DB Adapter Integration

Demo

Heba Owis

26 May 2024

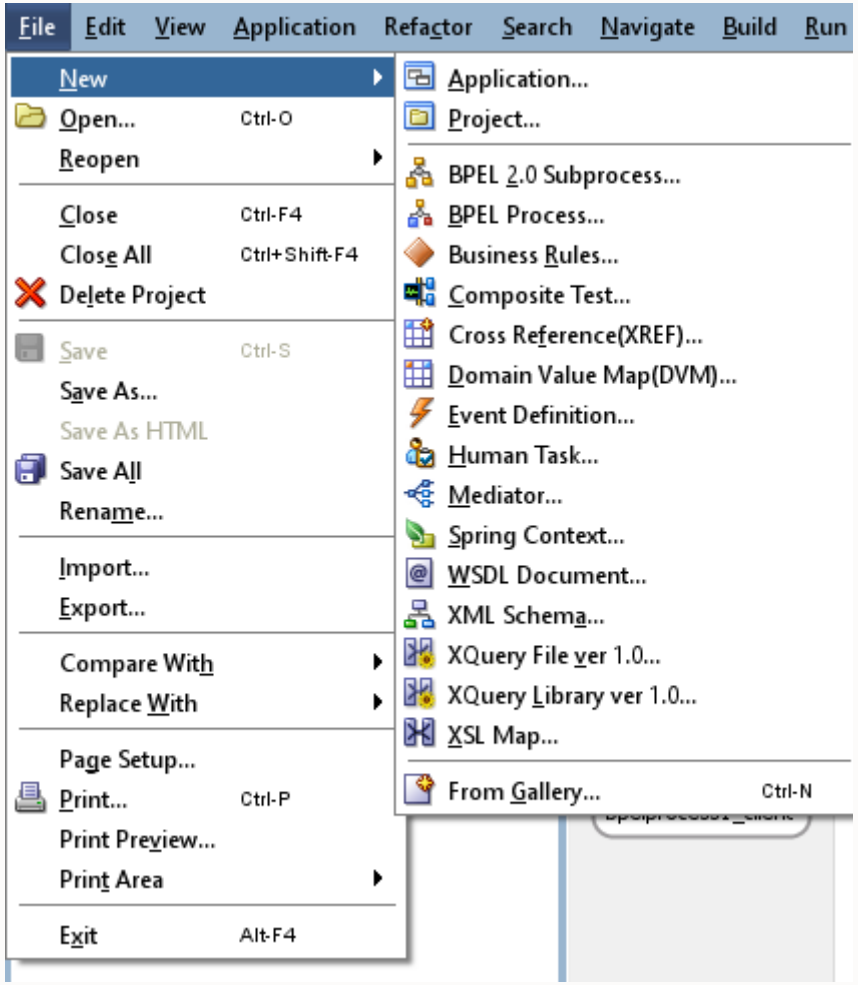
Agenda

1. Development of “QueryDept” SOA Composite
2. Deployment of SOA Composite

Development of “QueryDept” SOA Composite

DB Adapter

New Project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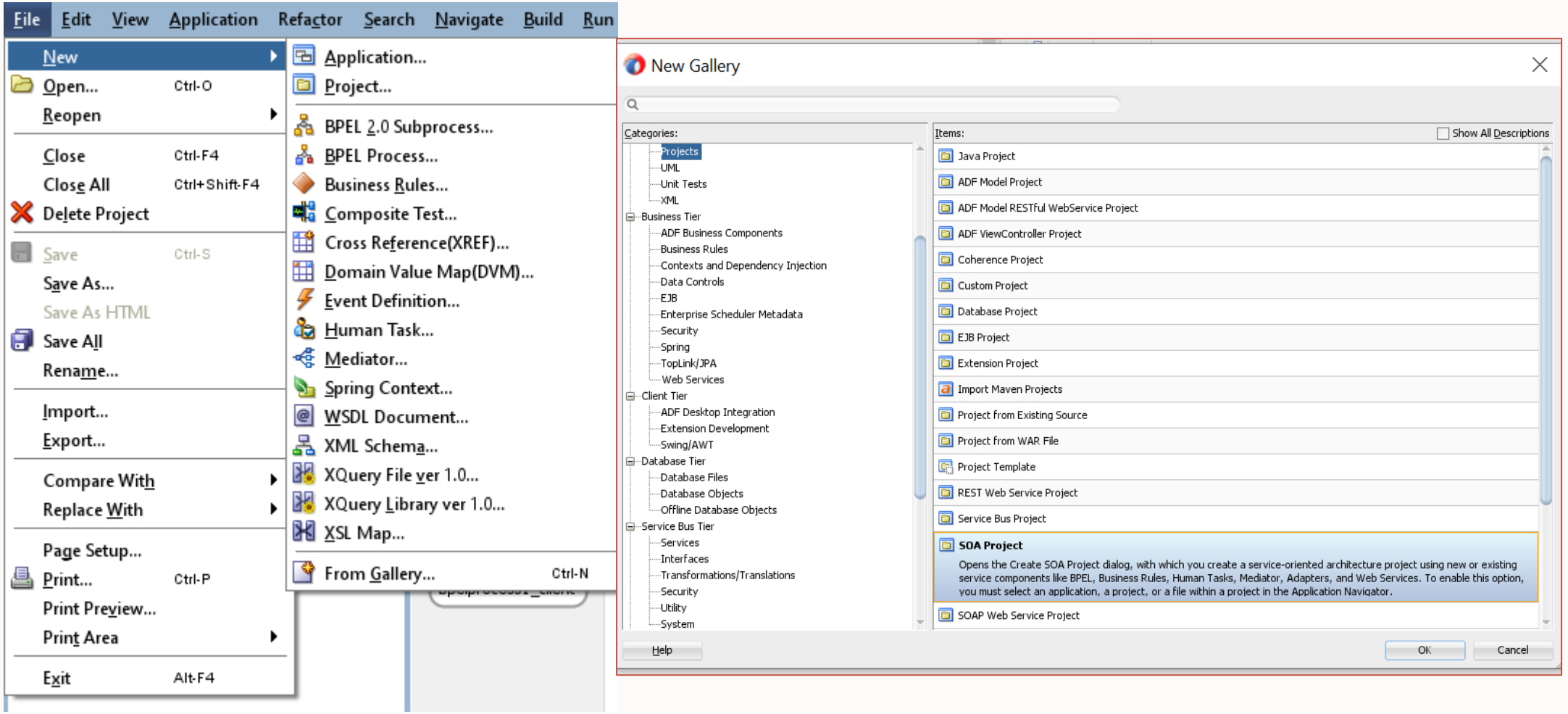
View
Application
Refactor
Search
Navigate
Build
Run
New
Open... Ctrl-O
Reopen
Close Ctrl-F4
Close All Ctrl+Shift-F4
Delete Project
Save Ctrl-S
Save As...
Save As HTML
Save All
Rename...
Import...
Export...
Compare With
Replace With
Page Setup...
Print... Ctrl-P
Print Preview...
Print Area
Exit Alt-F4
Application...
Project...
BPEL 2.0 Subprocess...
BPEL Process...
Business Rules...
Composite Test...
Cross Reference(XREF)...
Domain Value Map(DVM)...
Event Definition...
Human Task...
Mediator...
Spring Context...
WSDL Document...
XML Schema...
XQuery File ver 1.0...
XQuery Library ver 1.0...
XSL Map...
From Gallery... Ctrl-N

