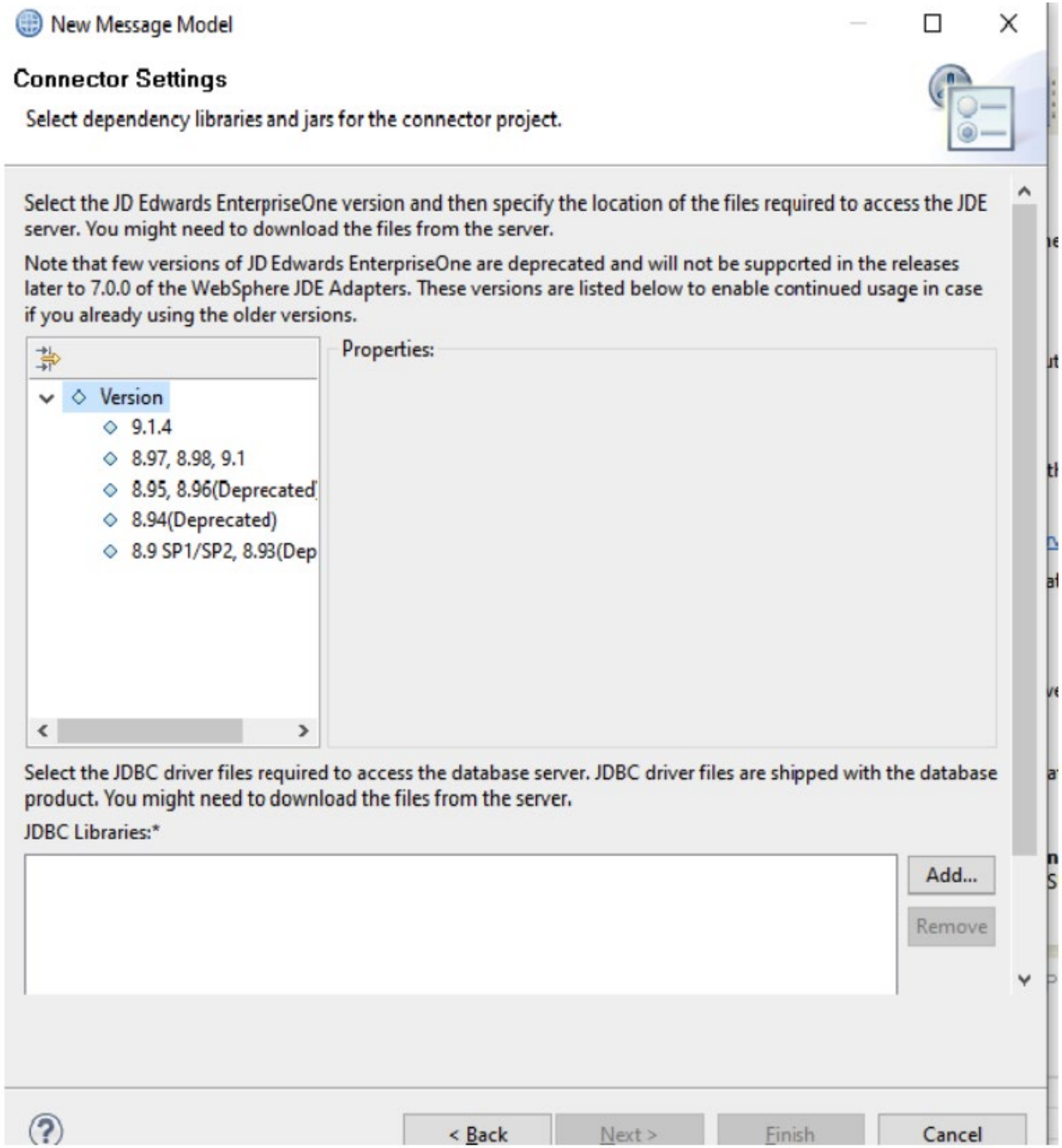
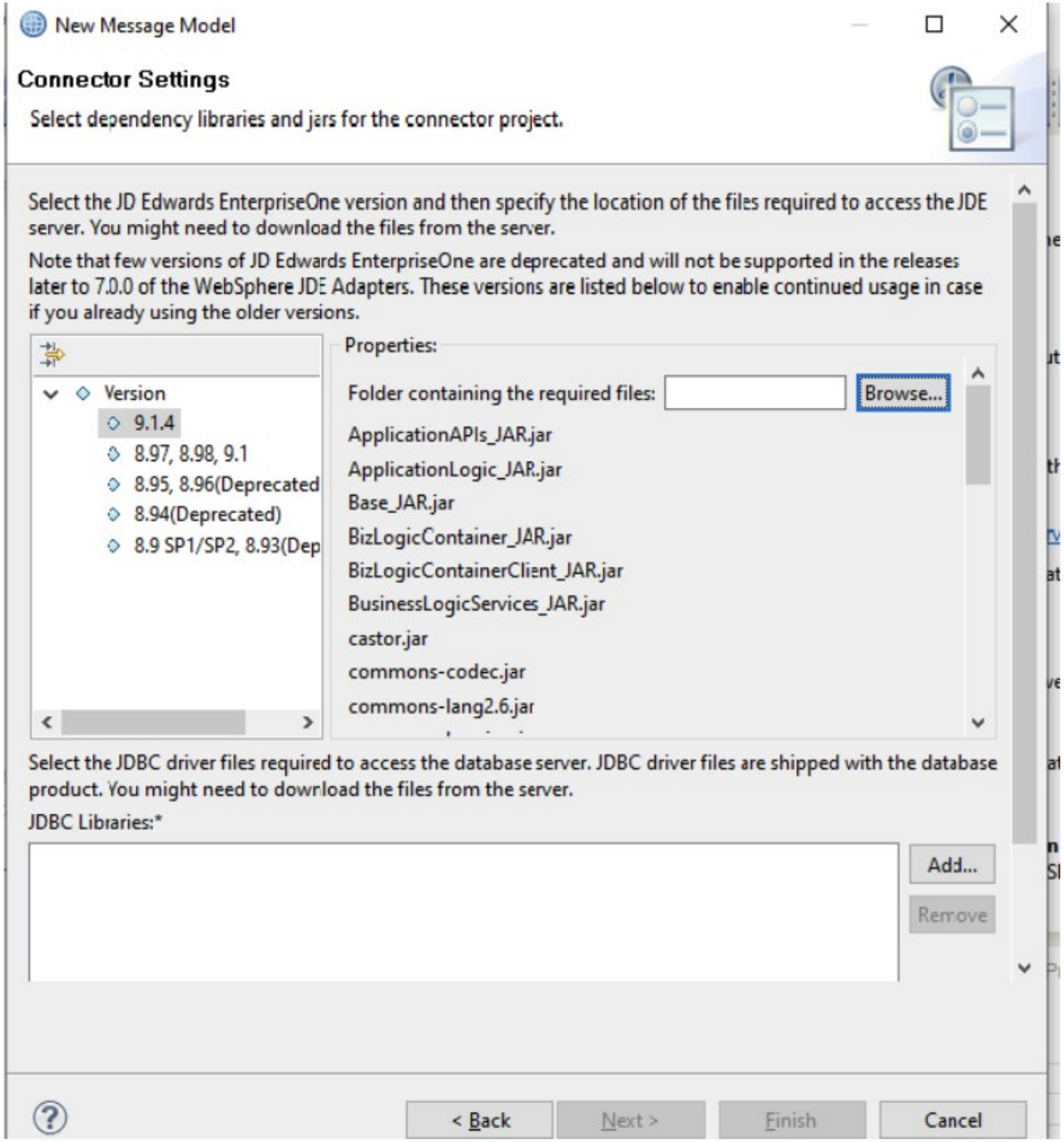
Start by discovering a service
Properties
Problems
Outline
Tasks
Deployment Log
Progress
Property
Value
JDE_Outbound_Blog/(New...)
Type here to search
ENG
19:14
10-02-2020


New Message Model
Create a new message model file
Select the message model type or format
XML
SOAP XML
XML data for use in Web Services.
Other XML
All other XML data.
Text and binary
CSV text
Comma Separated Values data, a delimited text format commonly used as an export format by spreadsheets and databases.
Record-oriented text
Text data formats where delimited fields are grouped into records.
COBOL
Data for COBOL programs
C
Data for C programs
Other text or binary
All other text or binary data formats.
Enterprise Information Systems
SAP
Data from SAP systems including IDoc and BAPI
Siebel
Data from Siebel systems
PeopleSoft
Data from PeopleSoft
JD Edwards
Data from JD Edwards systems
Other
CORBA IDL
Data from CORBA
Database record
Records from relational databases
MIME
Data for extended email format
IBM supplied
Predefined data format
< Back
Next >
Finish
Cancel

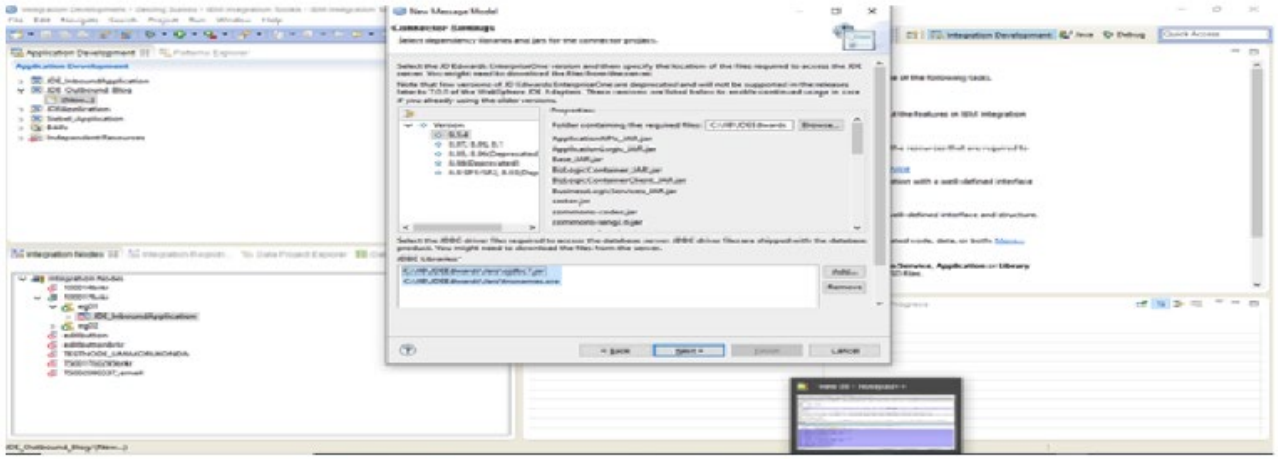

JD Edwards
Choose how you would like to create your JDEdward message model.
Integration Bus can establish a connection to the JDEdward server, discover services, and generate business objects,
Create from discovery
< Back
Next >
Finish
Cancel


New Message Model
Configure Settings for Discovery Agent
Specify the properties to initialize the discovery agent.
JDE IBM WebSphere Adapter for JD Edwards EnterpriseOne
CWYED_JDE2
< Back
Next >
Finish
Cancel

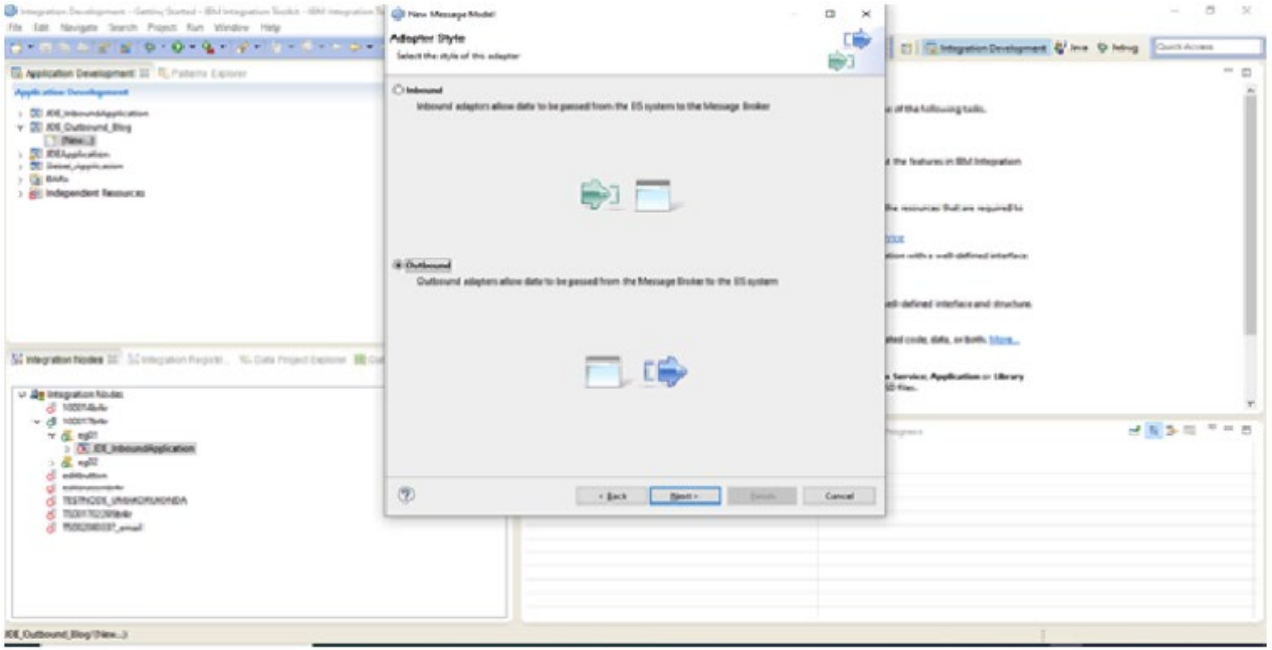

New Message Model
Connector Settings
Select dependency libraries and jars for the connector project.
Select the JD Edwards EnterpriseOne version and then specify the location of the files required to access the JDE server. You might need to download the files from the server.
Note that few versions of JD Edwards EnterpriseOne are deprecated and will not be supported in the releases later to 7.0.0 of the WebSphere JDE Adapters. These versions are listed below to enable continued usage in case if you already using the older versions.
Version
9.1.4
8.97, 8.98, 9.1
8.95, 8.96(Deprecated)
8.94(Deprecated)
8.9 SP1/SP2, 8.93(Dep
Properties:
Select the JDBC driver files required to access the database server. JDBC driver files are shipped with the database product. You might need to download the files from the server.
JDBC Libraries:*
Add...
Remove
< Back
Next >
Finish
Cancel



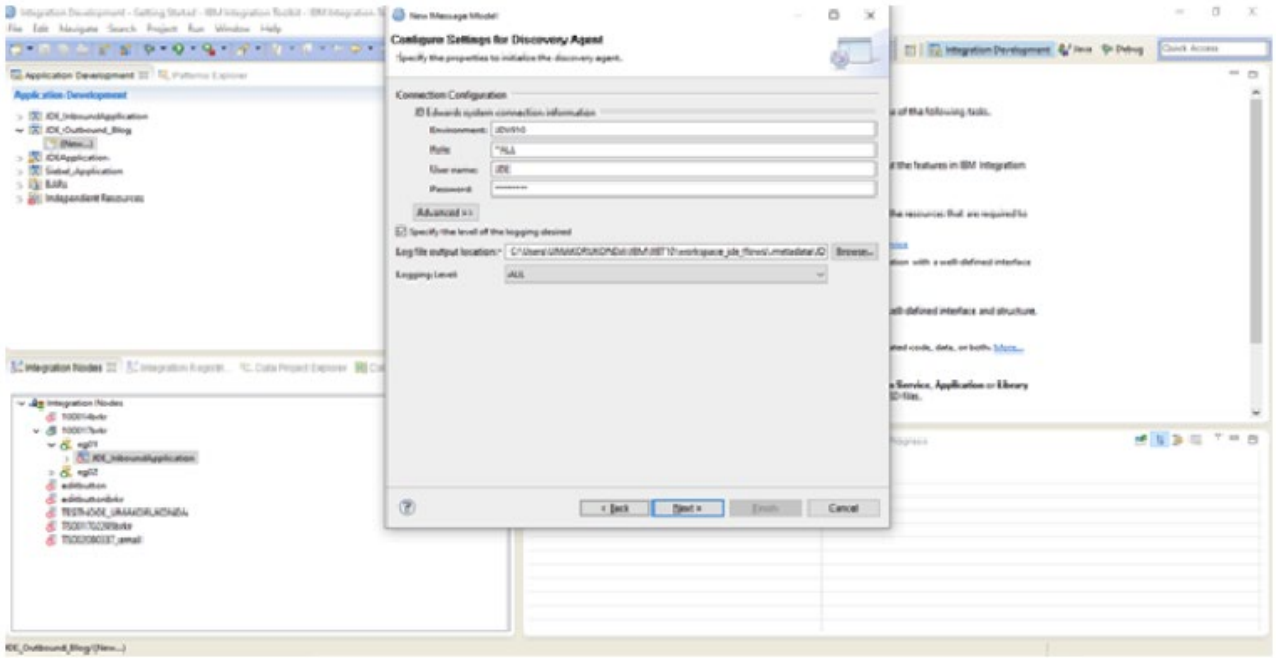
Select ojdbc7.jar and tnsnames.ora file location and click on next