New Project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Search
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Build
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Open... Ctrl-O
Reopen
Close Ctrl-F4
Close All Ctrl+Shift-F4
Delete Project
Save Ctrl-S
Save As...
Save As HTML
Save All
Rename...
Import...
Export...
Compare With
Replace With
Page Setup...
Print... Ctrl-P
Print Preview...
Print Area
Exit Alt-F4
Application...
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BPEL 2.0 Subprocess...
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Cross Reference(XREF)...
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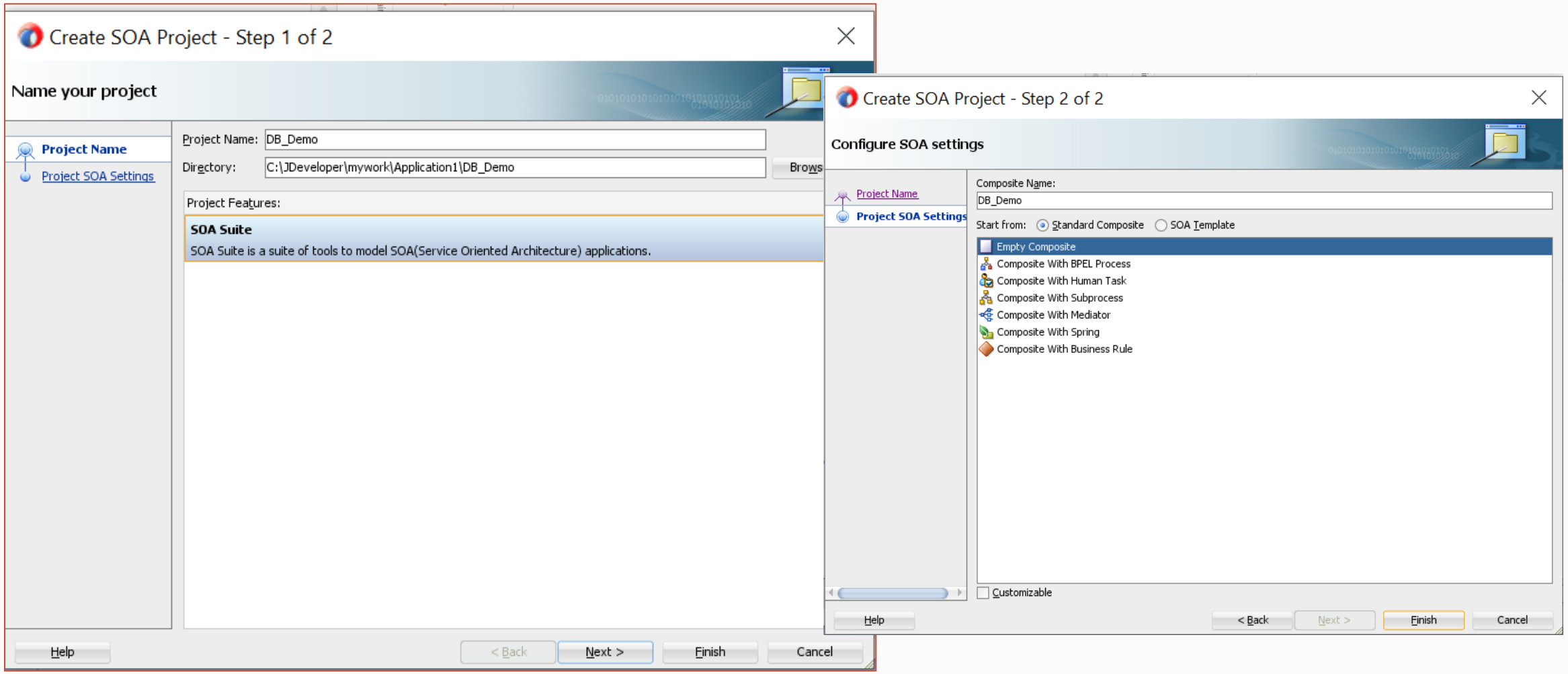
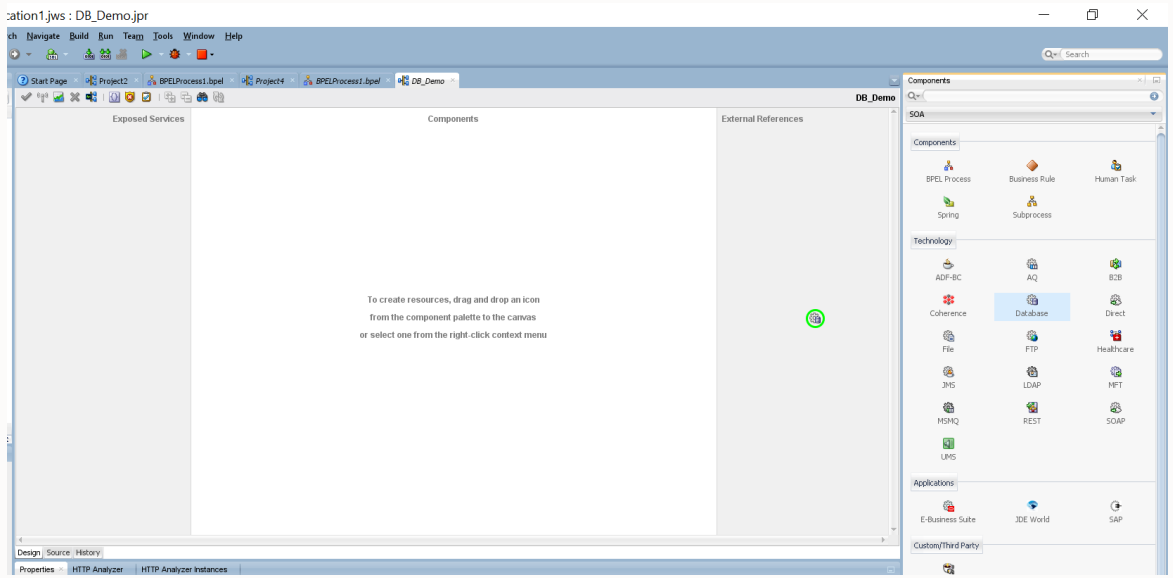
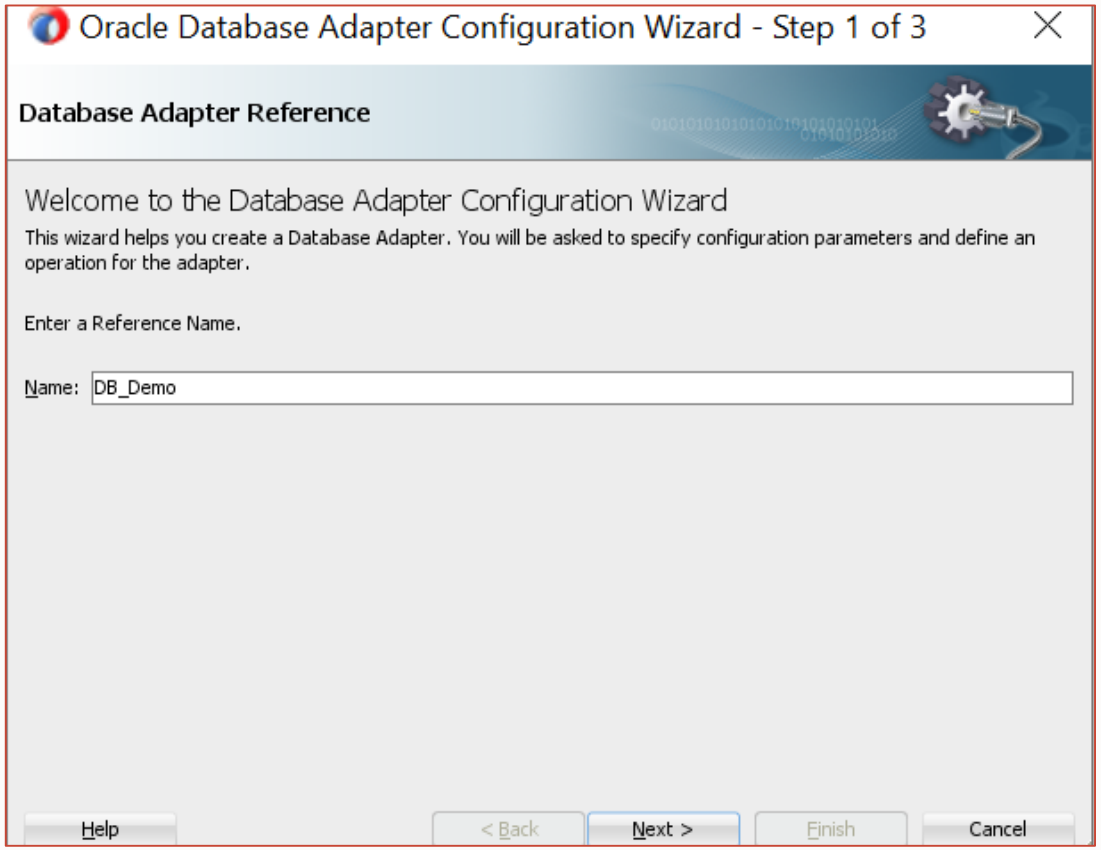
Spring Context...
WSDL Document...
XML Schema...
XQuery File ver 1.0...
XQuery Library ver 1.0...
XSL Map...
From Gallery... Ctrl-N
New Gallery
Categories:
Items:
Show All Descriptions
Projects
UML
Unit Tests
XML
Business Tier
ADF Business Components
Business Rules
Contexts and Dependency Injection
Data Controls
EJB
Enterprise Scheduler Metadata
Security
Spring
TopLink/JPA
Web Services
Client Tier
ADF Desktop Integration
Extension Development
Swing/AWT
Database Tier
Database Files
Database Objects
Offline Database Objects
Service Bus Tier
Services
Interfaces
Transformations/Translations
Security
Utility
System
Java Project
ADF Model Project
ADF Model RESTful WebService Project
ADF ViewController Project
Coherence Project
Custom Project
Database Project
EJB Project
Extension Project
Import Maven Projects
Project from Existing Source
Project from WAR File
Project Template
REST Web Service Project
Service Bus Project
SOA Project
Opens the Create SOA Project dialog, with which you create a service-oriented architecture project using new or existing service components like BPEL, Business Rules, Human Tasks, Mediator, Adapters, and Web Services. To enable this option, you must select an application, a project, or a file within a project in the Application Navigator.
SOAP Web Service Project
Help
OK
Cancel