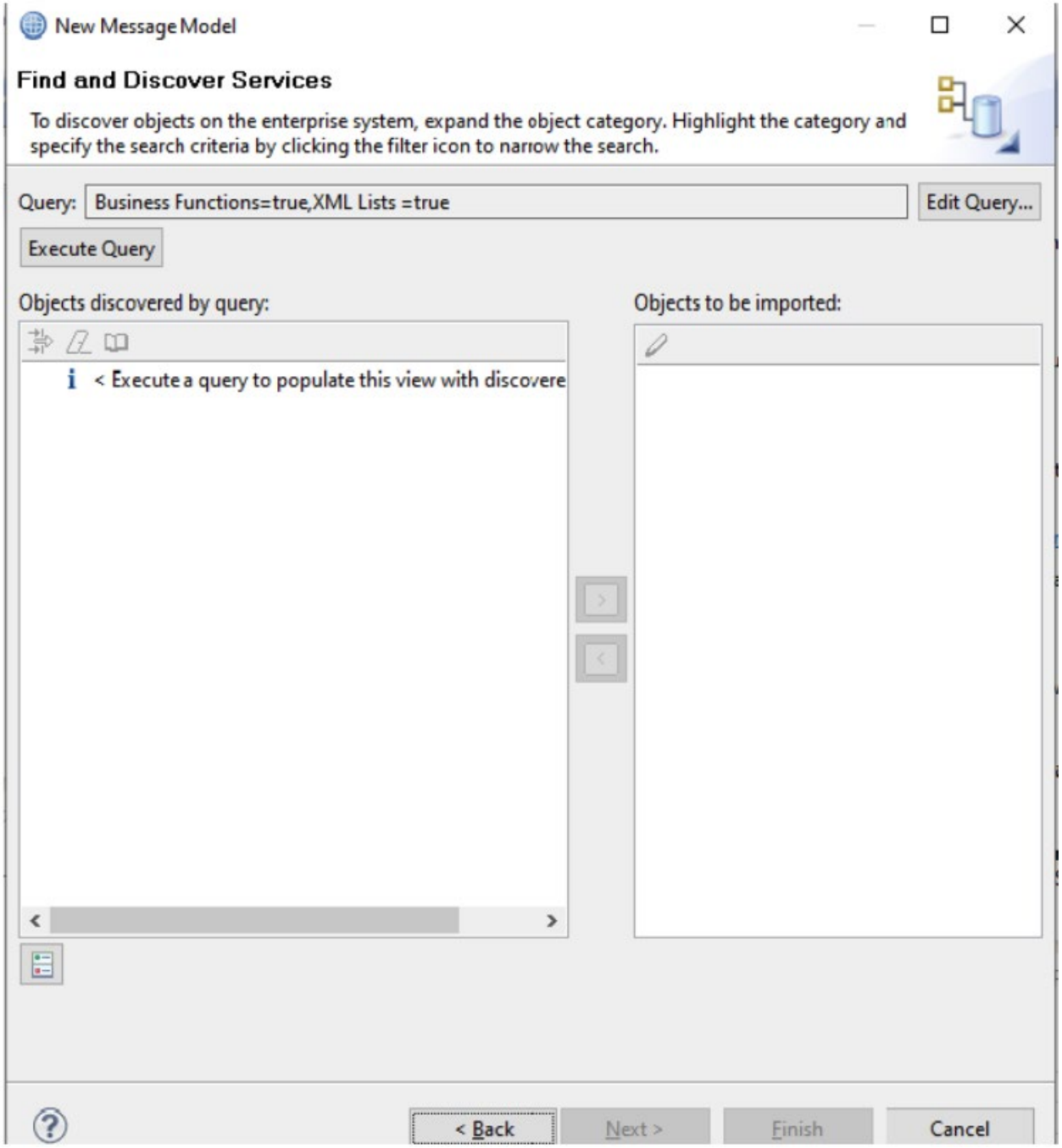


Select Outbound to create an IBM WebSphere JDE Adapter

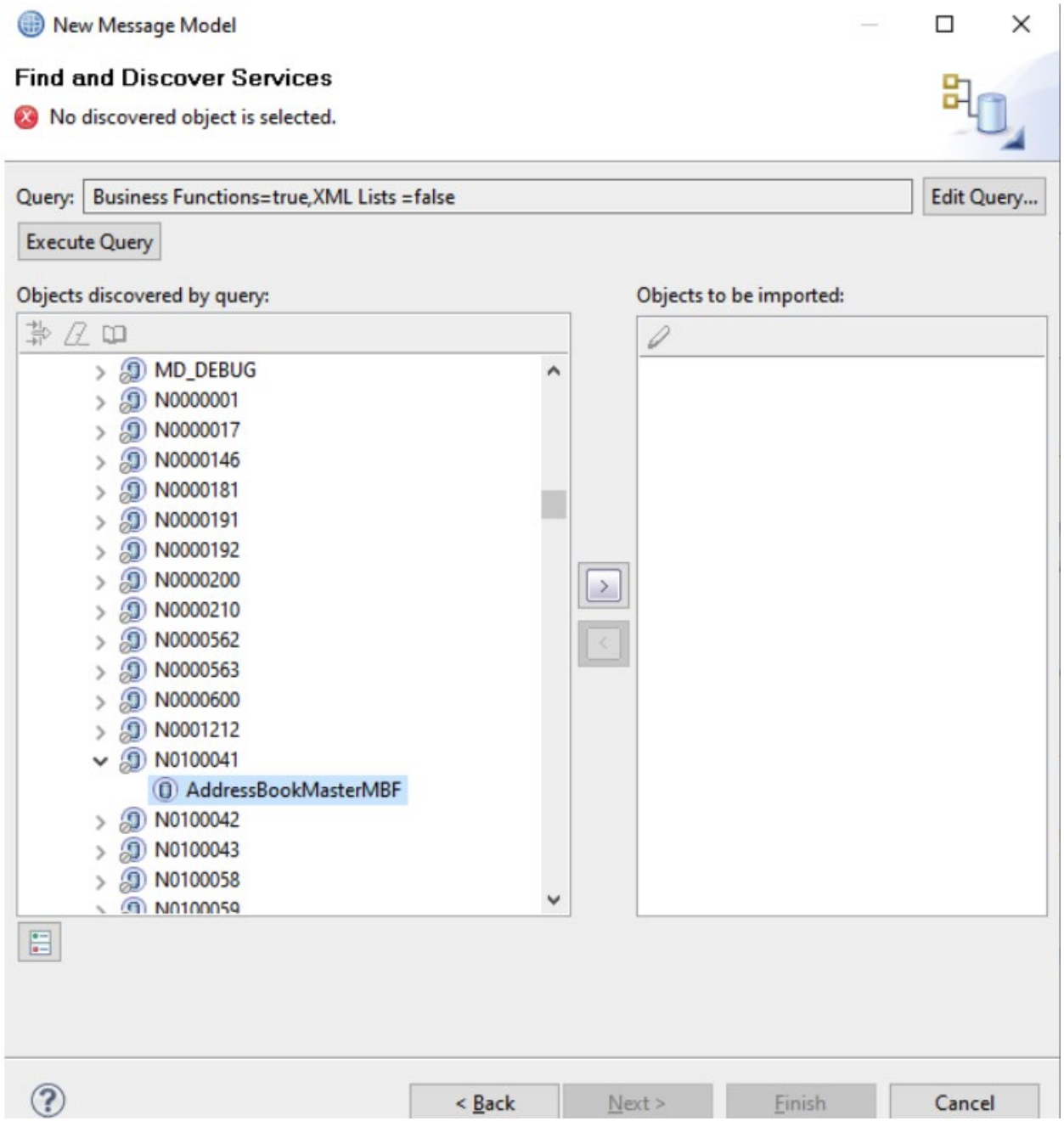


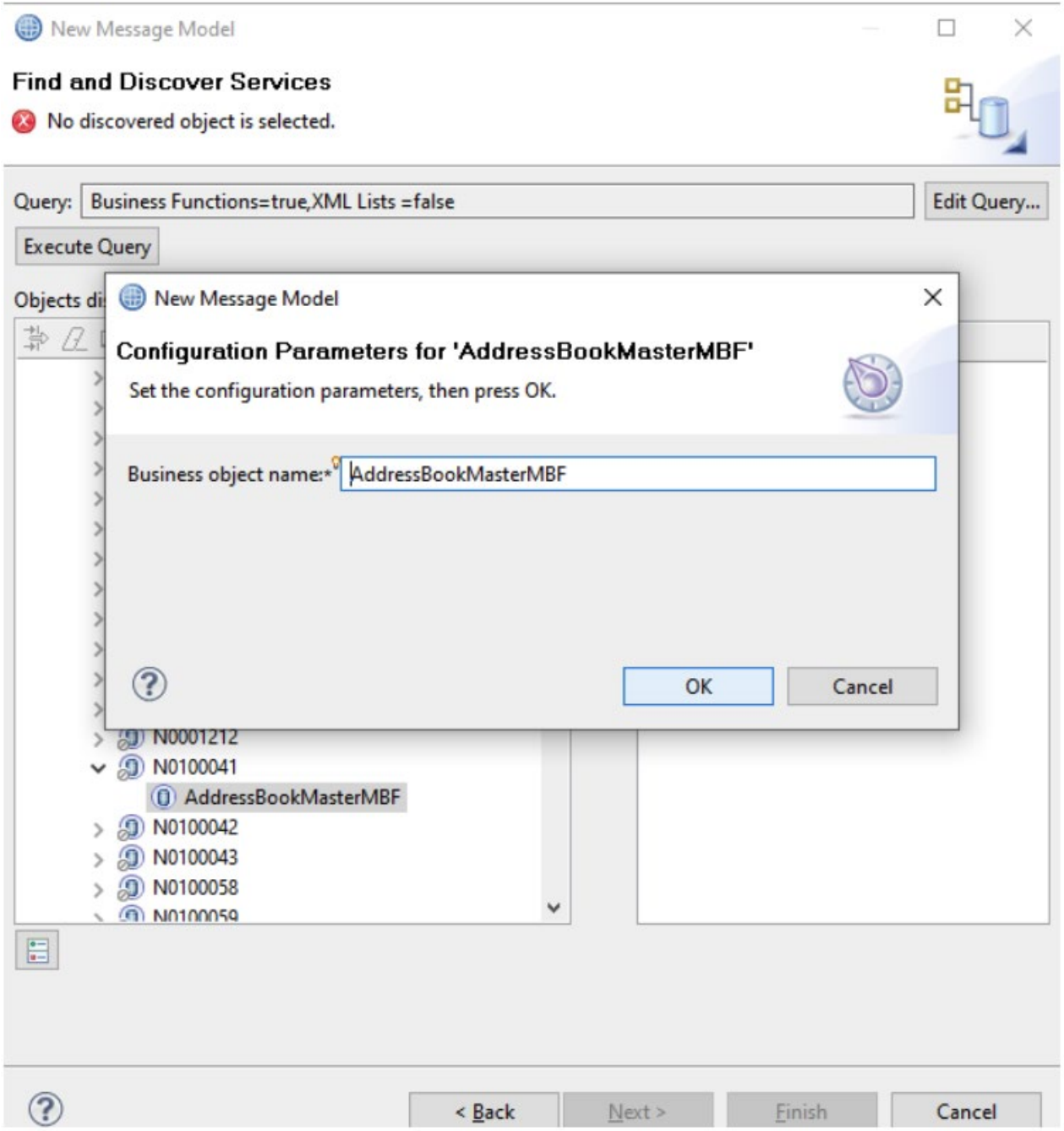
Provide values for JDE Environment, Role, Username and Password to connect to the JDE server configured. Optionally you can provide the logging details.

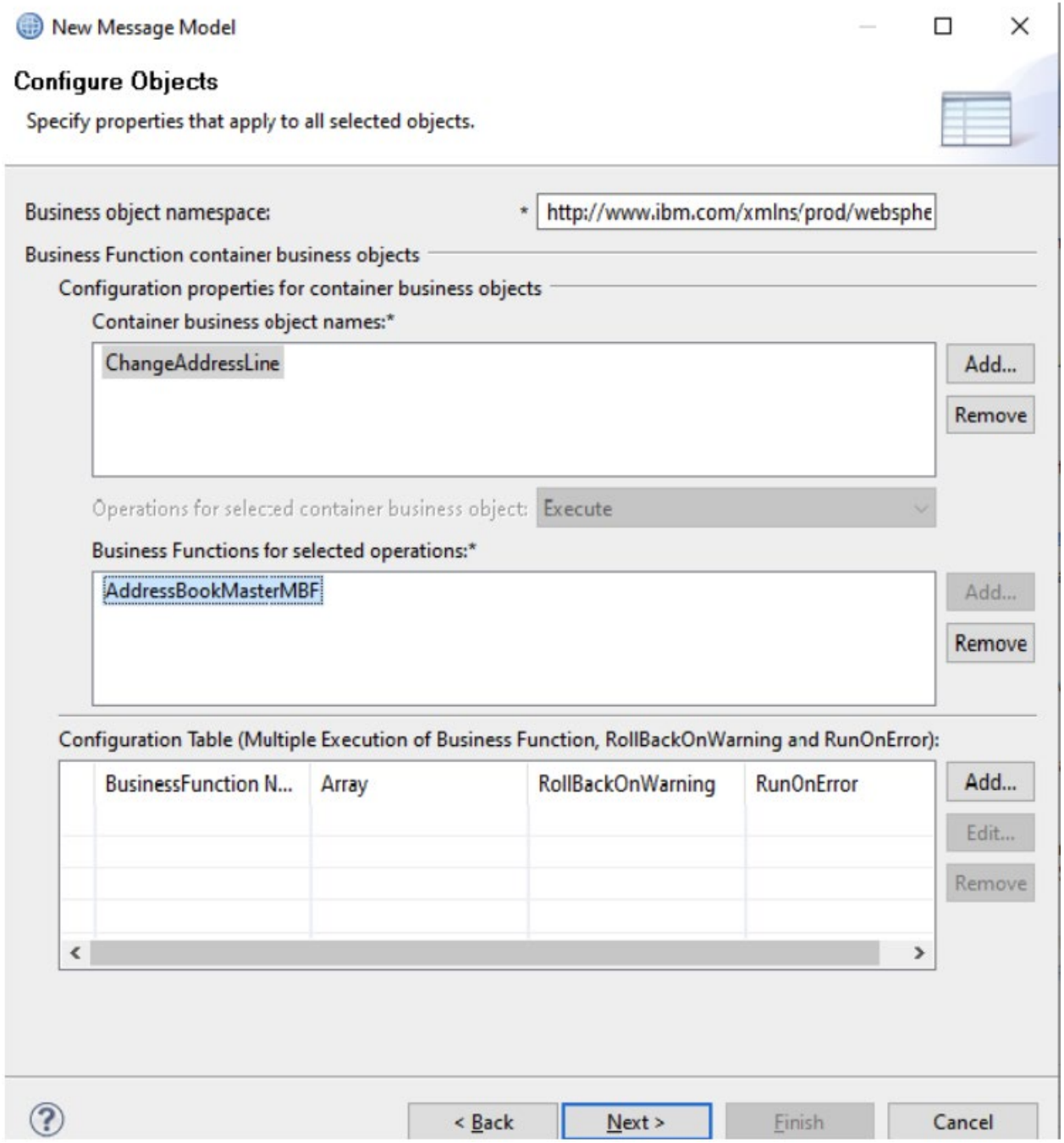

New Message Model
Configure Settings for Discovery Agent
Specify the properties to initialize the discovery agent.
Connection Configuration
Environment:
Role:
User name:
Password:
Advanced >>
Specify the level of the logging desired
Log file output location:
Logging Level:
Browse...
< Back
Next >
Finish
Cancel

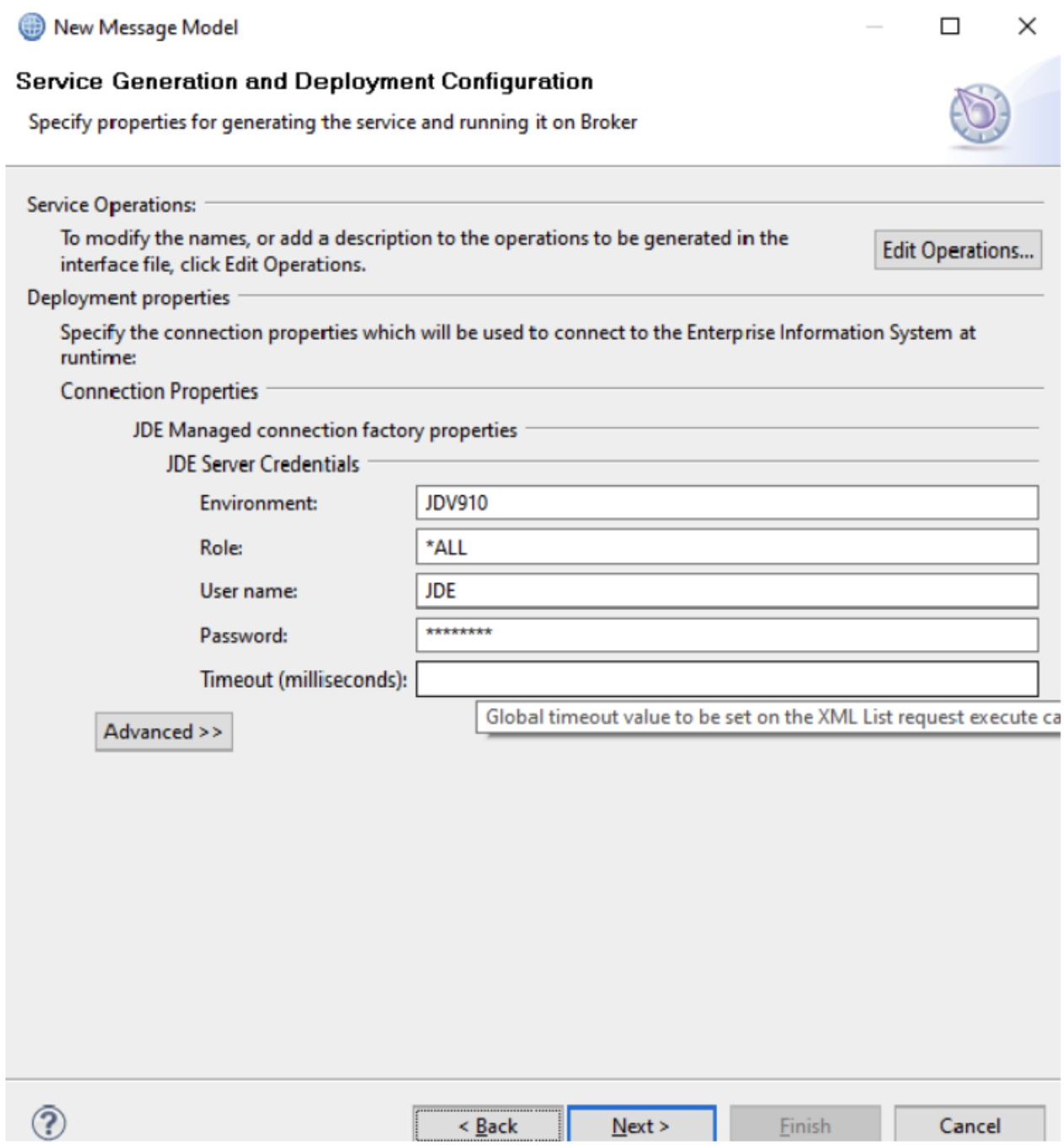


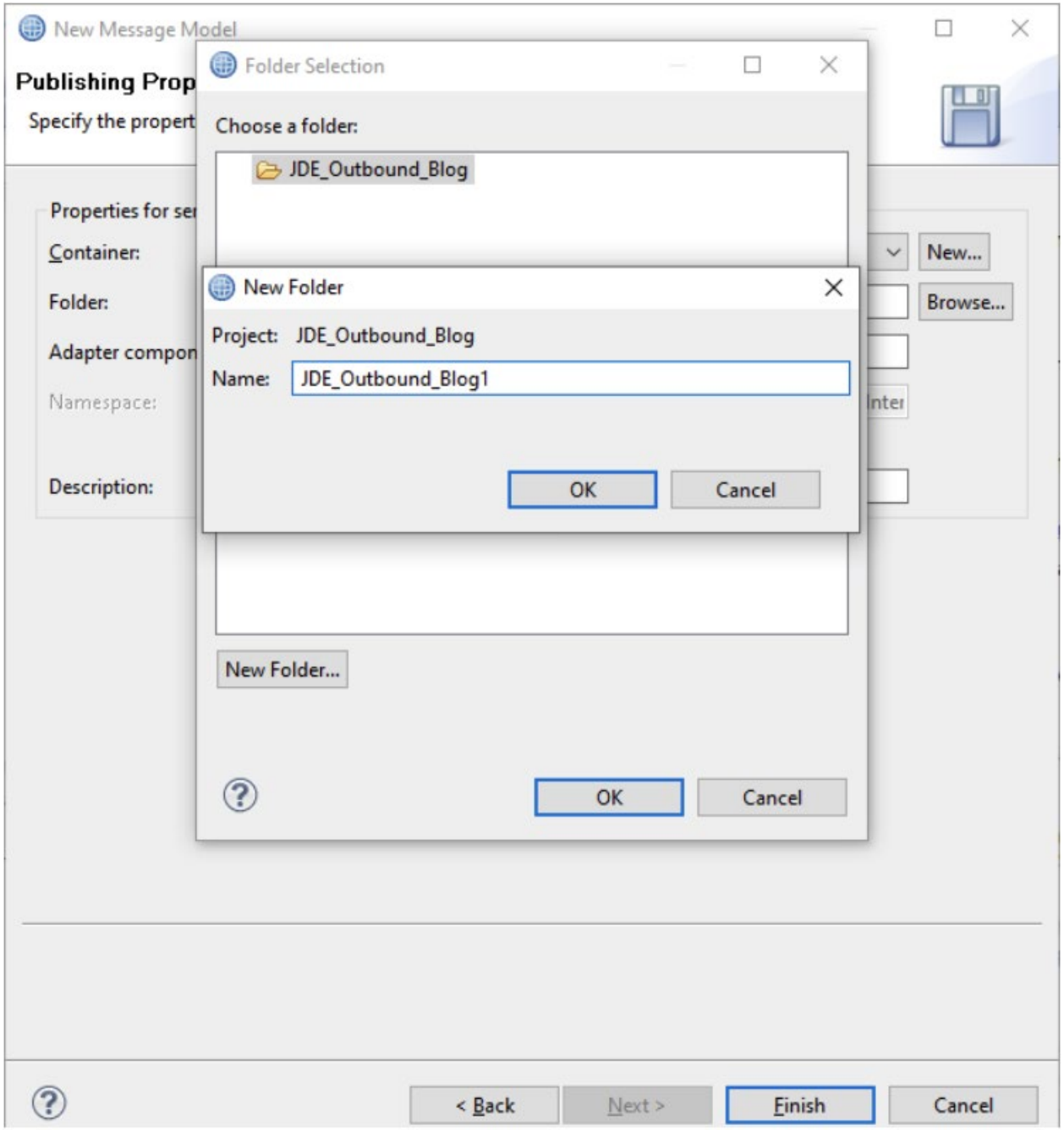
Search and Select AddressBookmasterMBF from N0100041 Business Function

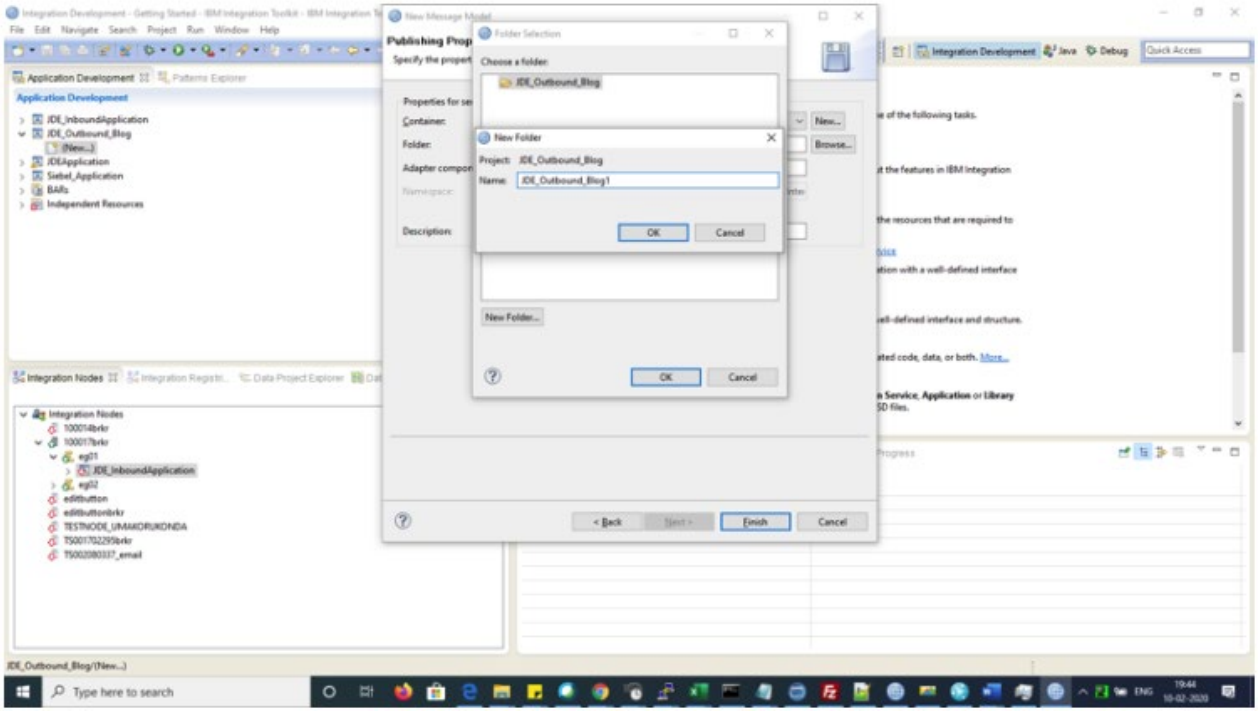

New Message Model
Find and Discover Services
No discovered object is selected.
Query:
Business Functions=true,XML Lists =false
Edit Query...
Execute Query
Objects discovered by query:
Objects to be imported:
MD_DEBUG
N0000001
N0000017
N0000146
N0000181
N0000191
N0000192
N0000200
N0000210
N0000562
N0000563
N0000600
N0001212
N0100041
AddressBookMasterMBF
N0100042
N0100043
N0100058
N0100059
< Back
Next >
Finish
Cancel


New Message Model
Find and Discover Services
No discovered object is selected.
Query: Business Functions=true,XML Lists =false
Edit Query...
Execute Query
Objects di
New Message Model
Configuration Parameters for 'AddressBookMasterMBF'
Set the configuration parameters, then press OK.
Business object name:*
AddressBookMasterMBF
OK
Cancel
N0001212
N0100041
AddressBookMasterMBF
N0100042
N0100043
N0100058
N0100059
< Back
Next >
Finish
Cancel


New Message Model
Configure Objects
Specify properties that apply to all selected objects.
Business object namespace:
*
http://www.ibm.com/xmlns/prod/websphe
Business Function container business objects
Configuration properties for container business objects
Container business object names:*
ChangeAddressLine
Add...
Remove
Operations for selected container business object:
Execute
Business Functions for selected operations:*
AddressBookMasterMBF
Add...
Remove
Configuration Table (Multiple Execution of Business Function, RollBackOnWarning and RunOnError):
BusinessFunction N...
Array
RollBackOnWarning
RunOnError
Add...
Edit...
Remove
< Back
Next >
Finish
Cancel


New Message Model
Service Generation and Deployment Configuration
Specify properties for generating the service and running it on Broker
Service Operations:
To modify the names, or add a description to the operations to be generated in the interface file, click Edit Operations.
Edit Operations...
Deployment properties
Specify the connection properties which will be used to connect to the Enterprise Information System at runtime:
Connection Properties
JDE Managed connection factory properties
JDE Server Credentials
Environment:
JDV910
Role:
*ALL
User name:
JDE
Password:
****
Timeout (milliseconds):
Global timeout value to be set on the XML List request execute ca
Advanced >>
< Back
Next >
Finish
Cancel


New Message Model
Publishing Prop
Specify the propert
Properties for ser
Container:
Folder:
Adapter compon
Namespace:
Description:
New...
Browse...
Folder Selection
Choose a folder:
JDE_Outbound_Blog
New Folder
Project: JDE_Outbound_Blog
Name: JDE_Outbound_Blog1
OK
Cancel
New Folder...
OK
Cancel
< Back
Next >
Finish
Cancel


Integration Development - Getting Started - IBM Integration Toolkit - IBM Integration Toolkit
File Edit Navigate Search Project Run Window Help
Application Development
Patterns Explorer
Application Development
JDE_InboundApplication
JDE_Outbound_Blog
(New...)
JDEApplication
Siebel_Application
BARs
Independent Resources
Integration Development
Java
Debug
Quick Access
New Message Model
Publishing Prop
Specify the propert
Folder Selection
Choose a folder:
JDE_Outbound_Blog
New Folder
Project: JDE_Outbound_Blog
Name: JDE_Outbound_Blog1
OK
Cancel
New Folder...
OK
Cancel
Properties for se
Container:
Folder:
Adapter compon
Namespace:
Description:
New...
Browse...
of the following tasks.
t the features in IBM integration
the resources that are required to
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a Service, Application or Library
SD files.
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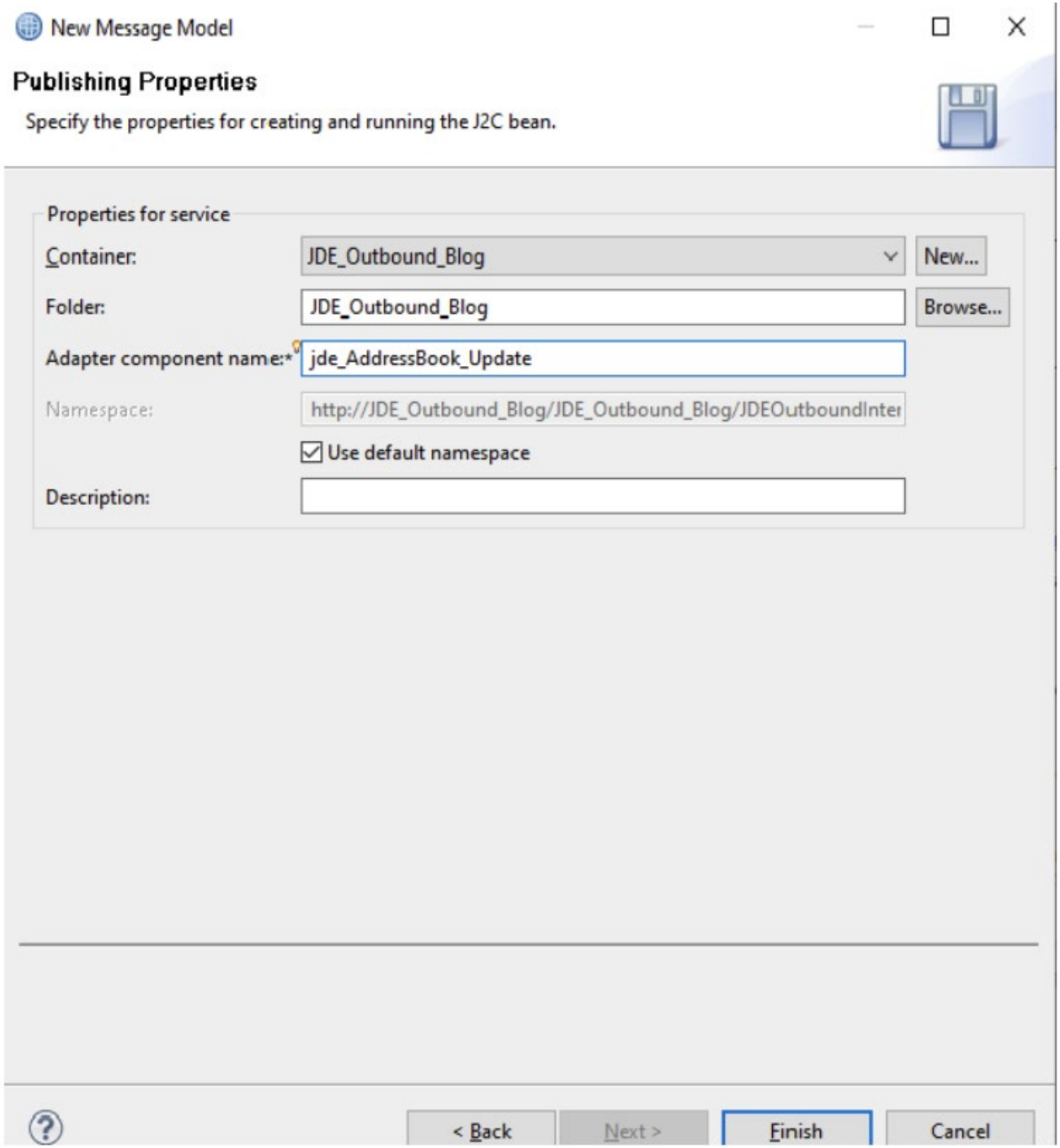
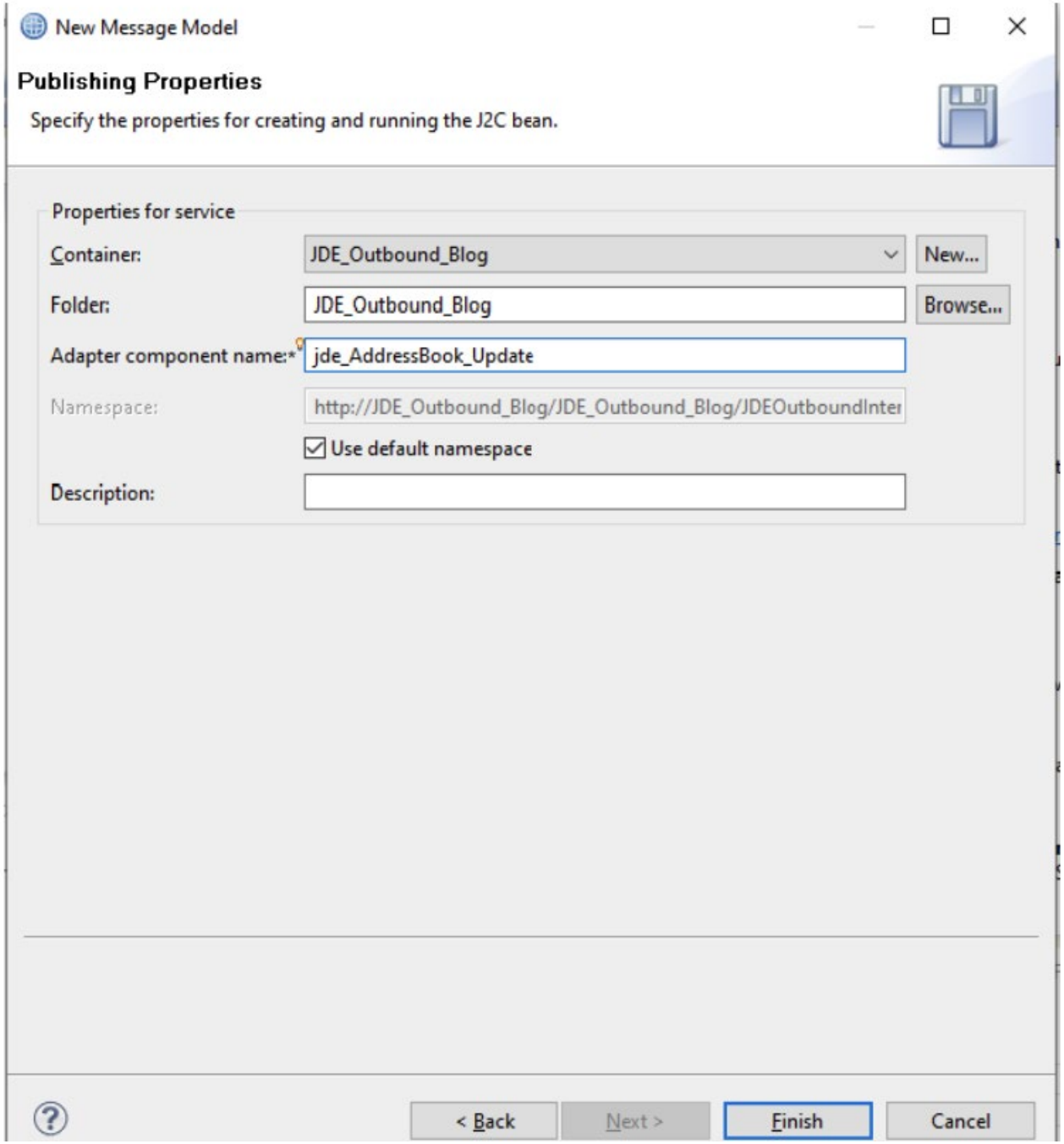
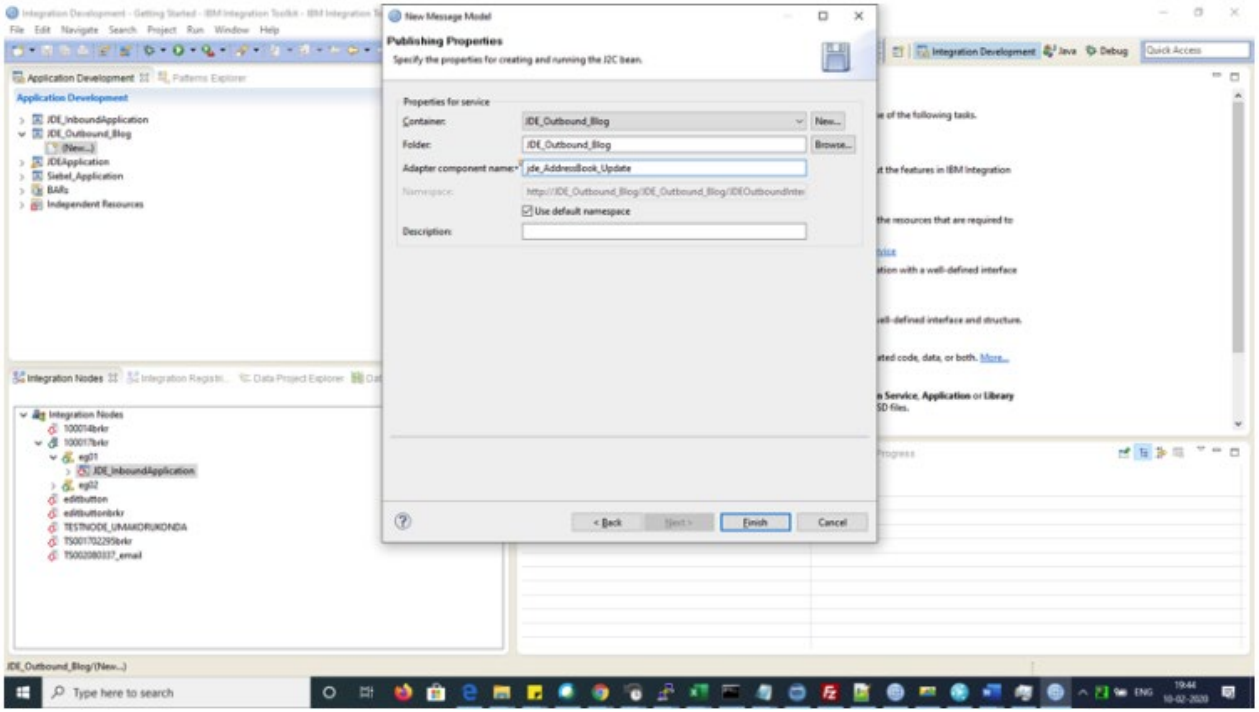
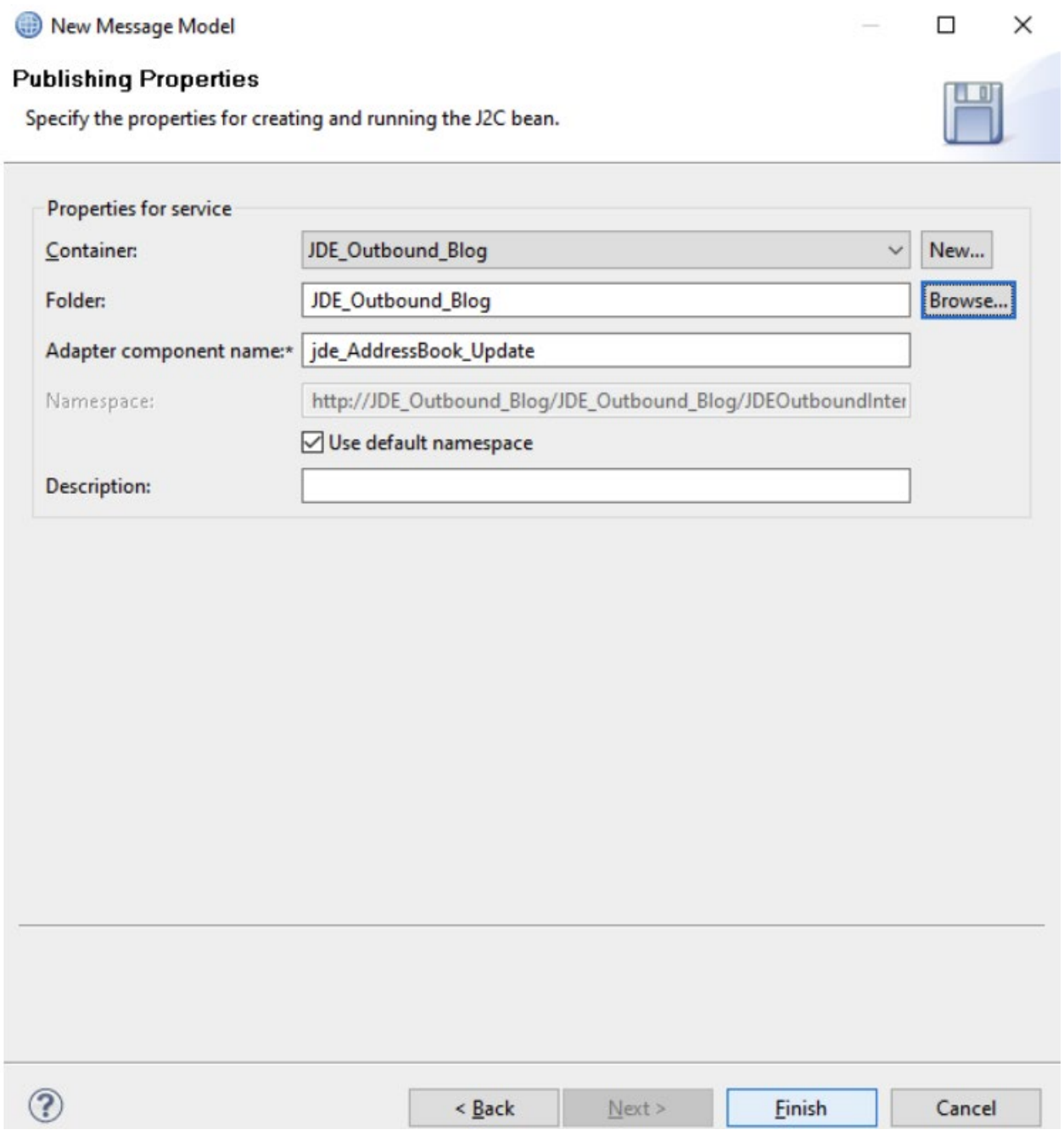
Integration Nodes
Integration Registri...
Data Project Explorer
Integration Nodes
100018brkr
100017brkr
eg01
JDE_InboundApplication
eg02
editbutton
editbuttonbrkr
TESTNODE_UMAKDRUKDNDA
TS001702259brkr
TS002080337_email
< Back
Next >
Finish
Cancel
JDE_Outbound_Blog/(New...)
Type here to search
ENG
19:44
10-02-2020

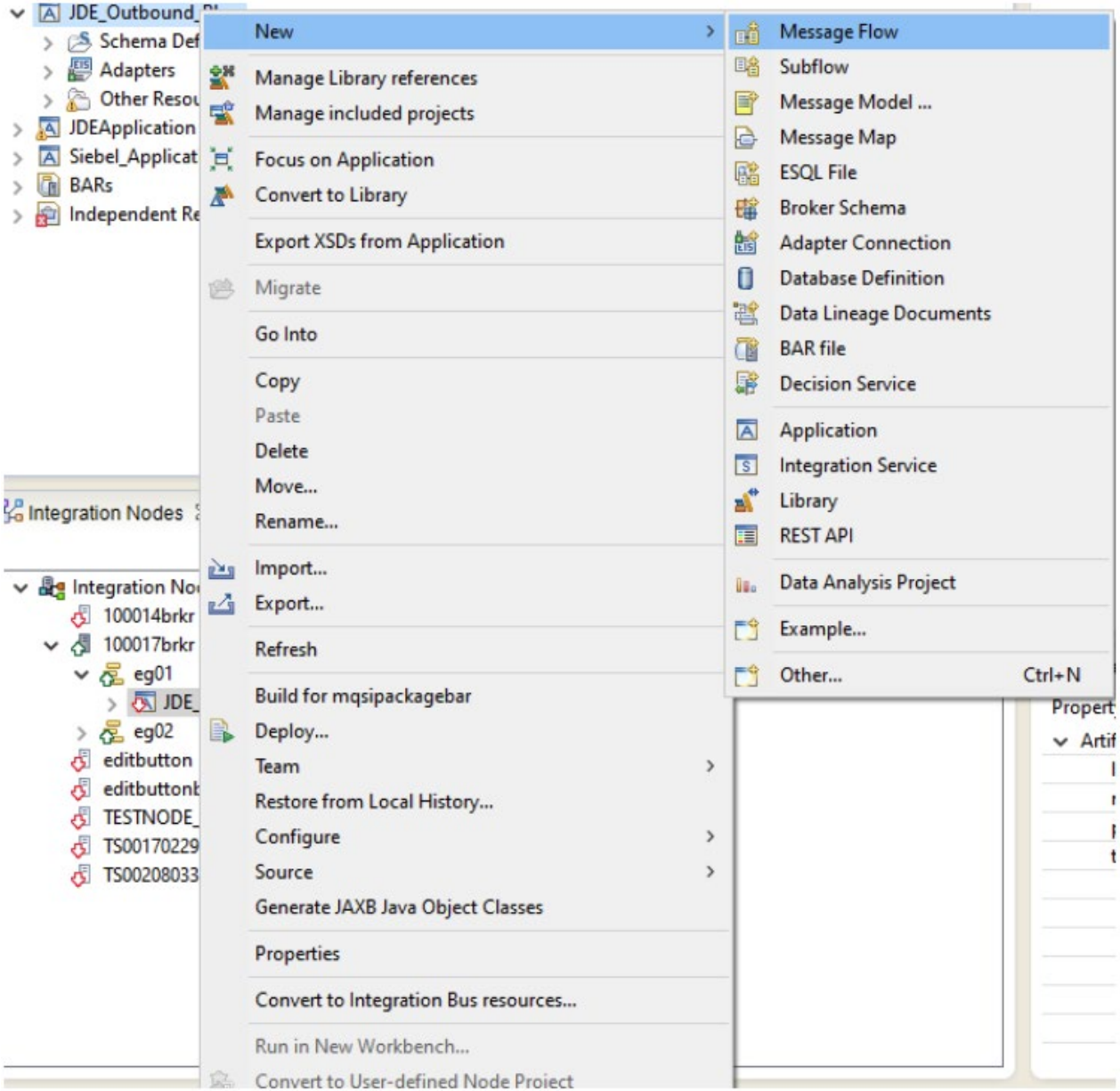

New Message Model
Publishing Properties
Specify the properties for creating and running the J2C bean.
Properties for service
Container:
JDE_Outbound_Blog
New...
Folder:
JDE_Outbound_Blog
Browse...
Adapter component name:*
jde_AddressBook_Update
Namespace:
http://JDE_Outbound_Blog/JDE_Outbound_Blog/JDEOutboundInter
Use default namespace
Description:
< Back
Next >
Finish
Cancel


New Message Model
Publishing Properties
Specify the properties for creating and running the J2C bean.
Properties for service
Container:
JDE_Outbound_Blog
New...
Folder:
JDE_Outbound_Blog
Browse...
Adapter component name:*
jde_AddressBook_Update
Namespace:
http://JDE_Outbound_Blog/JDE_Outbound_Blog/JDEOutboundInter
Use default namespace
Description:
< Back
Next >
Finish
Cancel


New Message Model
Publishing Properties
Specify the properties for creating and running the J2C bean.
Properties for service
Container:
IDE_Outbound_Blog
New...
Folder:
IDE_Outbound_Blog
Browse...
Adapter component name:*
jde_AddressBook_Update
Namespace:
http://IDE_Outbound_Blog/IDE_Outbound_Blog/IDEOutboundInter
Use default namespace
Description:
< Back
Next >
Finish
Cancel
Application Development
IDE_InboundApplication
IDE_Outbound_Blog
IDEApplication
Siebel_Application
BARs
Independent Resources
Integration Nodes
IDE_InboundApplication
Type here to search



The screen shots above showed you how to create a message model to update an address book record in JDE server. Now we will show you how to Create a Message flow using JDE Request Node, MQInput and MQ Output nodes in the same application.