Project Details

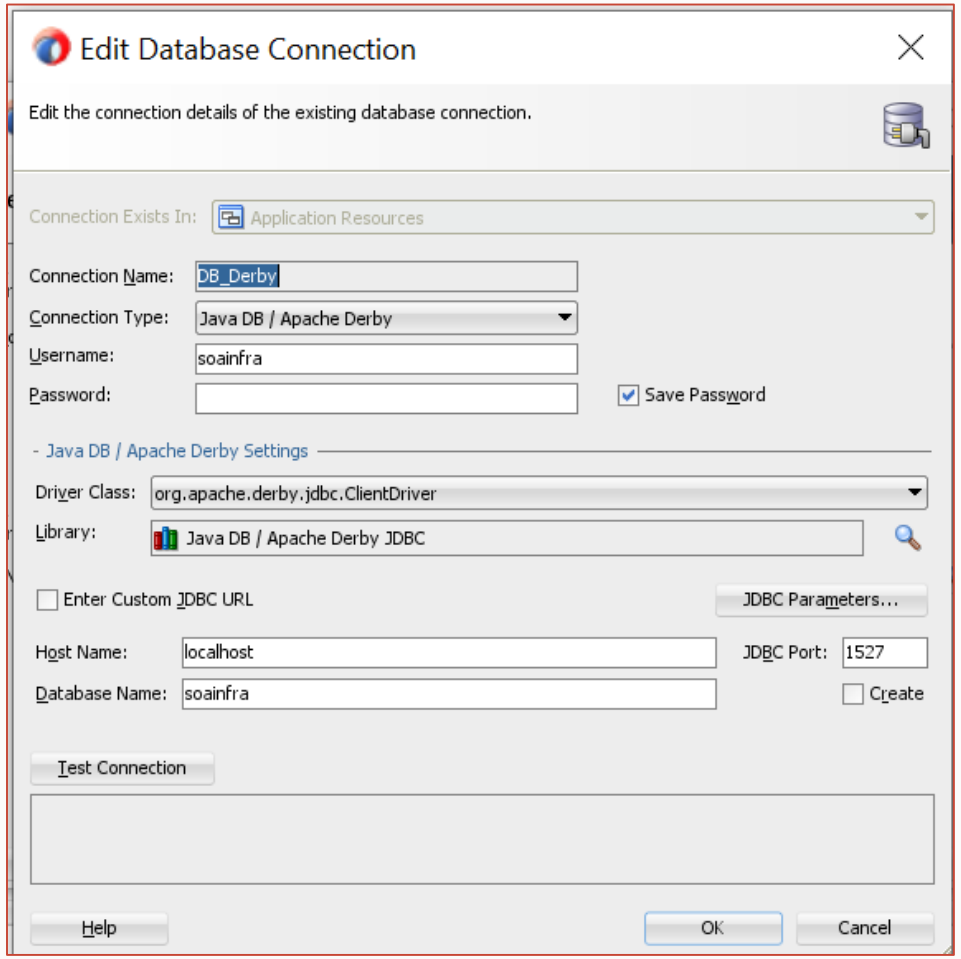


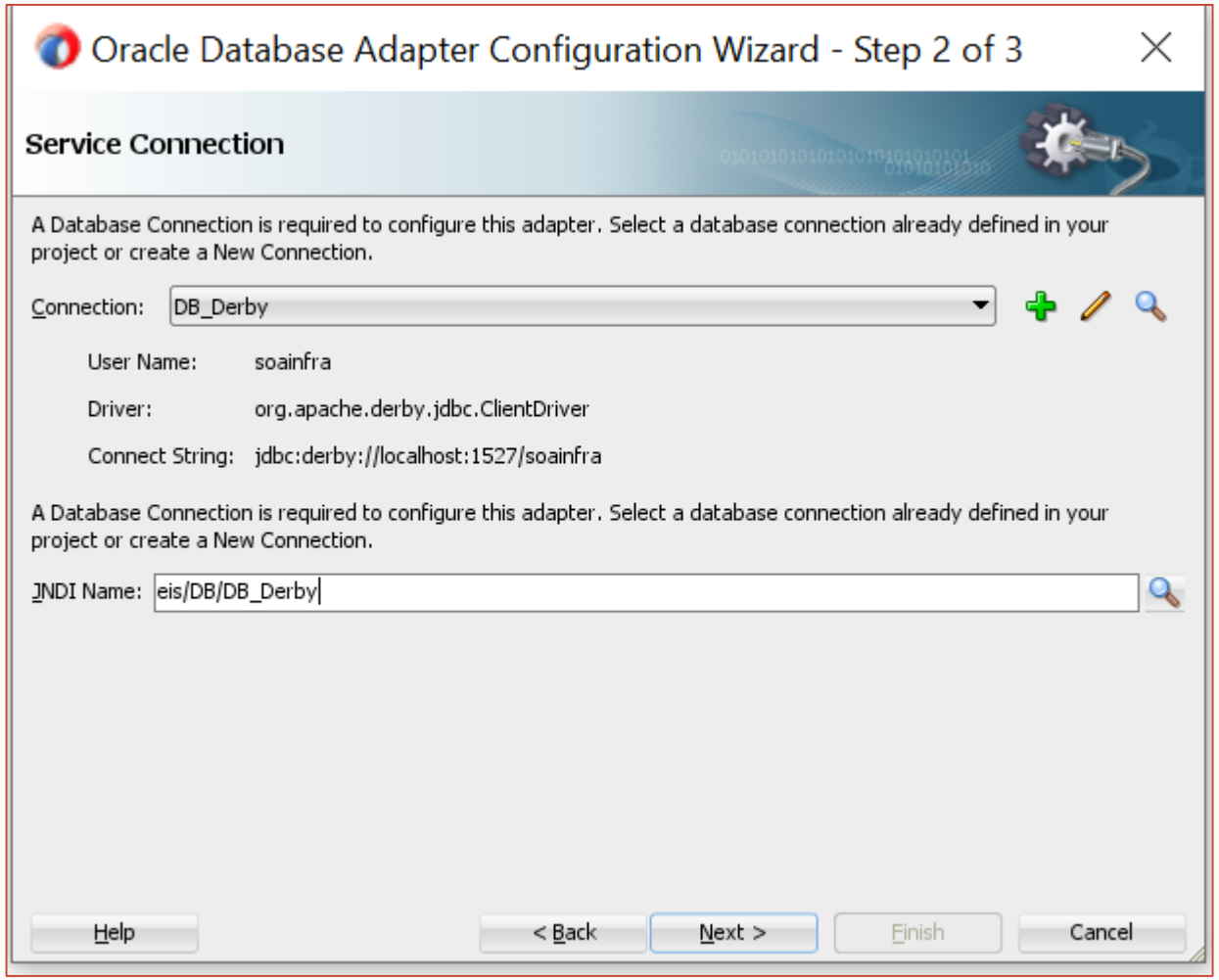
Database Adapter



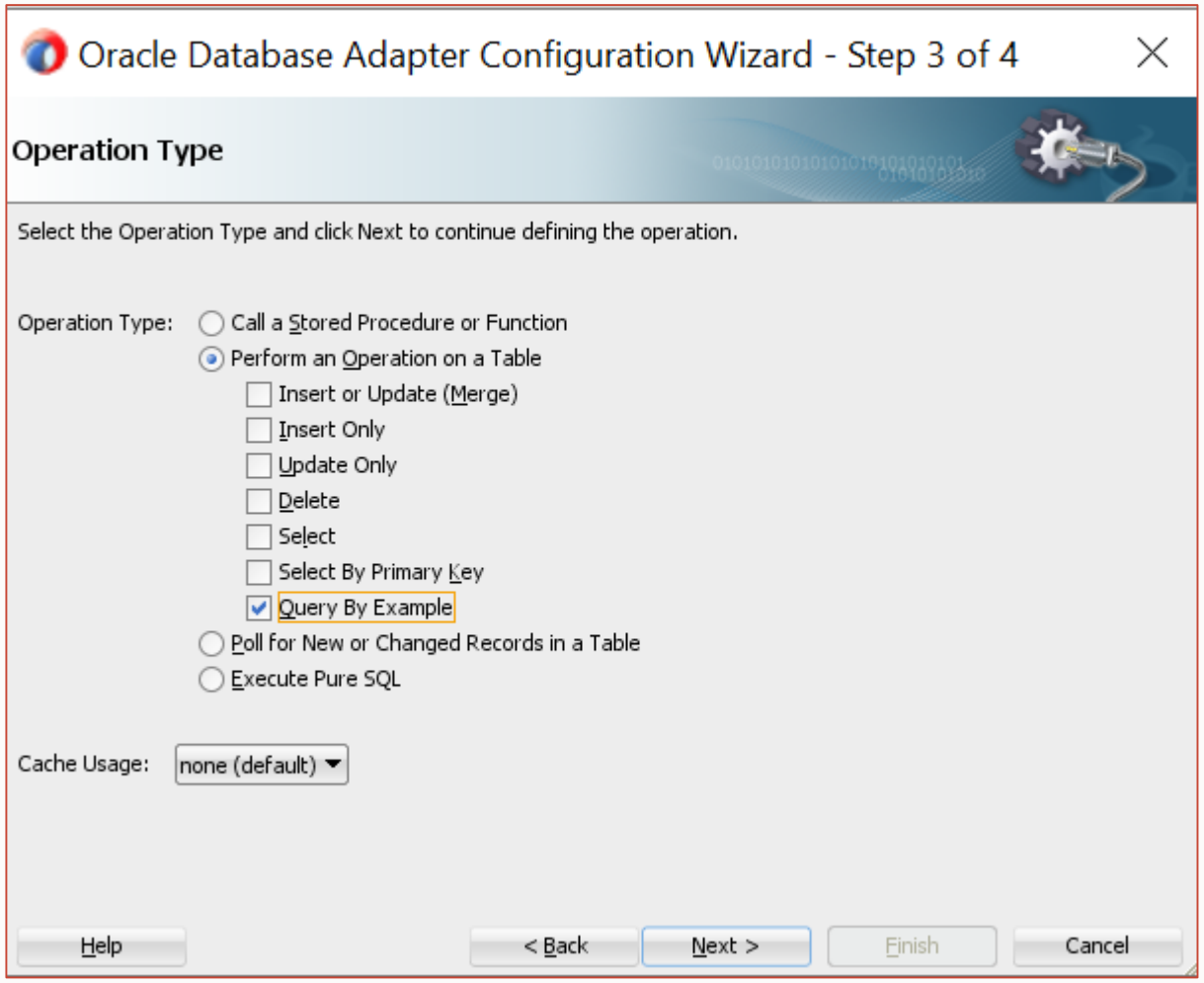