JDE_Outbound_
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Integration Nodes
Integration No
100014brkr
100017brkr
eg01
JDE_
eg02
editbutton
editbuttonb
TESTNODE_
TS00170229
TS00208033
New
Manage Library references
Manage included projects
Focus on Application
Convert to Library
Export XSDs from Application
Migrate
Go Into
Copy
Paste
Delete
Move...
Rename...
Import...
Export...
Refresh
Build for mqsipackagebar
Deploy...
Team
Restore from Local History...
Configure
Source
Generate JAXB Java Object Classes
Properties
Convert to Integration Bus resources...
Run in New Workbench...
Convert to User-defined Node Project
Message Flow
Subflow
Message Model ...
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Broker Schema
Adapter Connection
Database Definition
Data Lineage Documents
BAR file
Decision Service
Application
Integration Service
Library
REST API
Data Analysis Project
Example...
Other... Ctrl+N
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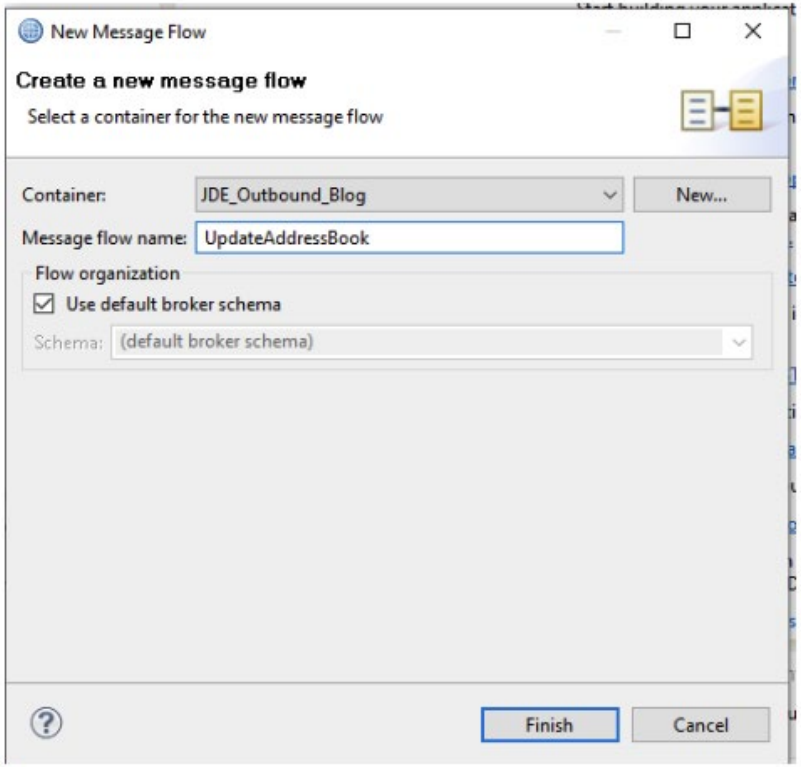
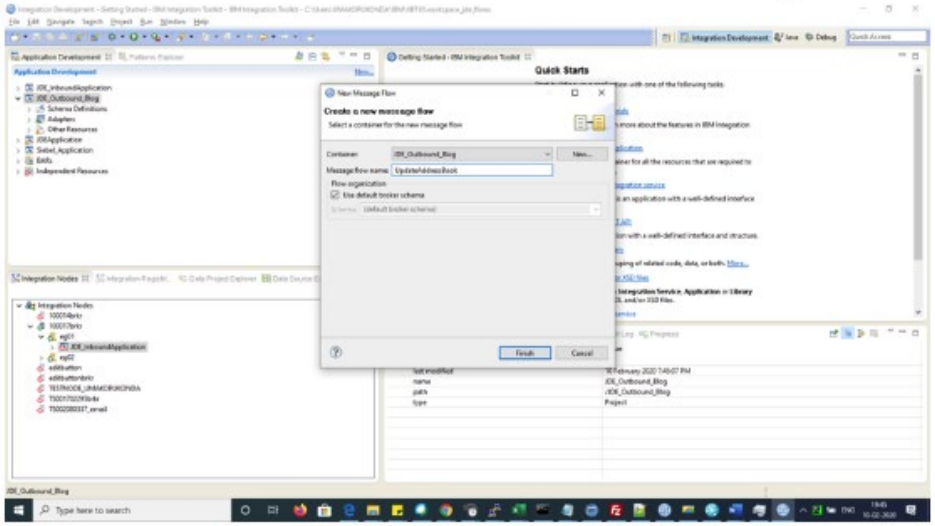
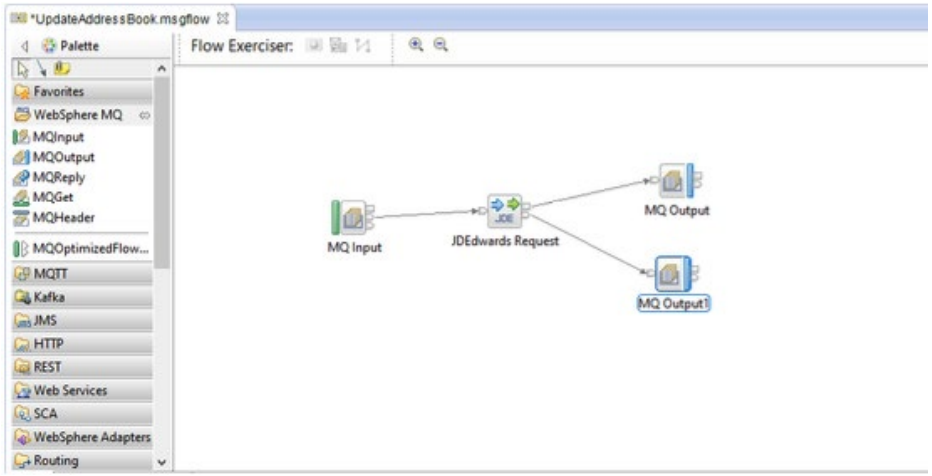


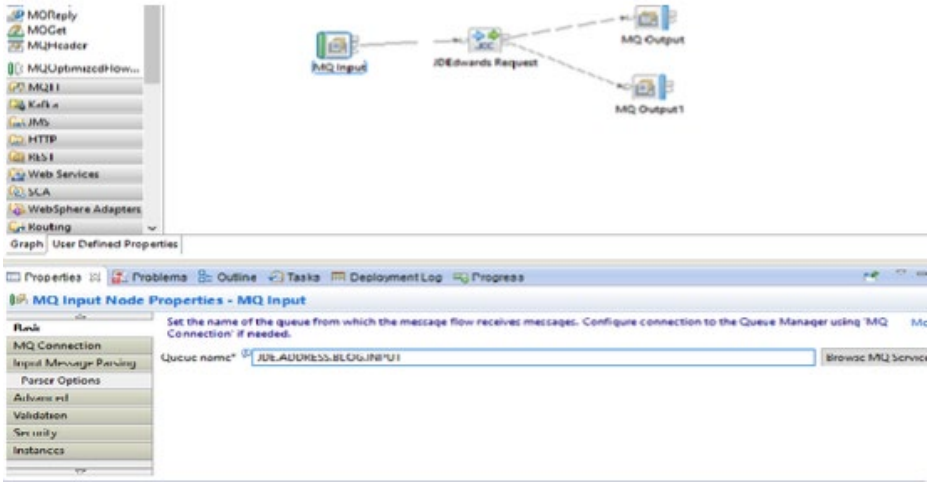


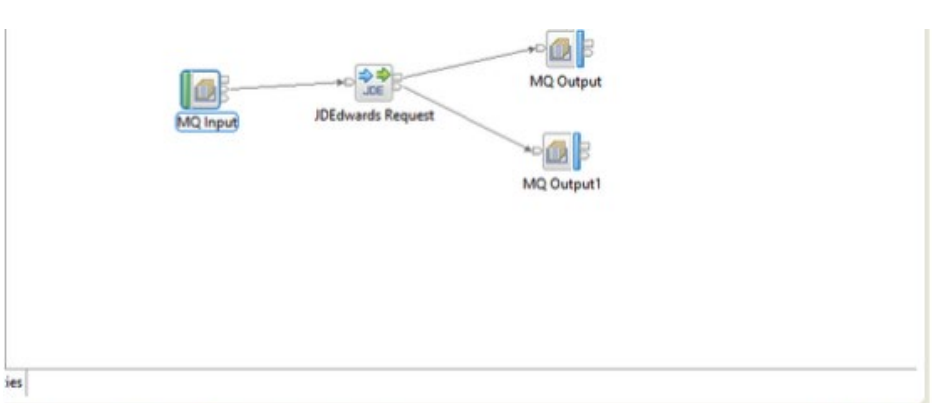
Drag and drop MQ Input node, JDE Request Node from WebSphere Adapters->JD Edwards panel, and two MQ Output nodes.

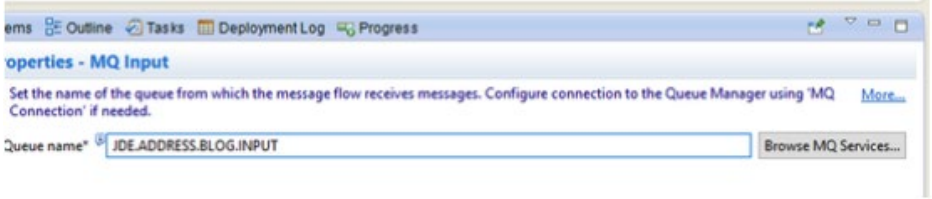
Wire the OUT terminal of the MQ Input node to JDE Request Node and wire the JDE Request node OUT terminal to one MQ Output Node and FAILURE terminal to another MQ Output Node as shown in the below picture.

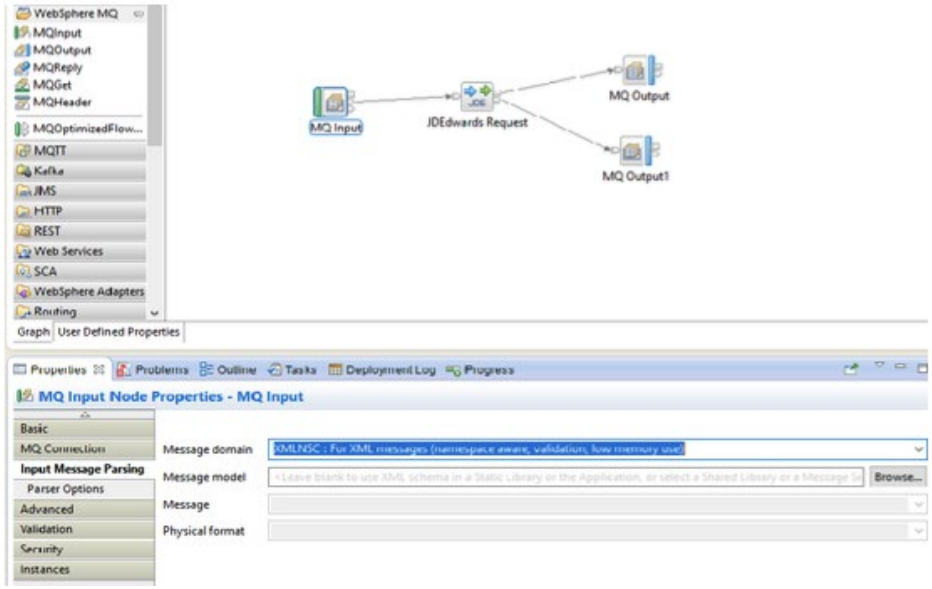


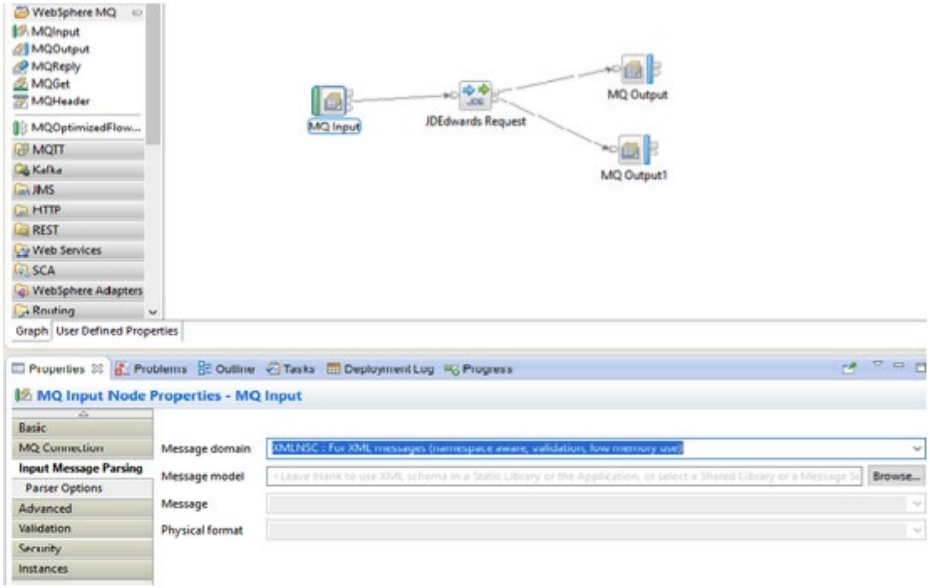
Provide Input, Output and Failure queues names.



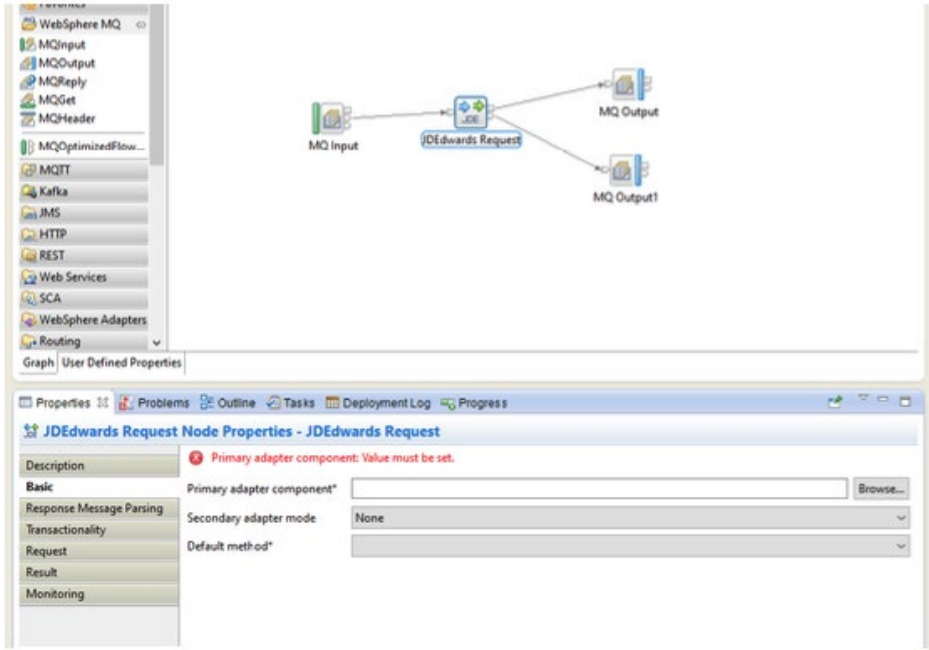

MQ Input
JDEdwards Request
MQ Output
MQ Output1

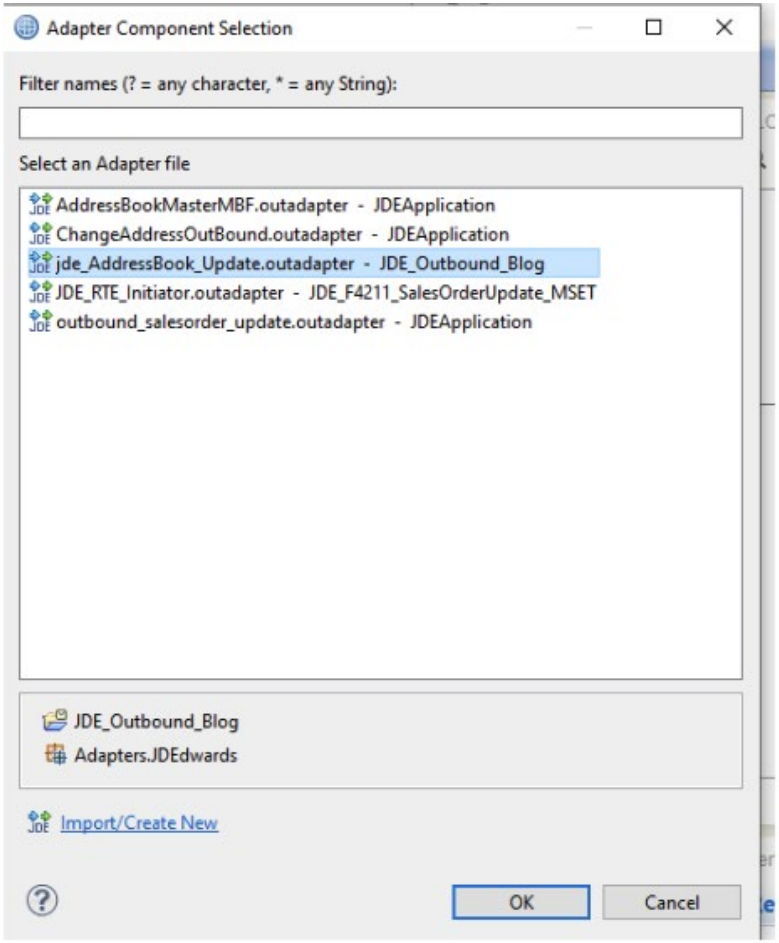

Outline
Tasks
Deployment Log
Progress
operties - MQ Input
Set the name of the queue from which the message flow receives messages. Configure connection to the Queue Manager using 'MQ Connection' if needed.
More...
Queue name*
JDE.ADDRESS.BLOG.INPUT
Browse MQ Services...

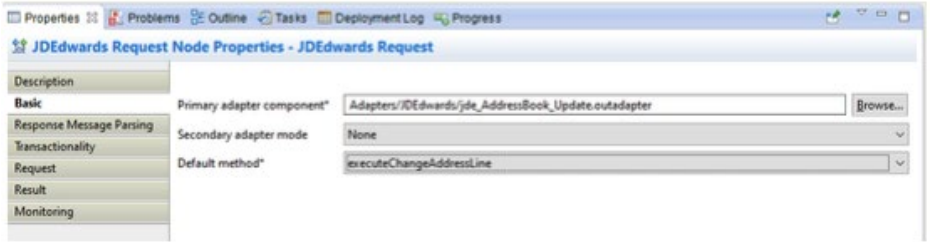

WebSphere MQ
MQInput
MQOutput
MQReply
MQGet
MQHeader
MQOptimizedFlow...
MQTT
Kafka
JMS
HTTP
REST
Web Services
SCA
WebSphere Adapters
Routing
Graph
User Defined Properties
MQ Input
JDEdwards Request
MQ Output
MQ Output1
Properties
Problems
Outline
Tasks
Deployment Log
Progress
MQ Input Node Properties - MQ Input
Basic
MQ Connection
Input Message Parsing
Parser Options
Advanced
Validation
Security
Instances
Message domain
Message model
Message
Physical format
Browse...

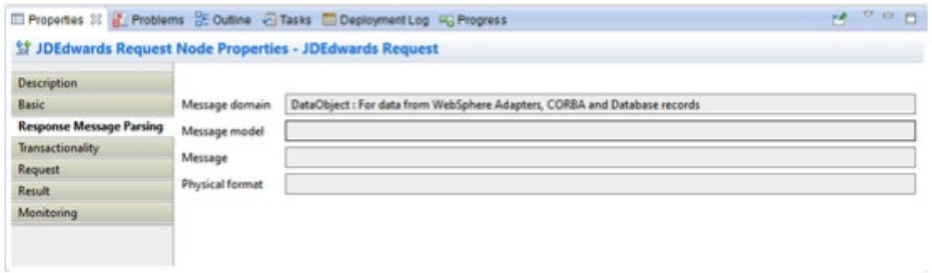


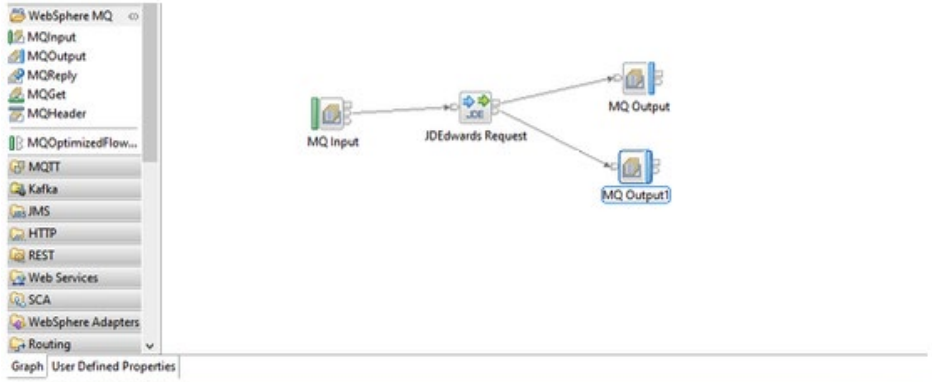
Select the JDE Adapter created in Step 1 and the method as shown in the below images.

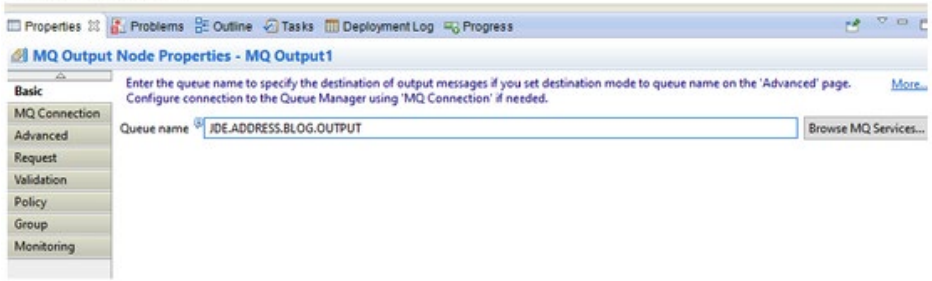


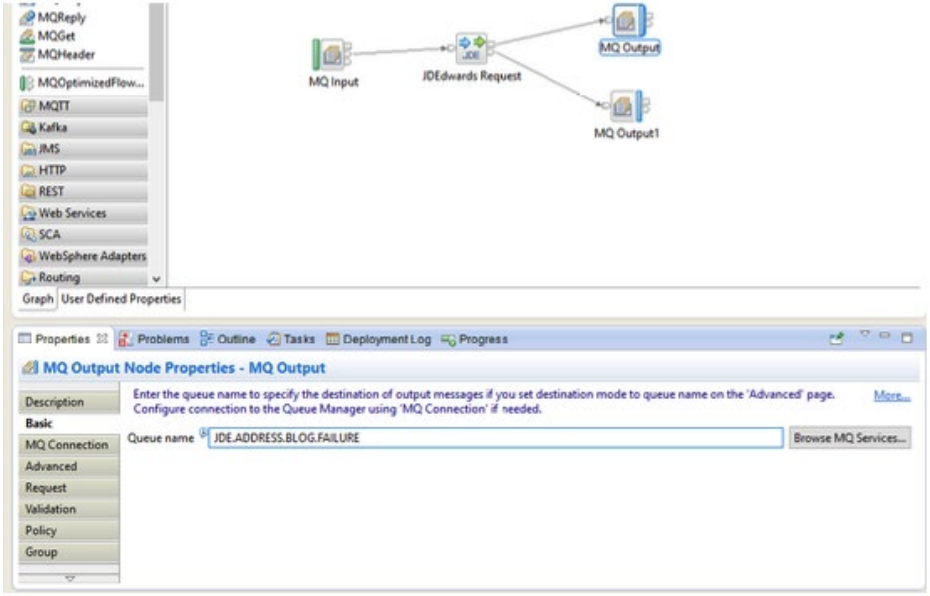

Adapter Component Selection
Filter names (? = any character, * = any String):
Select an Adapter file
AddressBookMasterMBF.outadapter - JDEApplication
ChangeAddressOutBound.outadapter - JDEApplication
jde_AddressBook_Update.outadapter - JDE_Outbound_Blog
JDE_RTE_Initiator.outadapter - JDE_F4211_SalesOrderUpdate_MSET
outbound_salesorder_update.outadapter - JDEApplication
JDE_Outbound_Blog
Adapters.JDEdwards
Import/Create New
OK
Cancel


Properties
Problems
Outline
Tasks
Deployment Log
Progress
JDEdwards Request Node Properties - JDEdwards Request
Description
Basic
Response Message Parsing
Transactionality
Request
Result
Monitoring
Primary adapter component*
Adapters/JDEdwards/jde_AddressBook_Update.outadapter
Browse...
Secondary adapter mode
None
Default method*
executeChangeAddressLine


Properties
Problems
Outline
Tasks
Deployment Log
Progress
JDEdwards Request Node Properties - JDEdwards Request
Description
Basic
Response Message Parsing
Transactionality
Request
Result
Monitoring
Message domain
DataObject : For data from WebSphere Adapters, CORBA and Database records
Message model
Message
Physical format

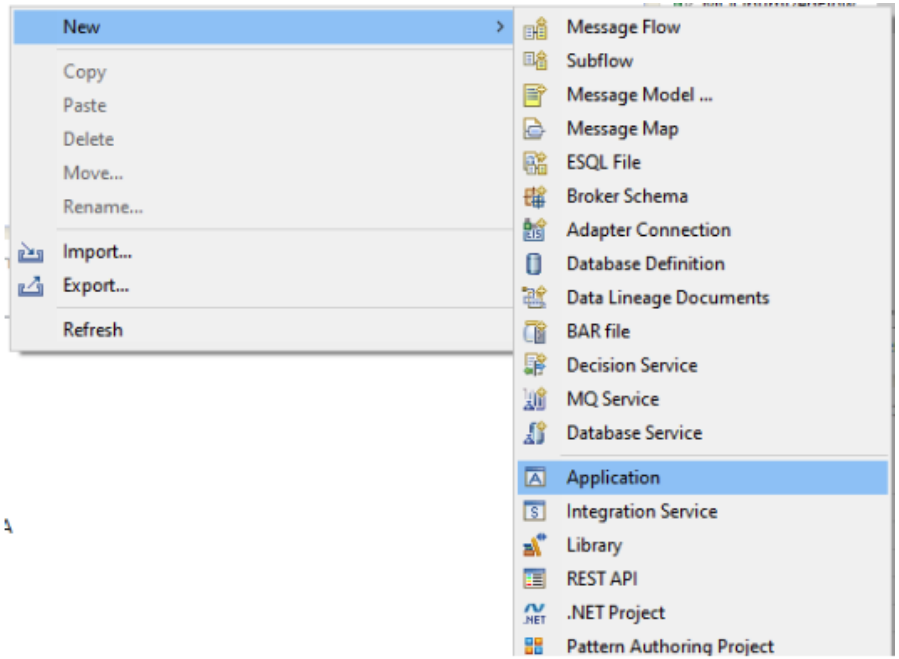

WebSphere MQ
MQInput
MQOutput
MQReply
MQGet
MQHeader
MQOptimizedFlow...
MQTT
Kafka
JMS
HTTP
REST
Web Services
SCA
WebSphere Adapters
Routing
MQ Input
JDE
JDEdwards Request
MQ Output
MQ Output1
Graph
User Defined Properties


Properties
Problems
Outline
Tasks
Deployment Log
Progress
MQ Output Node Properties - MQ Output1
Basic
MQ Connection
Advanced
Request
Validation
Policy
Group
Monitoring
Enter the queue name to specify the destination of output messages if you set destination mode to queue name on the 'Advanced' page.
Configure connection to the Queue Manager using 'MQ Connection' if needed.
More...
Queue name
JDE.ADDRESS.BLOG.OUTPUT
Browse MQ Services...

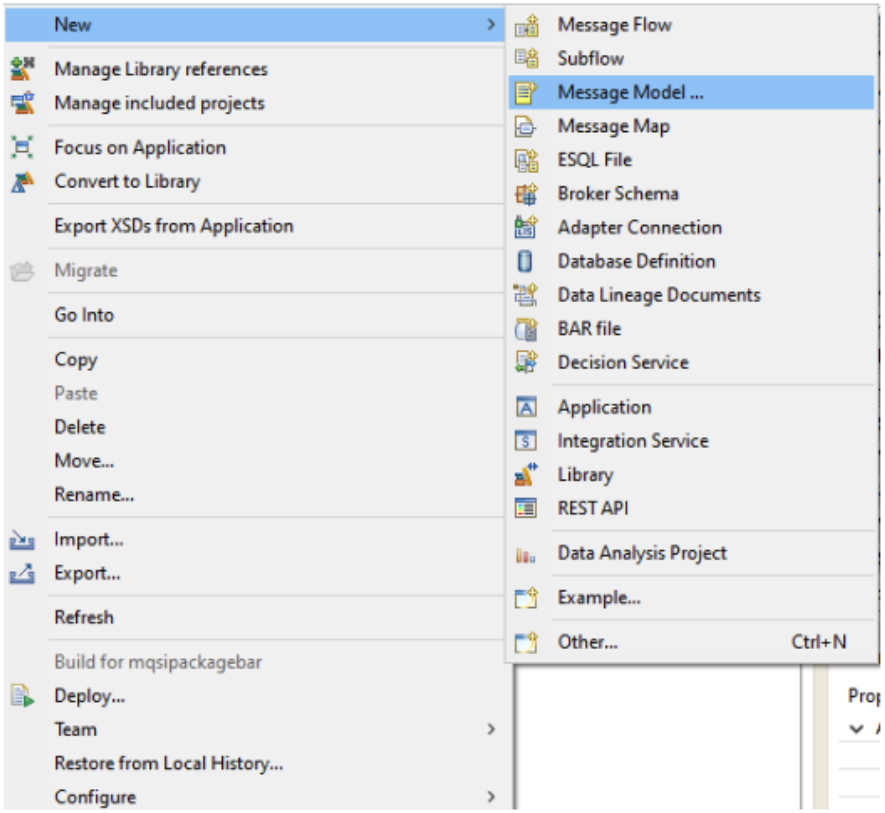


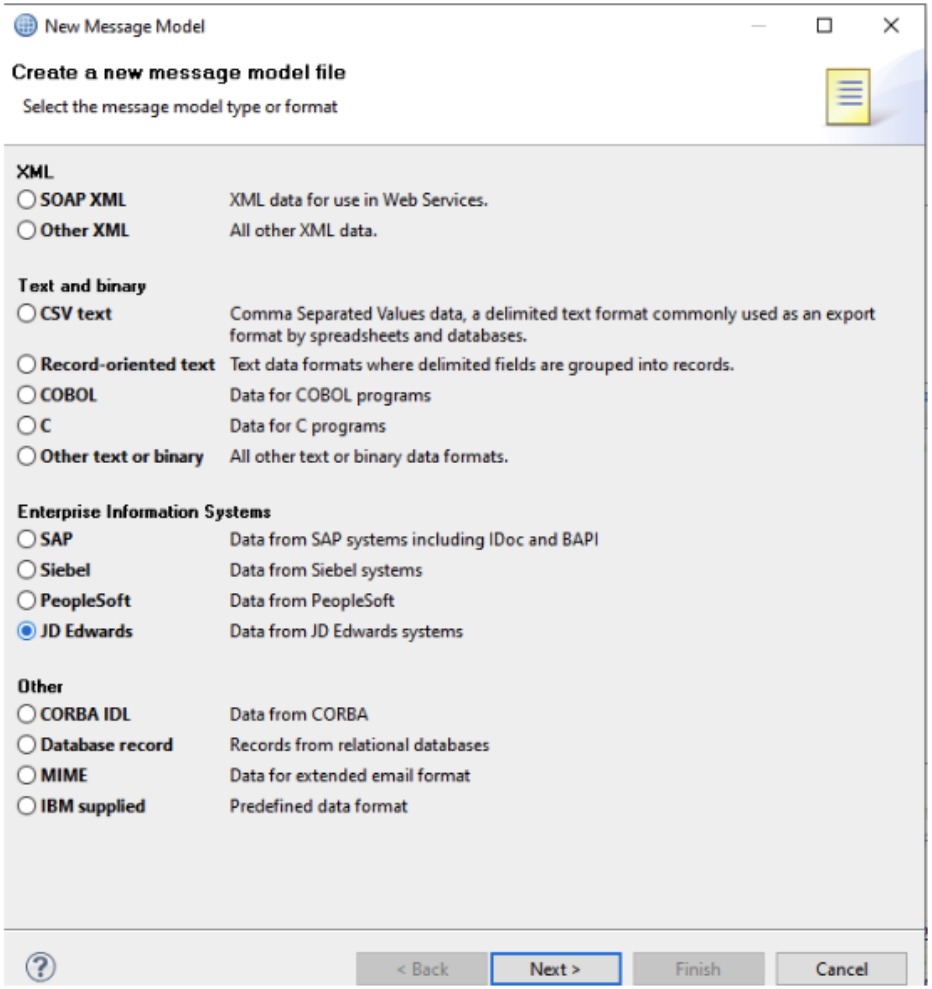
Creating an Inbound message flow using JDE Input Node provided by IIB toolkit and deploy to the IIB Integration node to poll the Address Book record that is updated using the above Outbound Message flow.

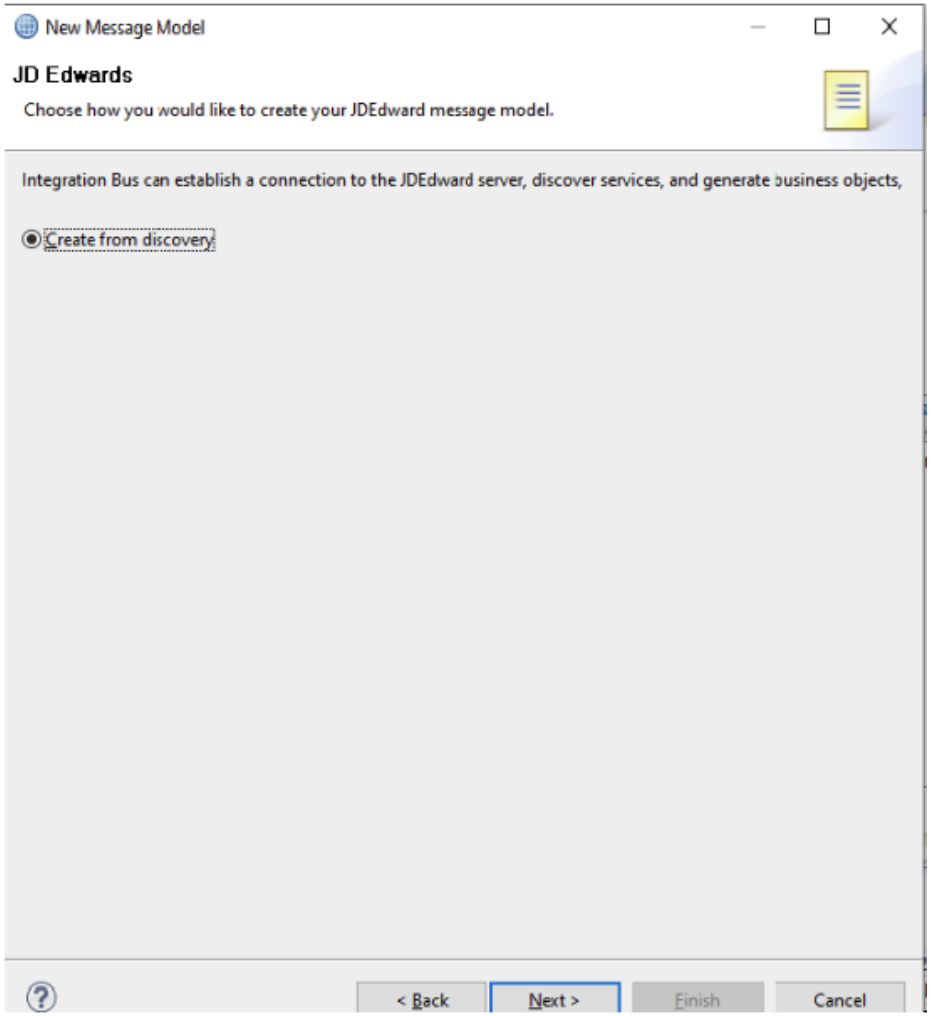
Similar to the Outbound message flow Create an application , WebSphere JD Edwards Inbound Adapter and a message flow.

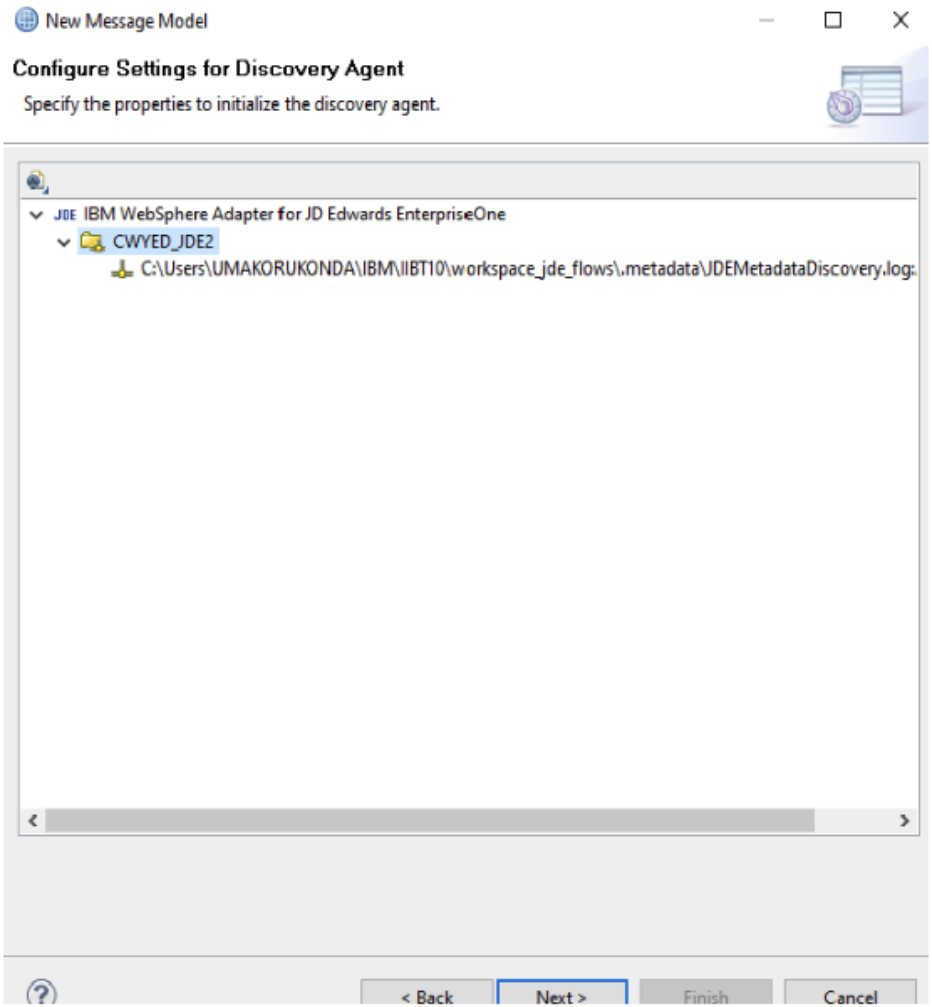


Create a Message model for Inbound JDE adapter:

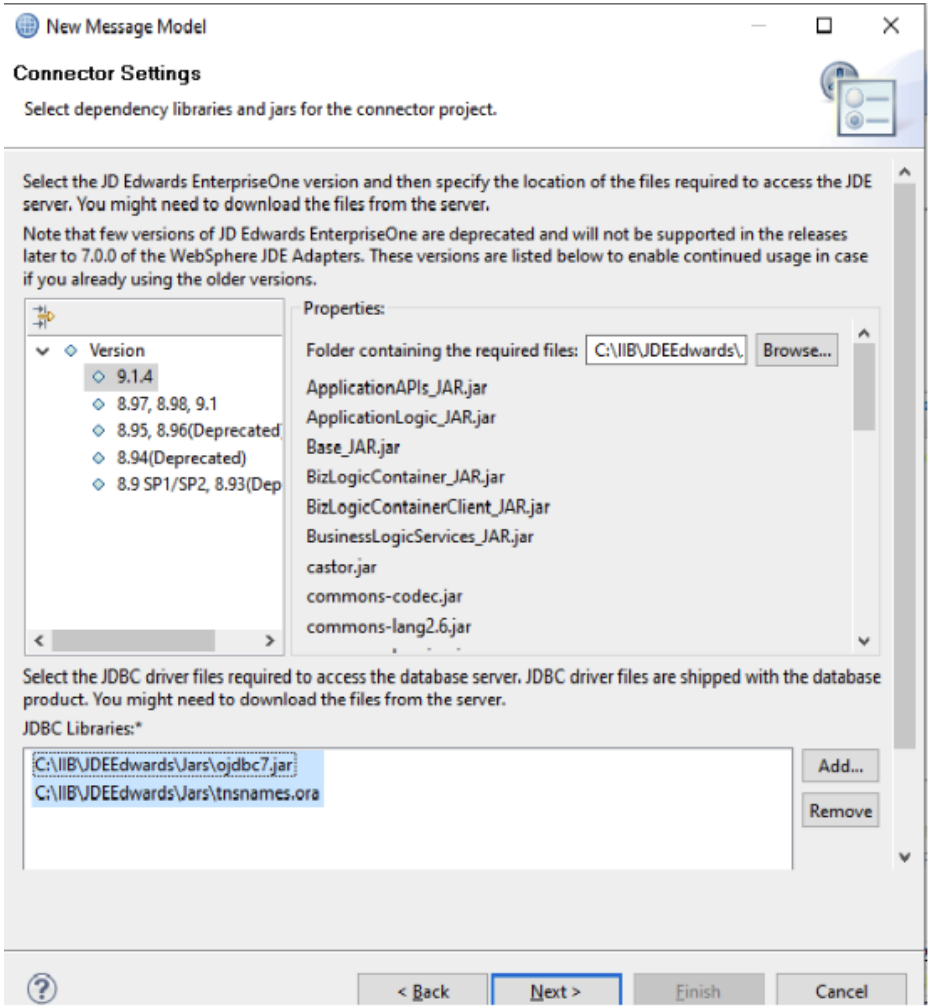

New
Manage Library references
Manage included projects
Focus on Application
Convert to Library
Export XSDs from Application
Migrate
Go Into
Copy
Paste
Delete
Move...
Rename...
Import...
Export...
Refresh
Build for mqsipackagebar
Deploy...
Team
Restore from Local History...
Configure
Message Flow
Subflow
Message Model ...
Message Map
ESQL File
Broker Schema
Adapter Connection
Database Definition
Data Lineage Documents
BAR file
Decision Service
Application
Integration Service
Library
REST API
Data Analysis Project
Example...
Other... Ctrl+N


New Message Model
Create a new message model file
Select the message model type or format
XML
SOAP XML
XML data for use in Web Services.
Other XML
All other XML data.
Text and binary
CSV text
Comma Separated Values data, a delimited text format commonly used as an export format by spreadsheets and databases.
Record-oriented text
Text data formats where delimited fields are grouped into records.
COBOL
Data for COBOL programs
C
Data for C programs
Other text or binary
All other text or binary data formats.
Enterprise Information Systems
SAP
Data from SAP systems including IDoc and BAPI
Siebel
Data from Siebel systems
PeopleSoft
Data from PeopleSoft
JD Edwards
Data from JD Edwards systems
Other
CORBA IDL
Data from CORBA
Database record
Records from relational databases
MIME
Data for extended email format
IBM supplied
Predefined data format
< Back
Next >
Finish
Cancel

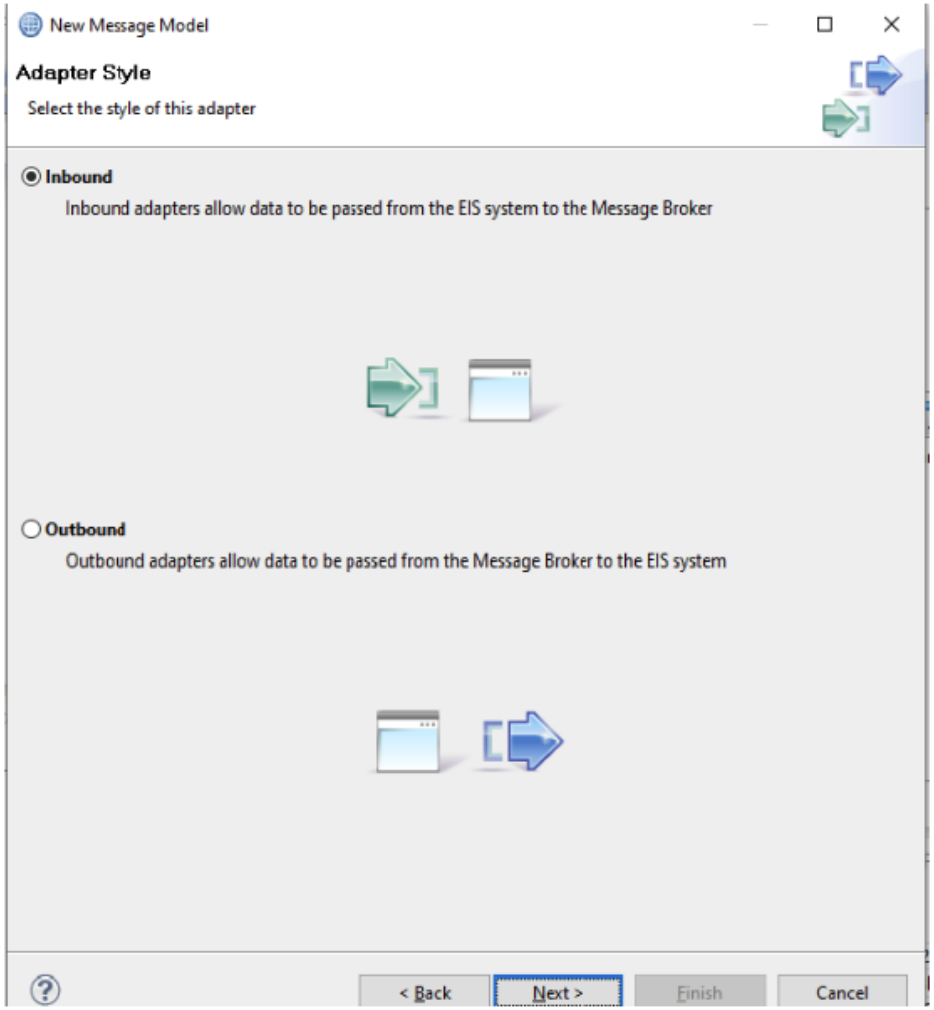

New Message Model
JD Edwards
Choose how you would like to create your JDEdward message model.
Integration Bus can establish a connection to the JDEdward server, discover services, and generate business objects,
Create from discovery
< Back
Next >
Finish
Cancel


New Message Model
Configure Settings for Discovery Agent
Specify the properties to initialize the discovery agent.
IBM WebSphere Adapter for JD Edwards EnterpriseOne
CWYED_JDE2
C:\Users\UMAKORUKONDA\IBM\IIBT10\workspace_jde_flows\.metadata\JDEMetadataDiscovery.log
< Back
Next >
Finish
Cancel

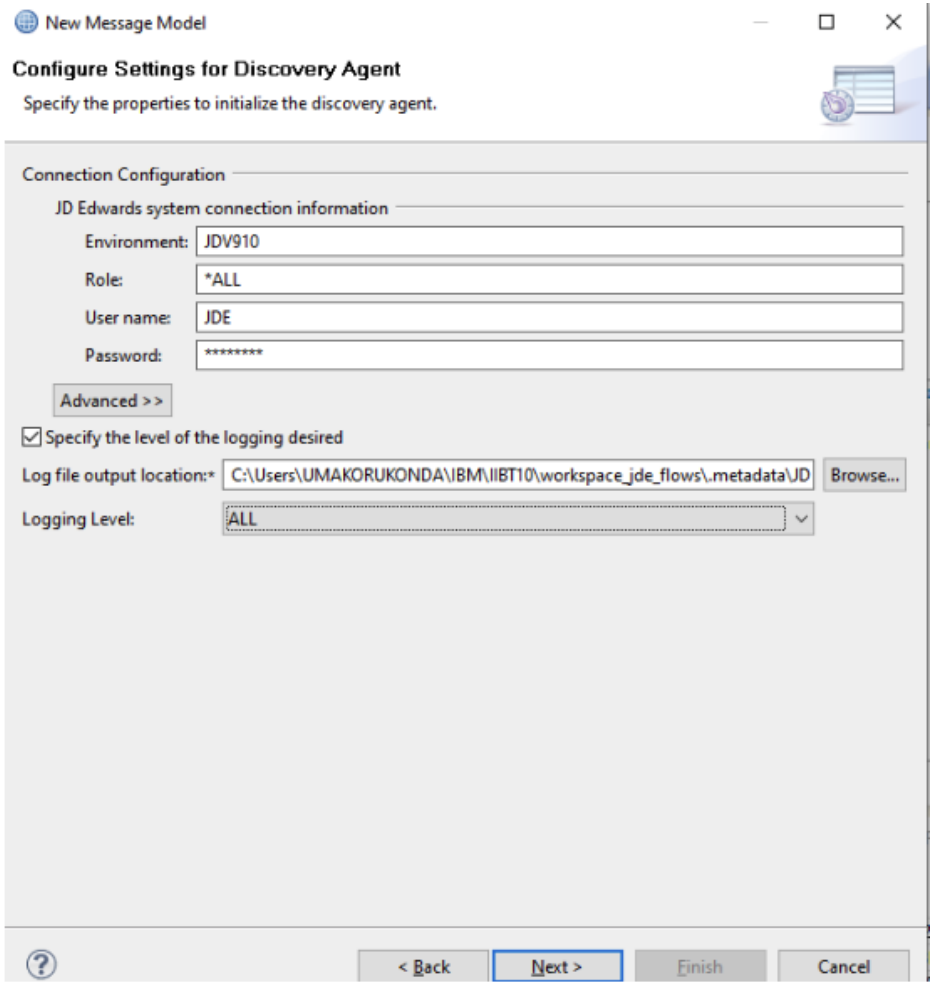
And



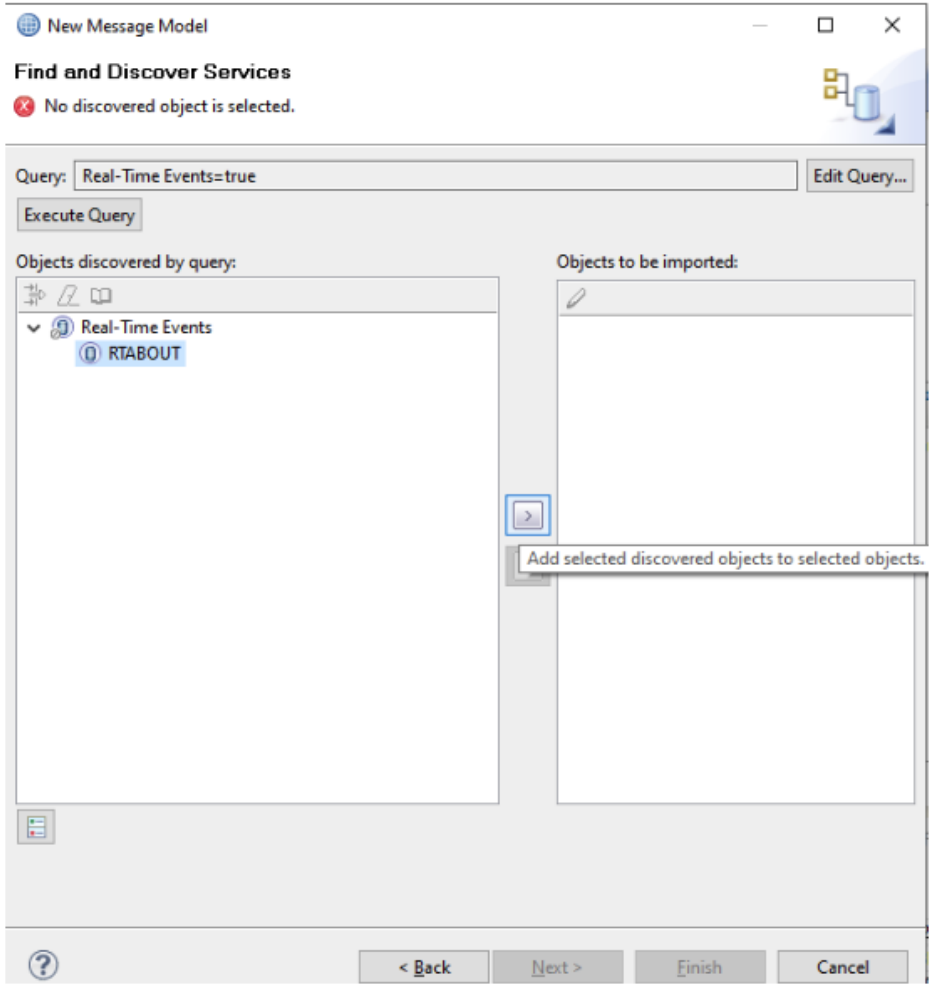
After clicking on next , Select Inbound option:

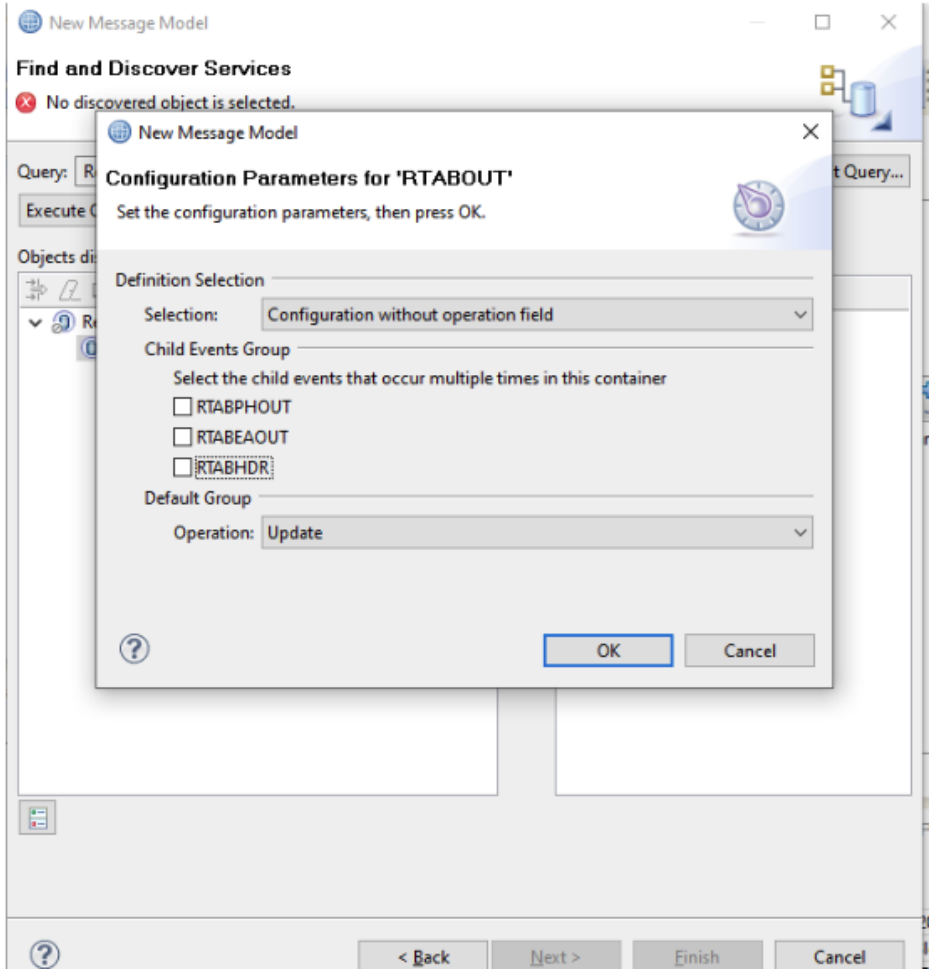


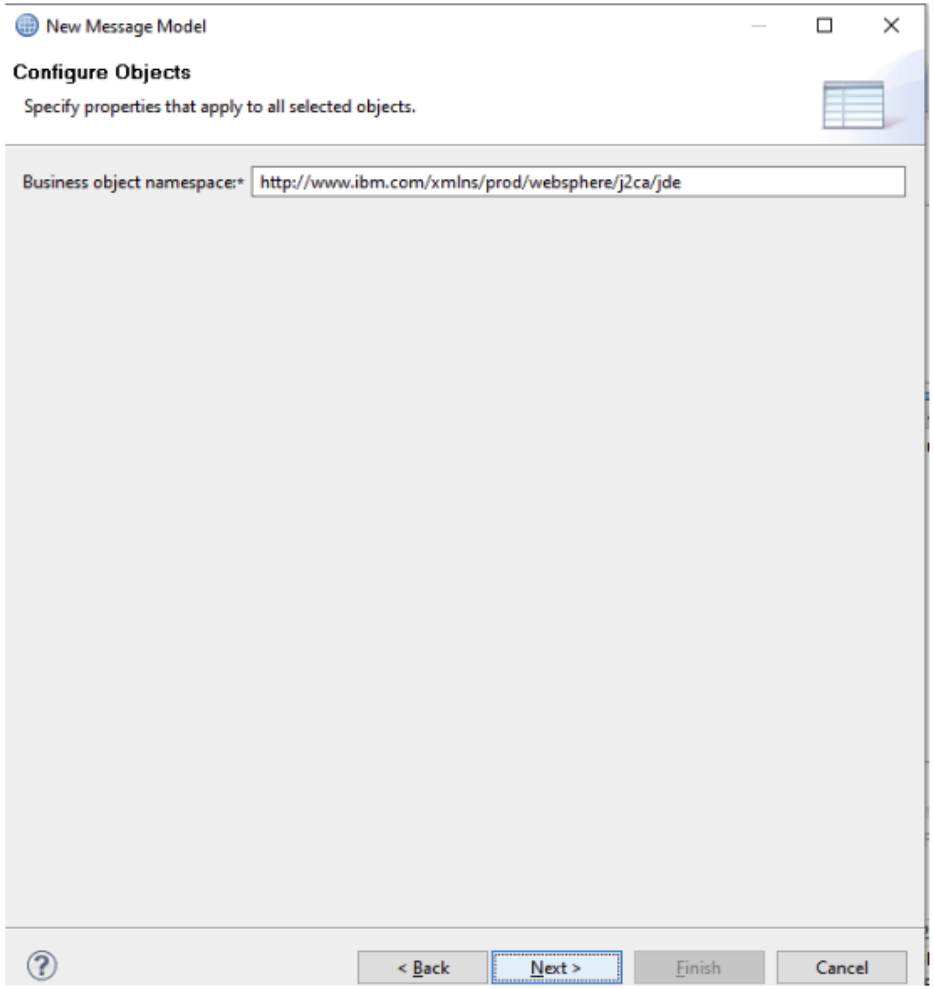
Provide JDE server info and click on next.

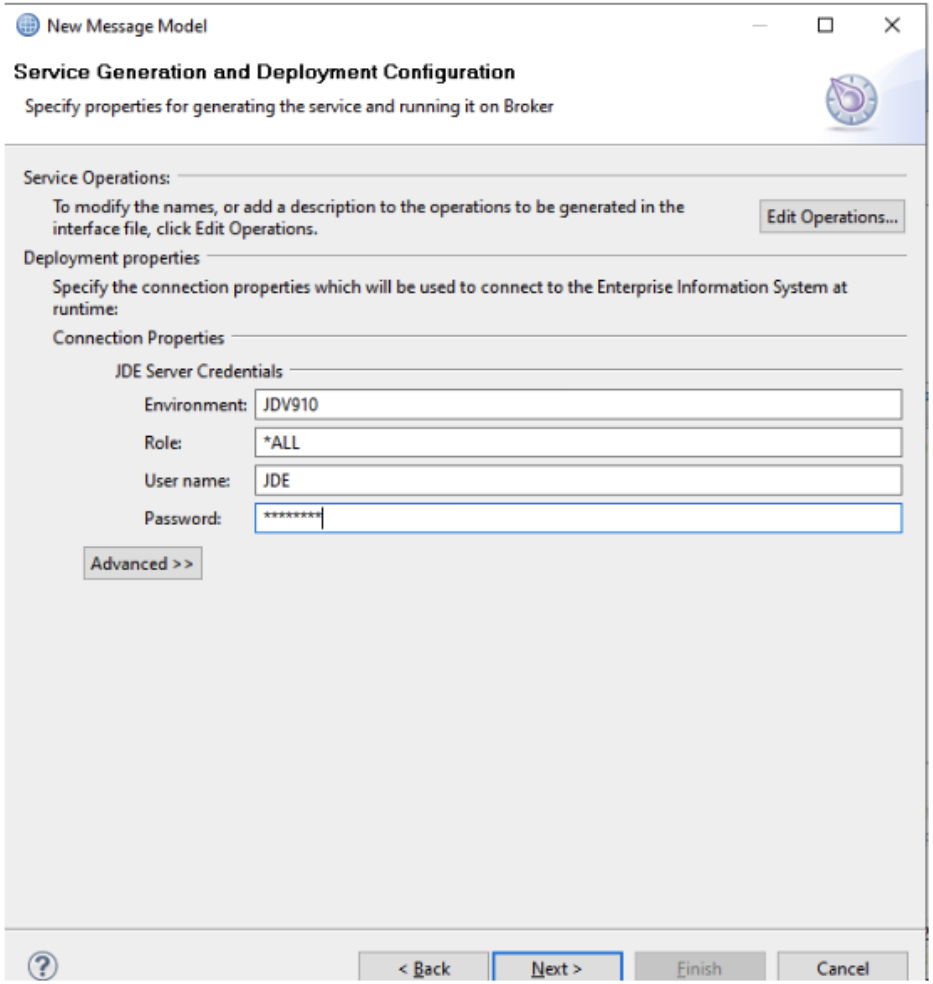


Select RTABOUT for polling the events for AddressBook.