DB Connection - JNDI

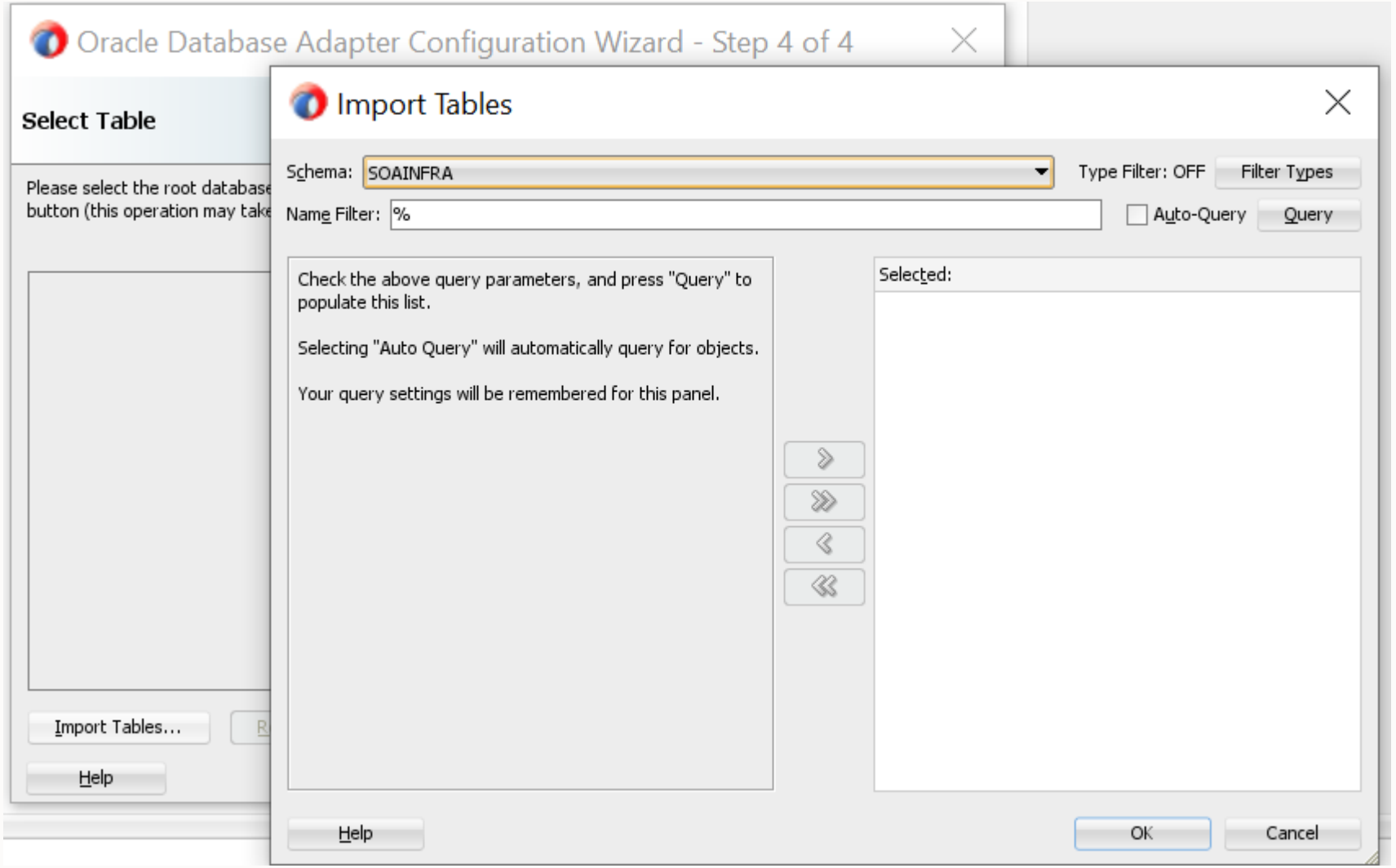




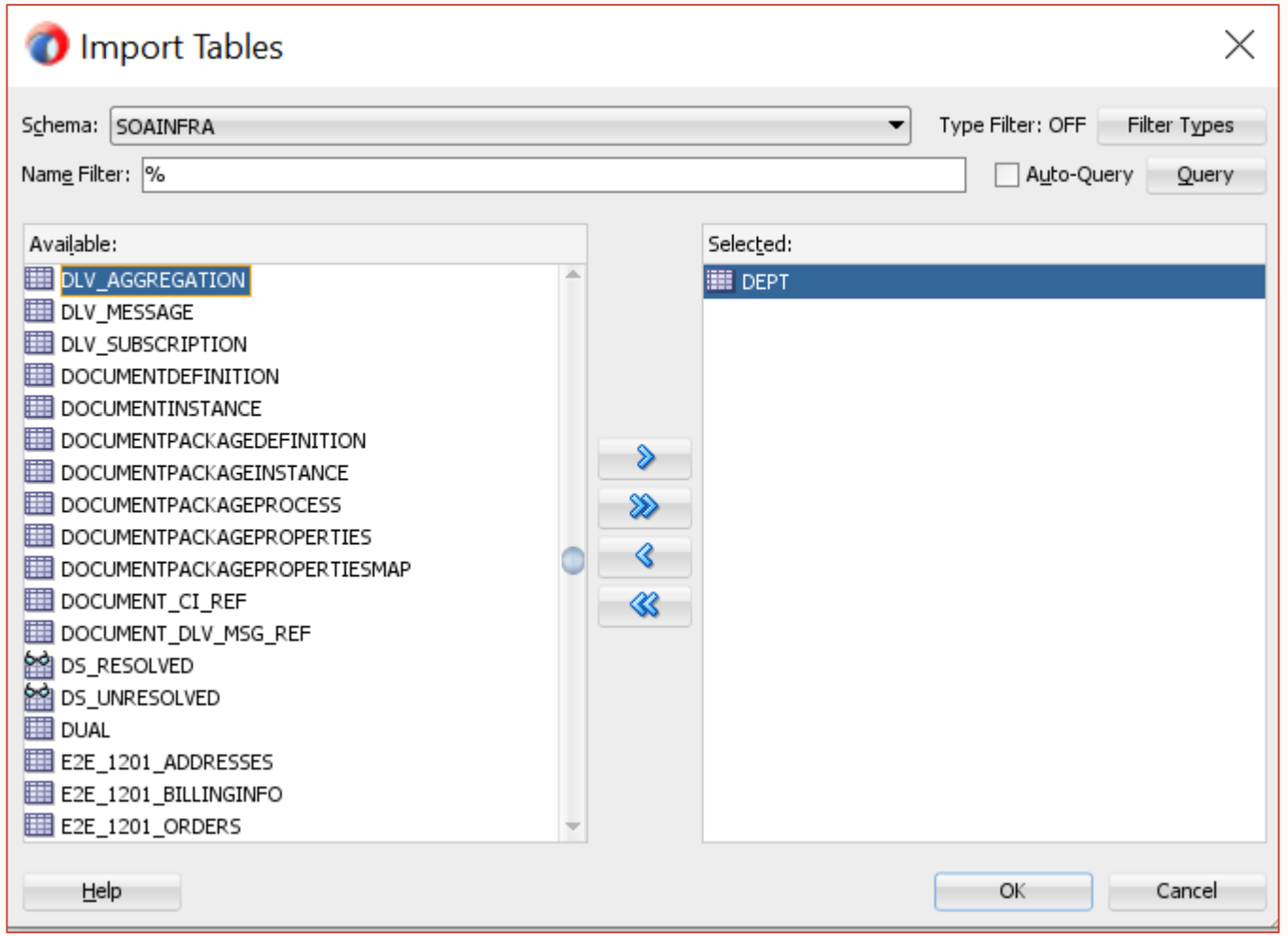
Query by Example



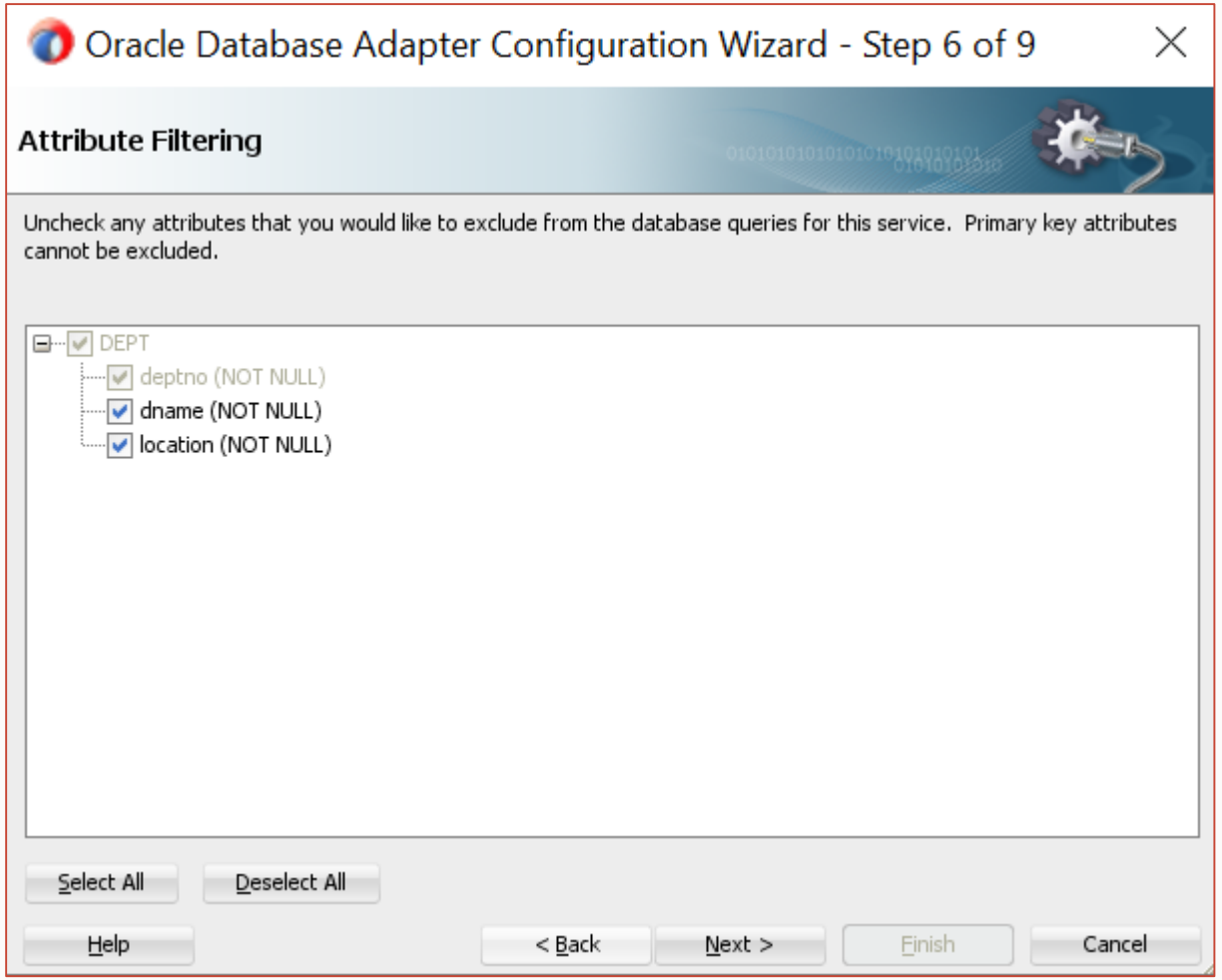
Select Table