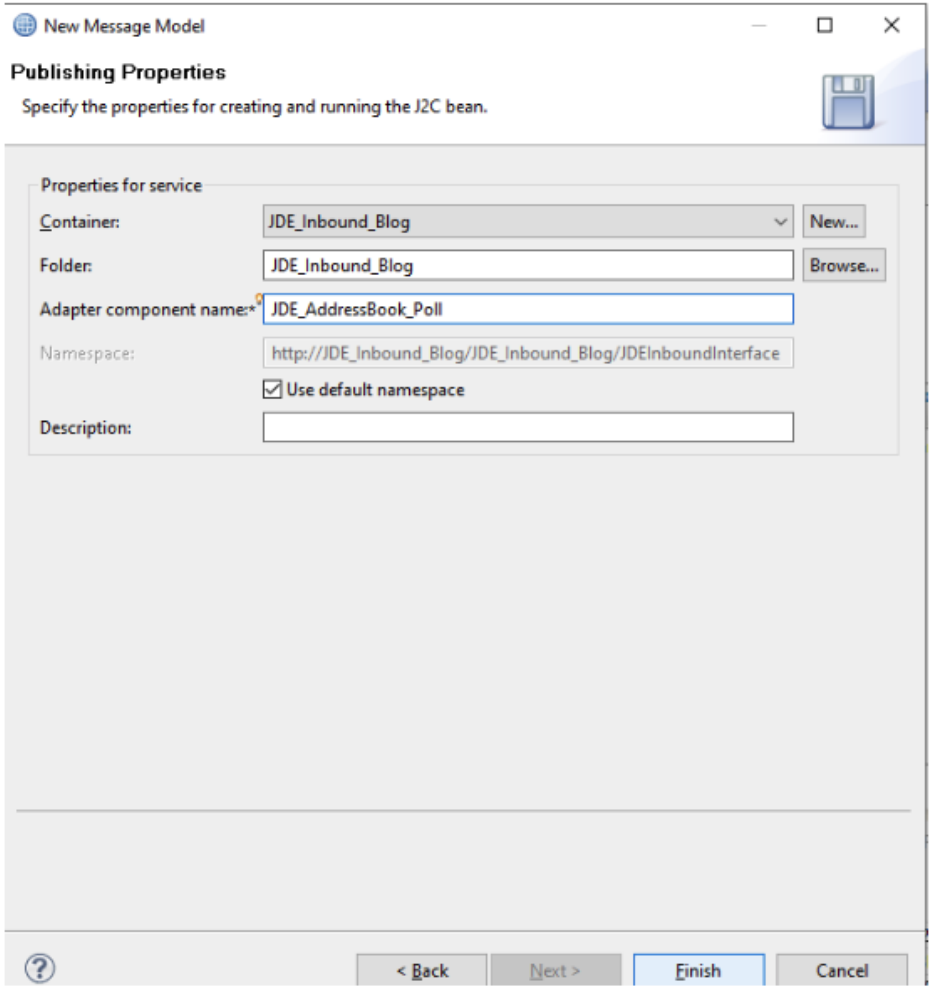

New Message Model
Find and Discover Services
No discovered object is selected.
Query:
Real-Time Events=true
Edit Query...
Execute Query
Objects discovered by query:
Real-Time Events
RTABOUT
Objects to be imported:
Add selected discovered objects to selected objects.
< Back
Next >
Finish
Cancel


New Message Model
Find and Discover Services
No discovered object is selected.
Query:
Execute
Objects di
t Query...
New Message Model
Configuration Parameters for 'RTABOUT'
Set the configuration parameters, then press OK.
Definition Selection
Selection:
Configuration without operation field
Child Events Group
Select the child events that occur multiple times in this container
RTABPHOUT
RTABEAOUT
RTABHDR
Default Group
Operation:
Update
OK
Cancel
< Back
Next >
Finish
Cancel

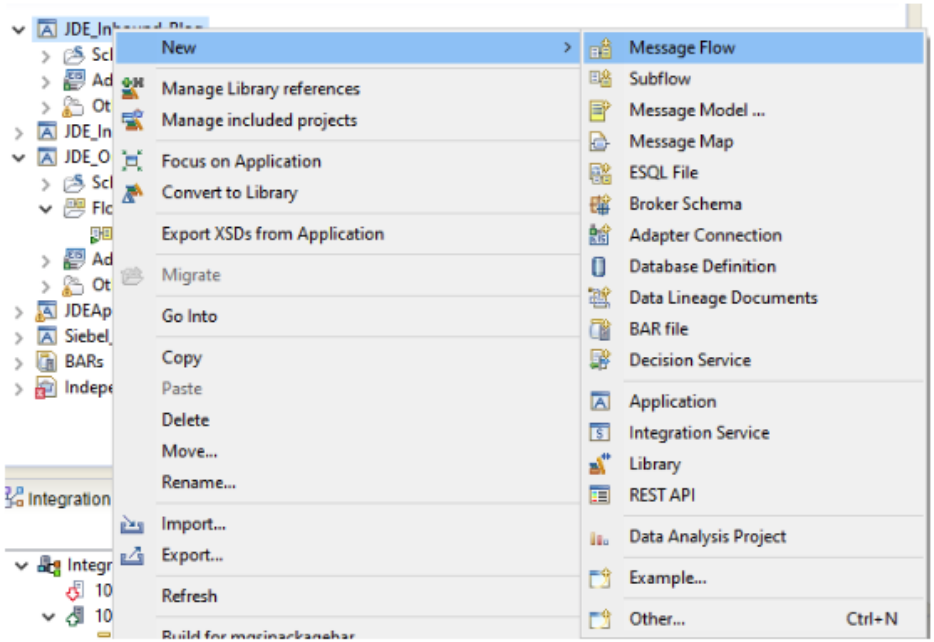

New Message Model
Configure Objects
Specify properties that apply to all selected objects.
Business object namespace:*
http://www.ibm.com/xmlns/prod/websphere/j2ca/jde
< Back
Next >
Finish
Cancel

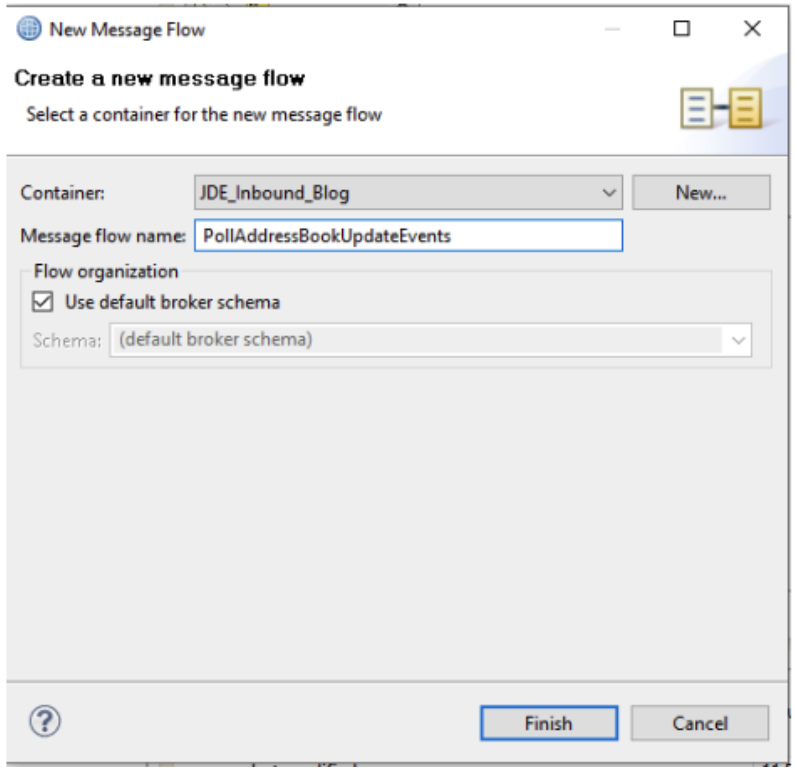


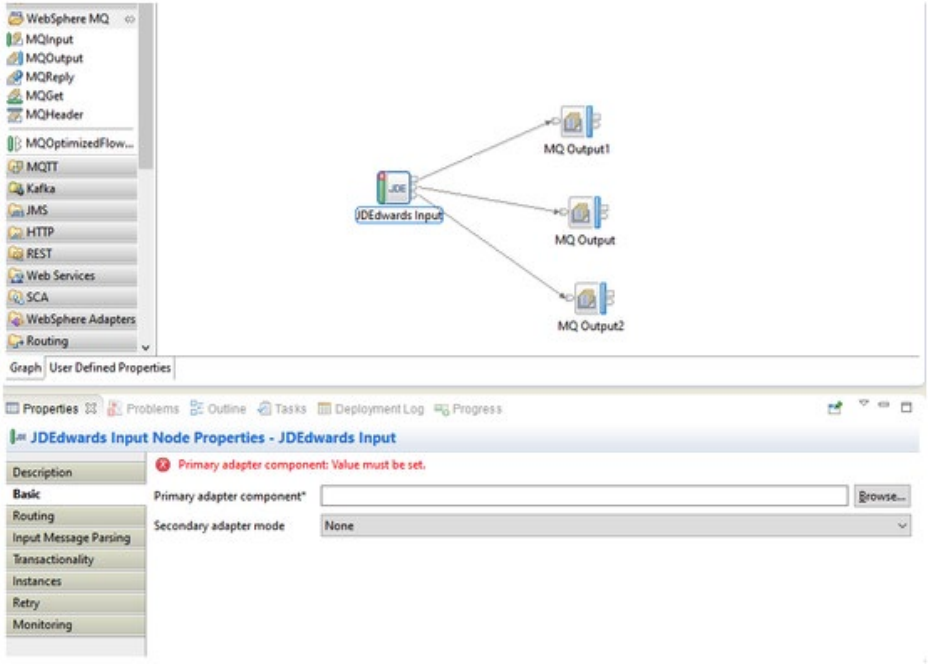
Provide the folder name and adapter name as shown below:

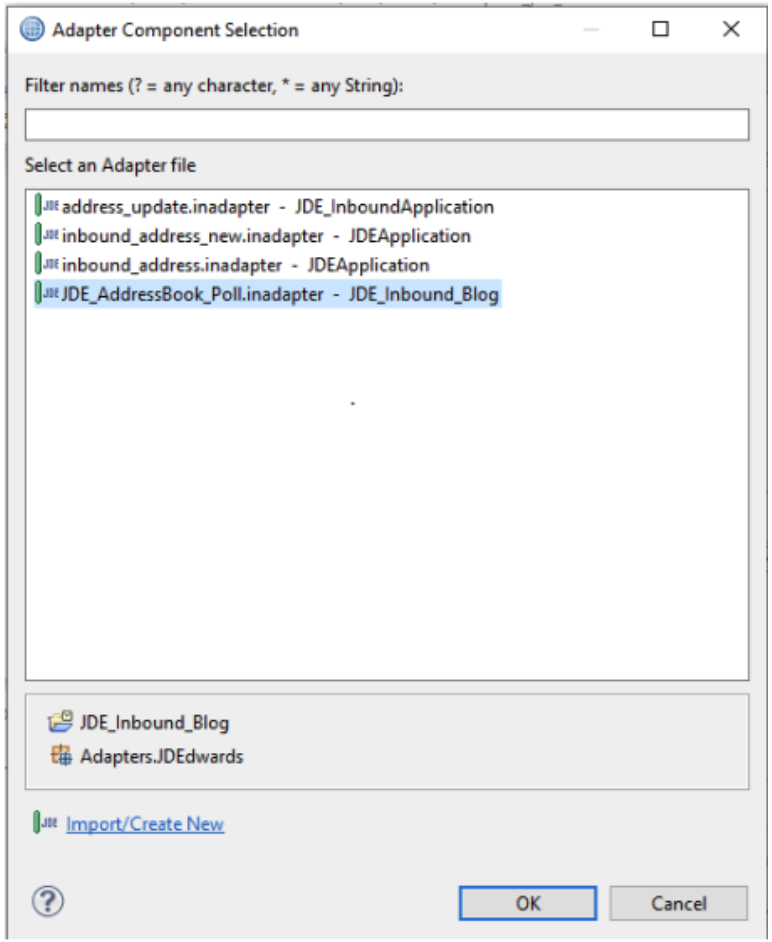


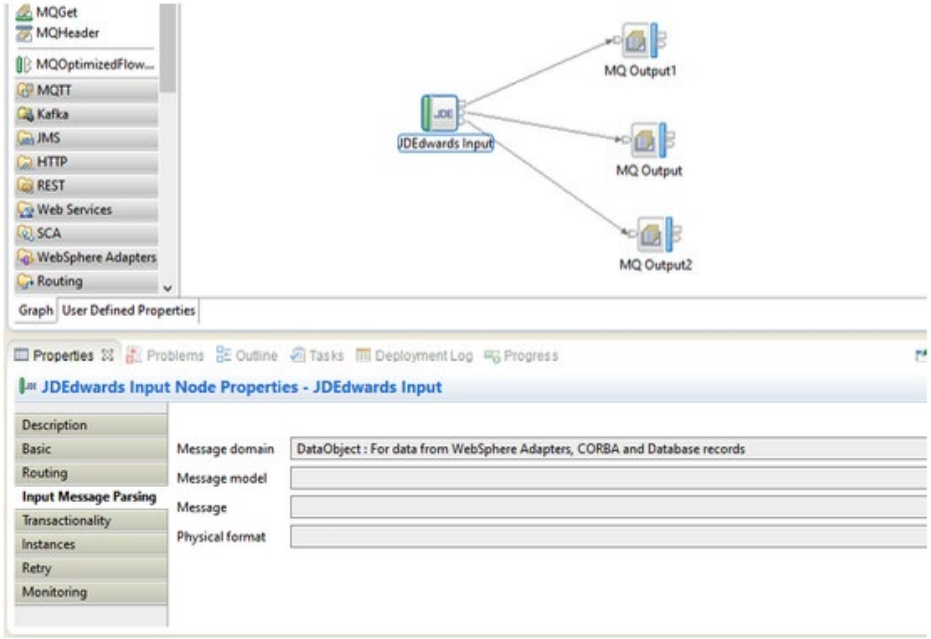
Click on finish which creates a message model for WebSphere Inbound JD Edwards Adapter.
Now create a message flow containing JDE Input node and MQ Output Nodes.


New
Manage Library references
Manage included projects
Focus on Application
Convert to Library
Export XSDs from Application
Migrate
Go Into
Copy
Paste
Delete
Move...
Rename...
Import...
Export...
Refresh
Message Flow
Subflow
Message Model ...
Message Map
ESQL File
Broker Schema
Adapter Connection
Database Definition
Data Lineage Documents
BAR file
Decision Service
Application
Integration Service
Library
REST API
Data Analysis Project
Example...
Other... Ctrl+N

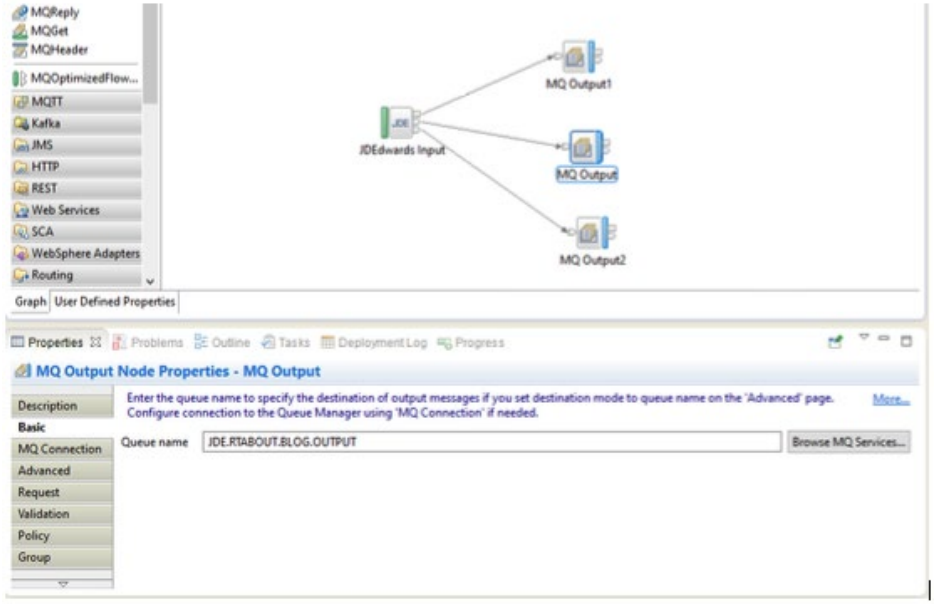

New Message Flow
Create a new message flow
Select a container for the new message flow
Container:
JDE_Inbound_Blog
New...
Message flow name:
PollAddressBookUpdateEvents
Flow organization
Use default broker schema
Schema:
(default broker schema)
Finish
Cancel

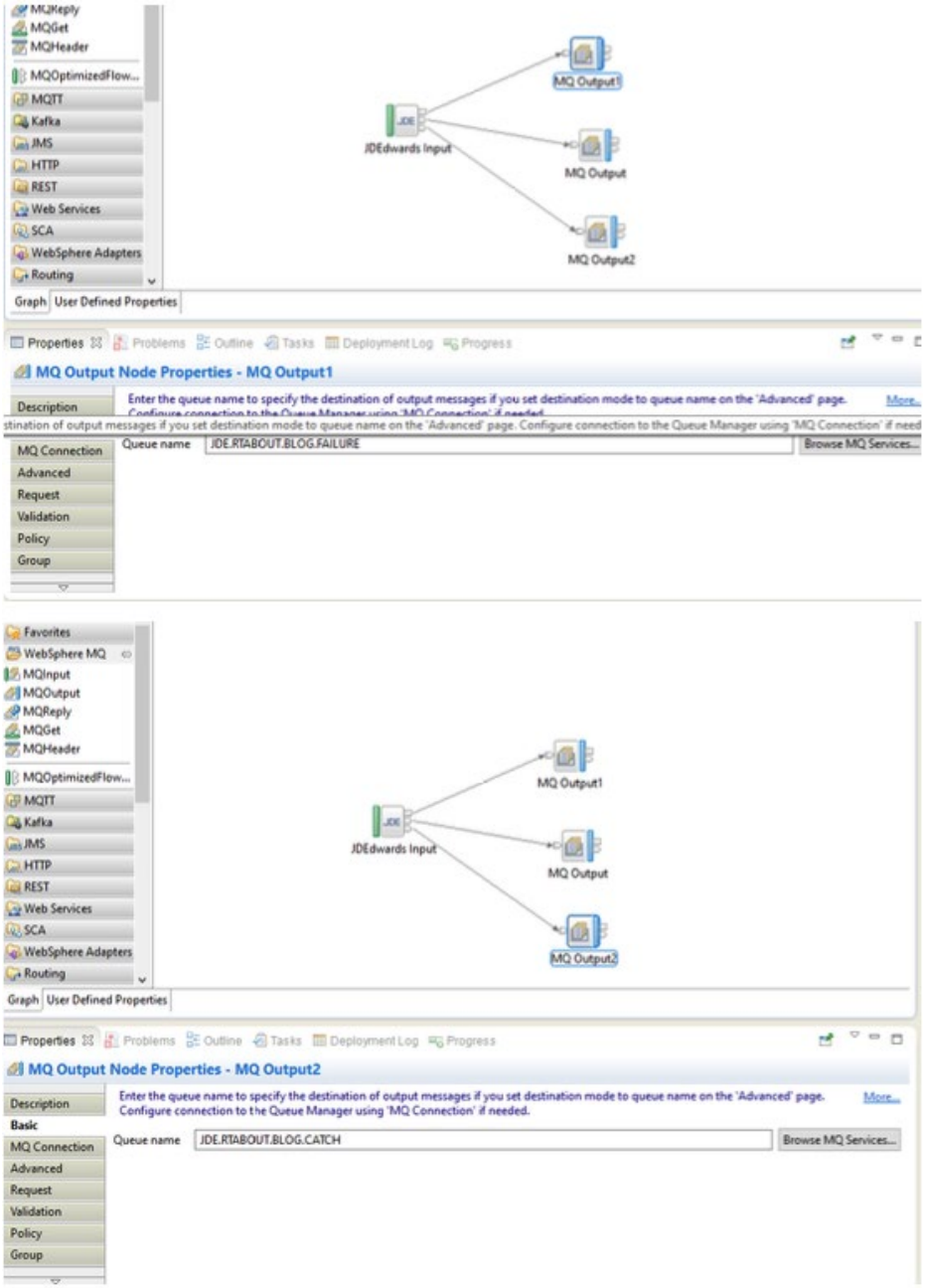

WebSphere MQ
MQInput
MQOutput
MQReply
MQGet
MQHeader
MQOptimizedFlow...
MQTT
Kafka
JMS
HTTP
REST
Web Services
SCA
WebSphere Adapters
Routing
JDE
JDEdwards Input
MQ Output1
MQ Output
MQ Output2
Graph
User Defined Properties
Properties
Problems
Outline
Tasks
Deployment Log
Progress
JDEdwards Input Node Properties - JDEdwards Input
Description
Basic
Routing
Input Message Parsing
Transactionality
Instances
Retry
Monitoring
Primary adapter component: Value must be set.
Primary adapter component*
Browse...
Secondary adapter mode
None


Adapter Component Selection
Filter names (? = any character, * = any String):
Select an Adapter file
address_update.inadapter - JDE_InboundApplication
inbound_address_new.inadapter - JDEApplication
inbound_address.inadapter - JDEApplication
JDE_AddressBook_Poll.inadapter - JDE_Inbound_Blog
JDE_Inbound_Blog
Adapters.JDEdwards
Import/Create New
OK
Cancel



Create the local queues for the MQ Output nodes and provide the queue names in respective nodes accordingly.