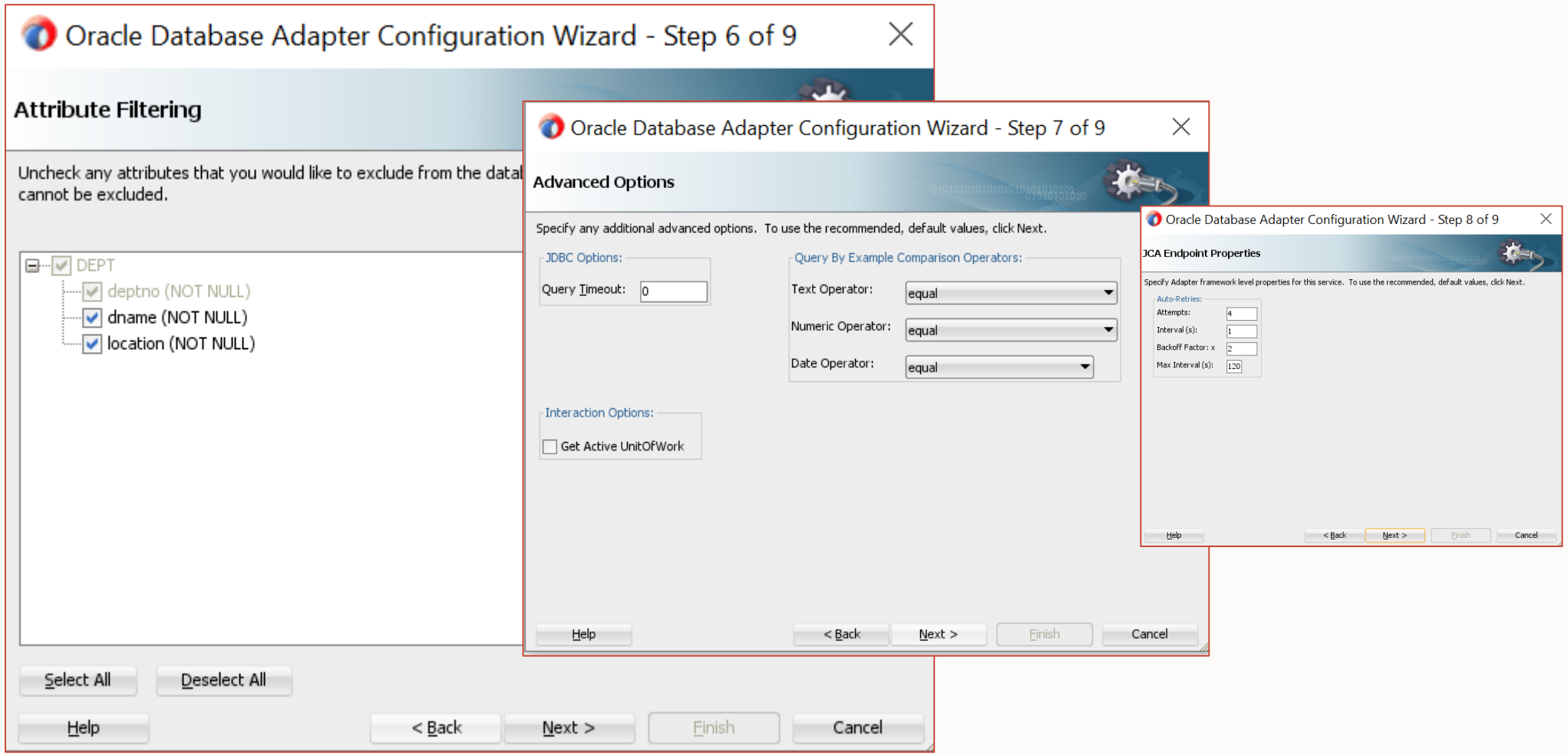
Import Table



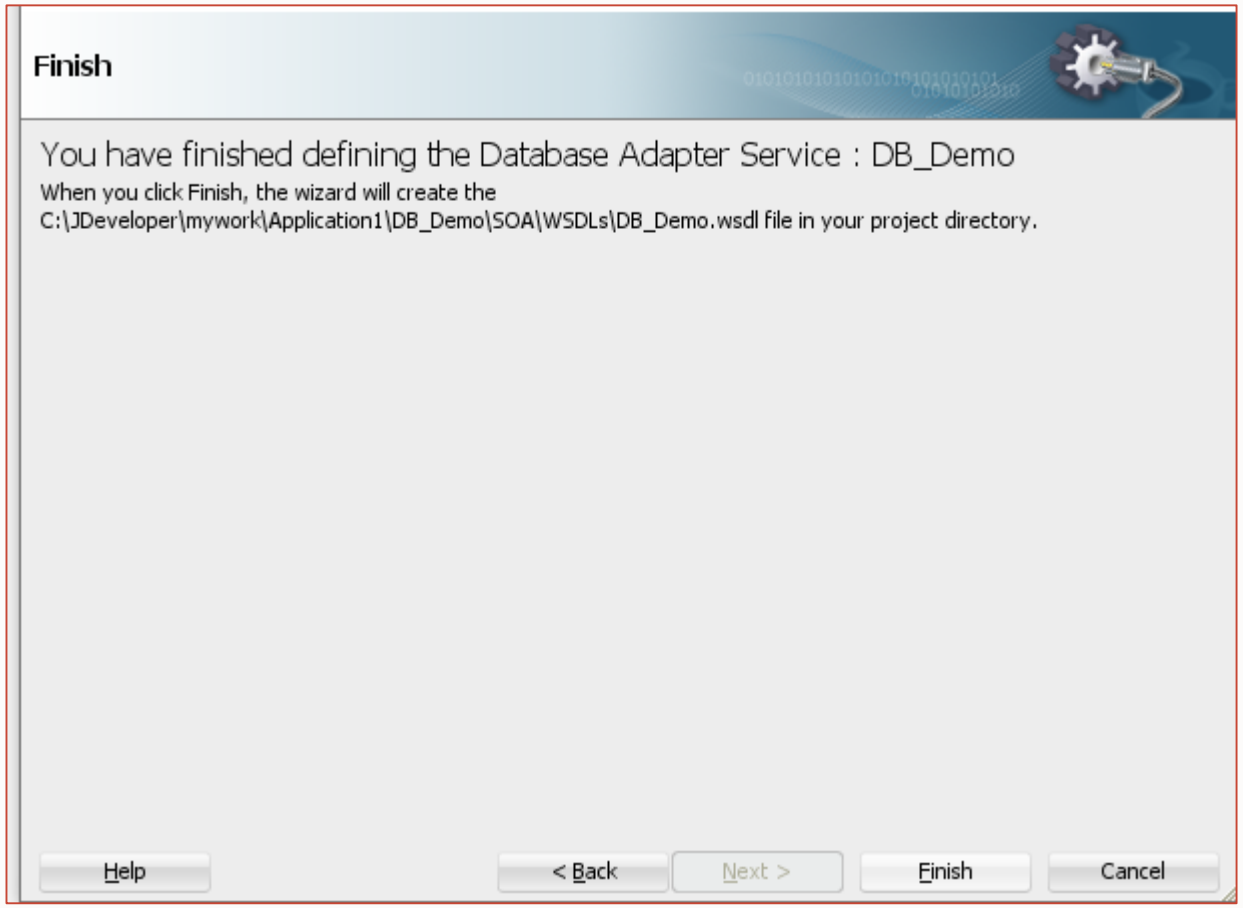
Filtering


Oracle Database Adapter Configuration Wizard - Step 6 of 9