Now the Outbound and Inbound message flows are ready to be deployed to the IBM Integration Bus Node.

Execute the below commands, configure and check the JD Edwards jars to the IBM Integration Node.

And restart the Integration Node.

```
mqsichangeproperties <integrationNodeName> -c EISProviders -o JDEdwards -n jarsURL -v <C:\IIB\JDEEdwards\Jars>
```

Now deploy outbound application to Integration Server and test the flow.

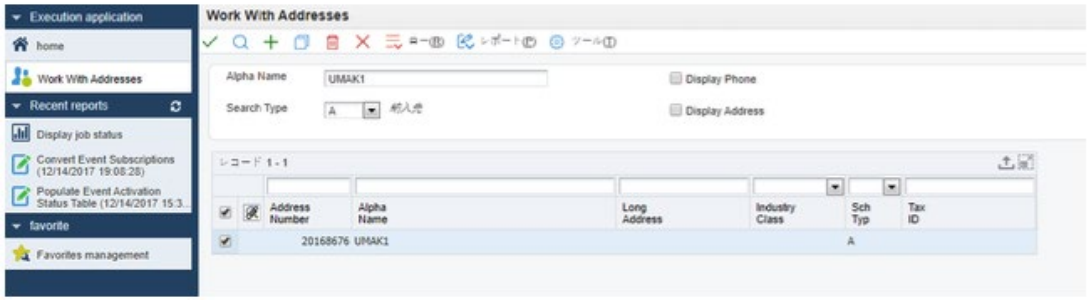
To test the outbound application, first create an address book record in the JD Edwards Enterprise One Server and send the below message to the input queue configured for MQ input node in the outbound application to update the address line for the record created above.

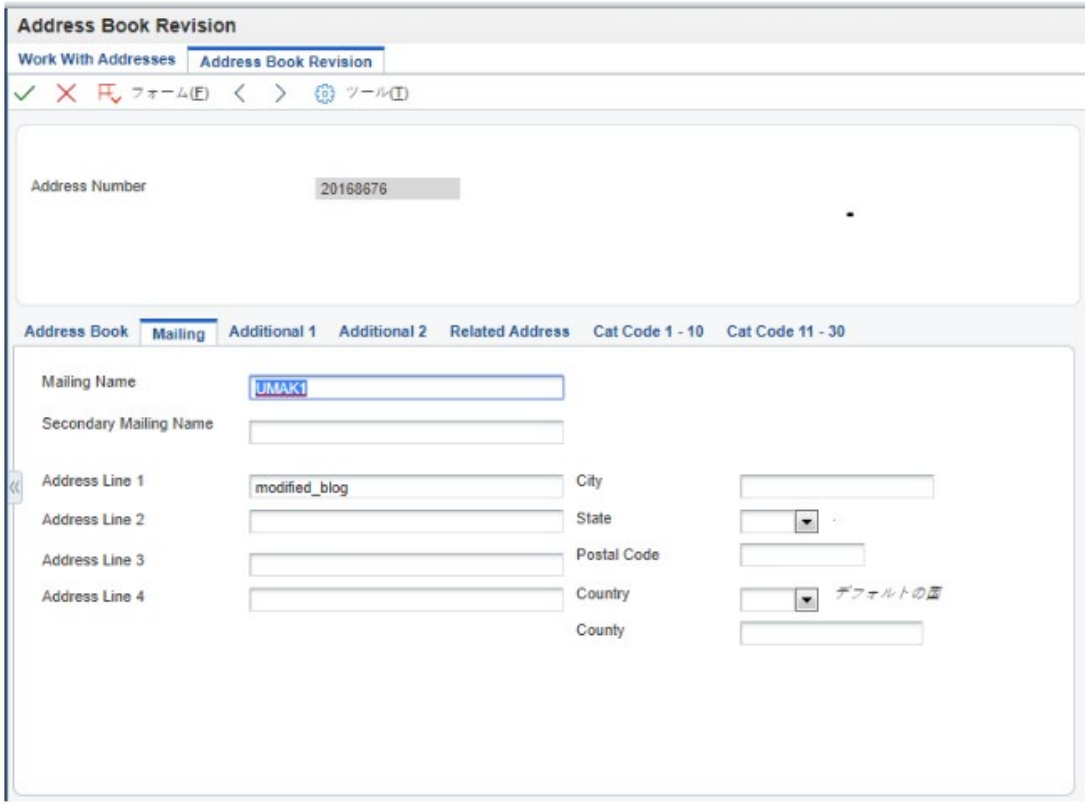
Input message sent to JDE.ADDRESS.INPUT input queue:

<ChangeAddressLine3><AddressBookMasterMBF><Cactioncode>C</Cactioncode><Cupdatemasterfile>1</Cupdatemasterfile>
<Mnaddressbooknumber>20168676</Mnaddressbooknumber><Szsearchtype>A</Szsearchtype><Szalphaname>UMAK1</Szalphaname>
<Szmailingname>UMAK1</Szmailingname><Szbusinessunit> A1</Szbusinessunit><Szaddressline1>modified_blog</Szaddressline1><Cpayablesynm>Y</Cpayablesynm>
</AddressBookMasterMBF></ChangeAddressLine3>

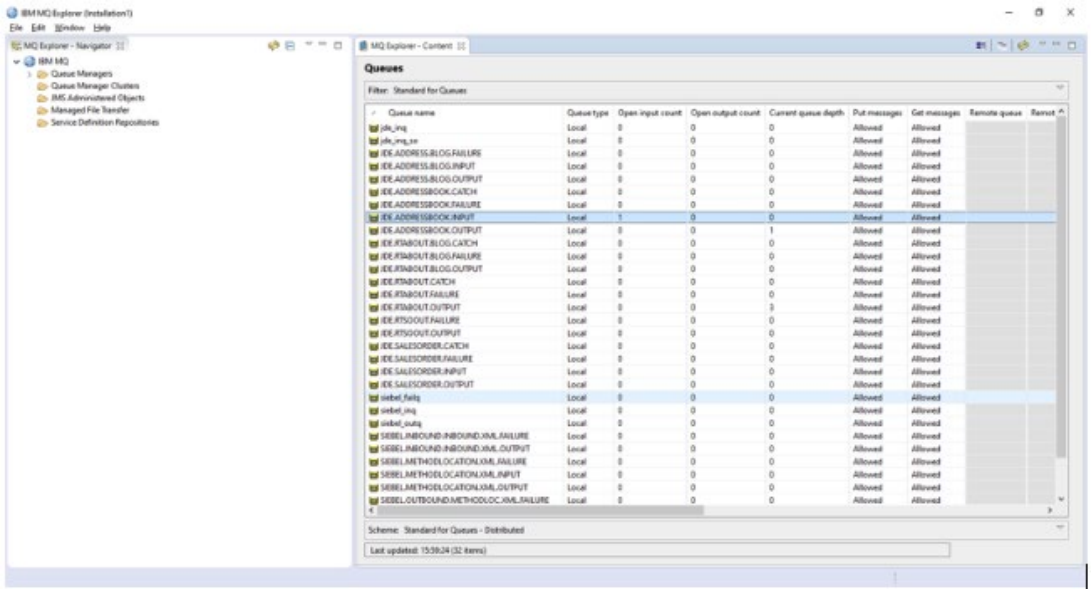
Check the JDE.ADDRESSBOOK.OUTPUT output queue and then login to the Webui and see if the record is updated.

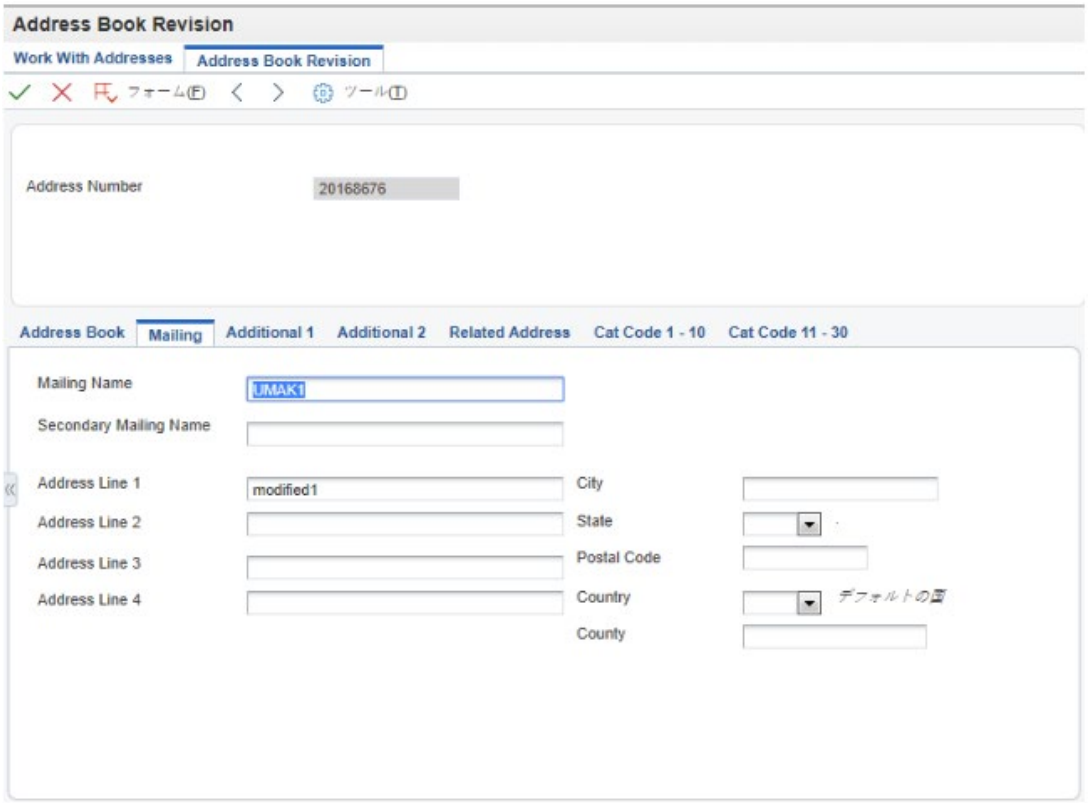
Before the update:



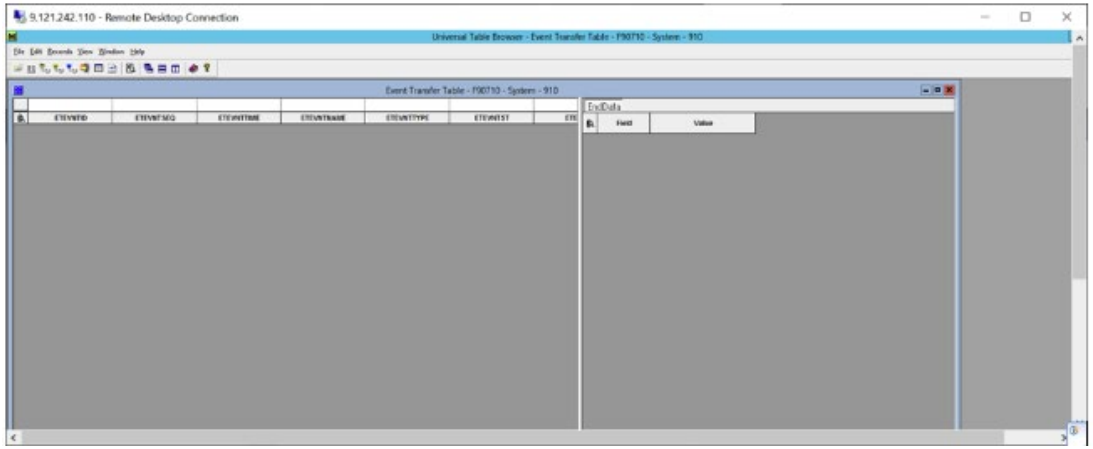


After the update:

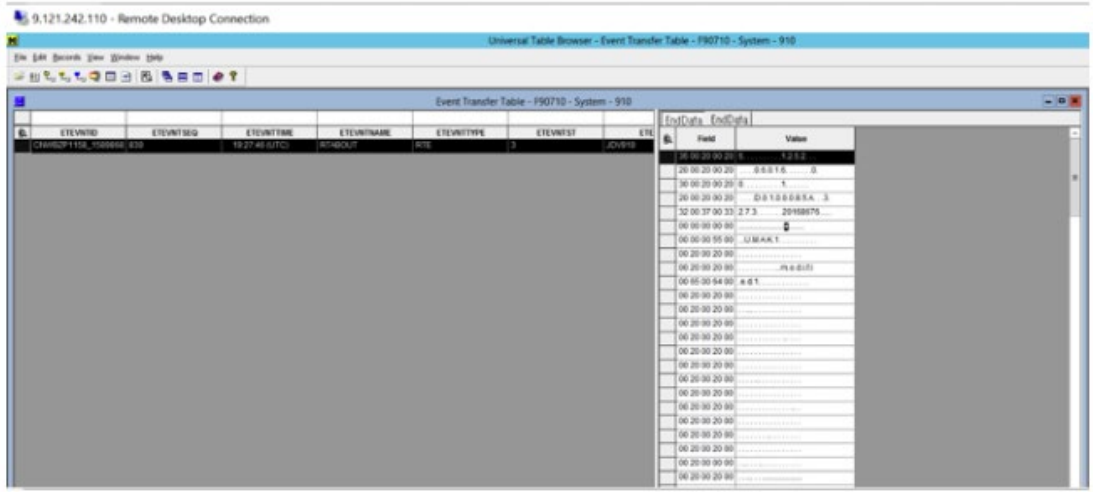




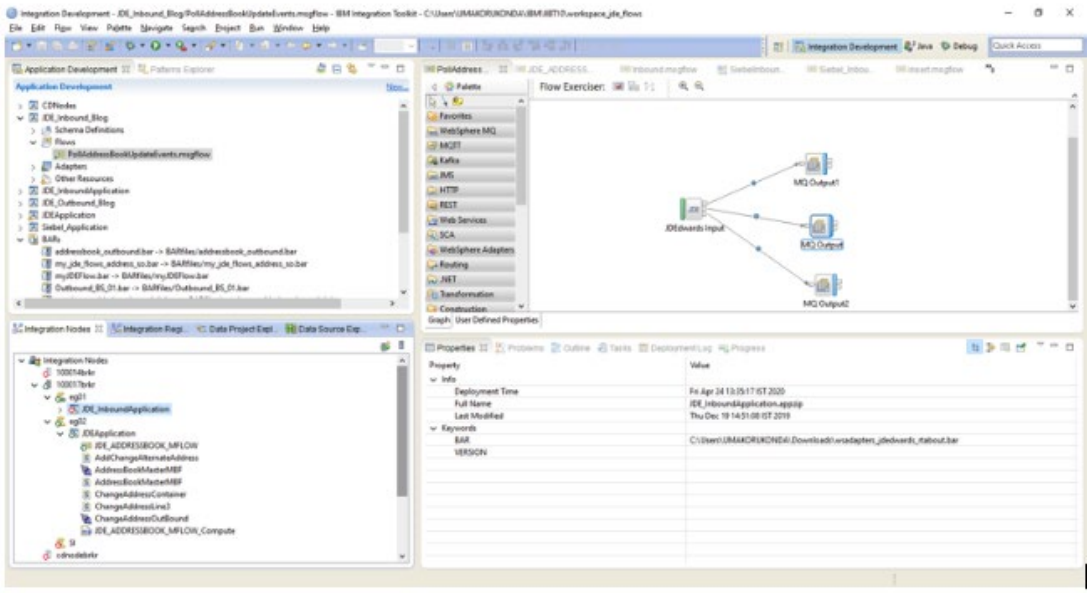
Now login to the machine where event table is and check if the record is present in the table or not.



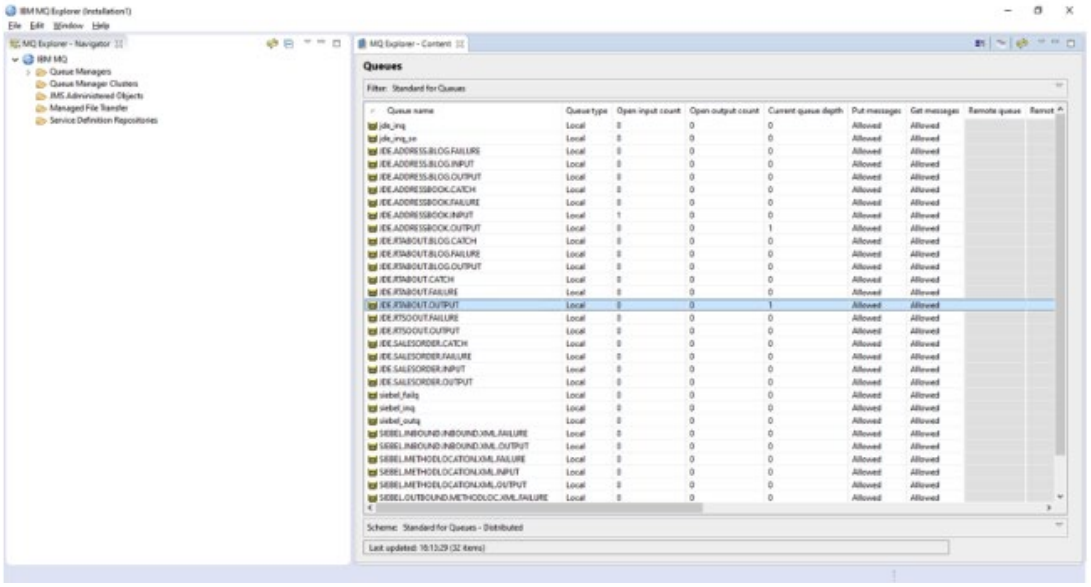
After update:



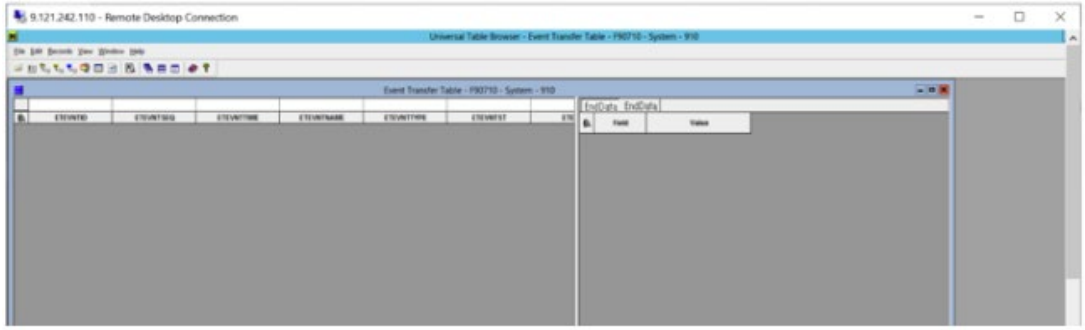
Now deploy inbound application to another Integration Server in the same IBM Integration Bus Node.



Check the JDE.RTABOUT.OUTPUT queue and it shows a message has come. This means that JDE Input node in the message flow has polled the updated record.



Now look in the event table and there will be no records.



Now we can read the data from the MQ Output node configured for the output terminal of the JDE input node and validate the data.

Reference Links:

JDEdwardsInput node:
https://www.ibm.com/support/knowledgecenter/en/SSMKHH_10.0.0/com.ibm.etools.mft.doc/bc22690_.htm
JDEdwardsRequest node:
https://www.ibm.com/support/knowledgecenter/SSMKHH_10.0.0/com.ibm.etools.mft.doc/bc22700_.html
WebSphere Configuration properties for JDEdwards:
https://www.ibm.com/support/knowledgecenter/SSMKHH_10.0.0/com.ibm.etools.mft.doc/bc22680_.html

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