Attribute Filtering
Uncheck any attributes that you would like to exclude from the database queries for this service. Primary key attributes cannot be excluded.
DEPT
deptno (NOT NULL)
dname (NOT NULL)
location (NOT NULL)
Select All
Deselect All
Help
< Back
Next >
Finish
Cancel

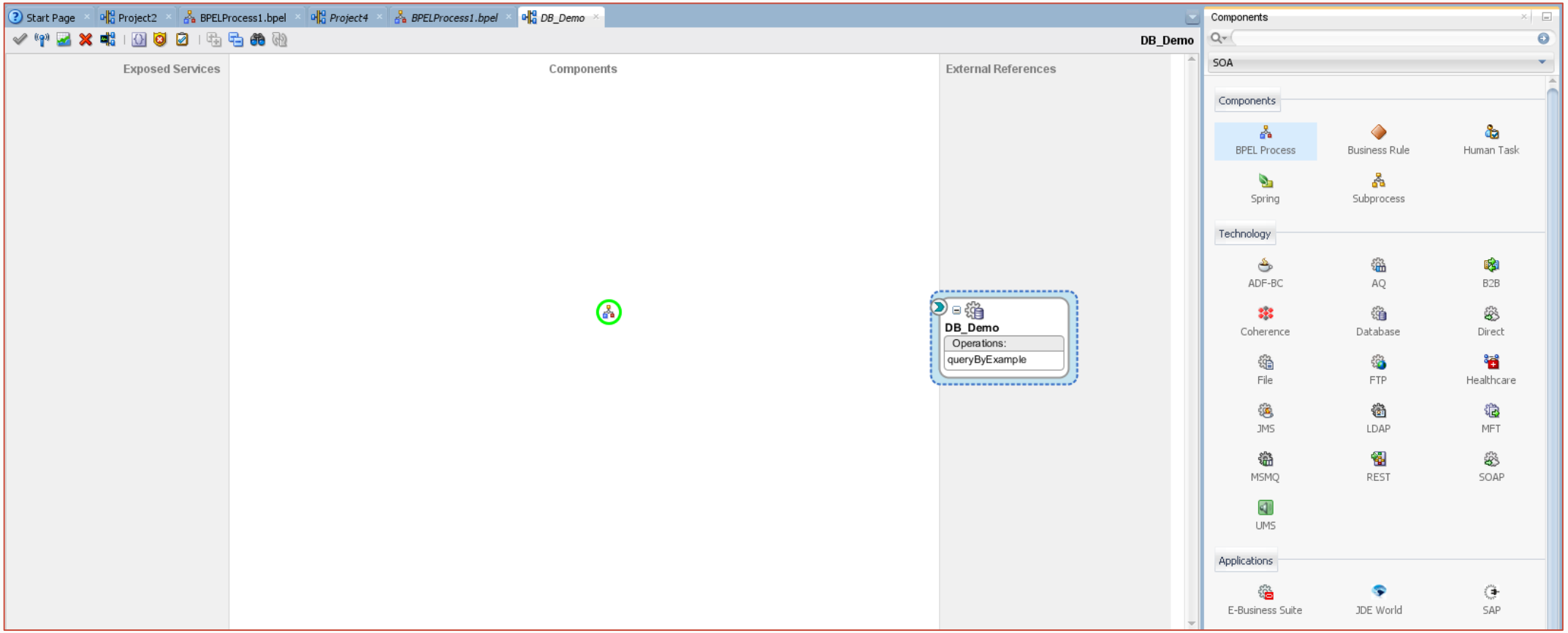
Filtering- Accept Default Values



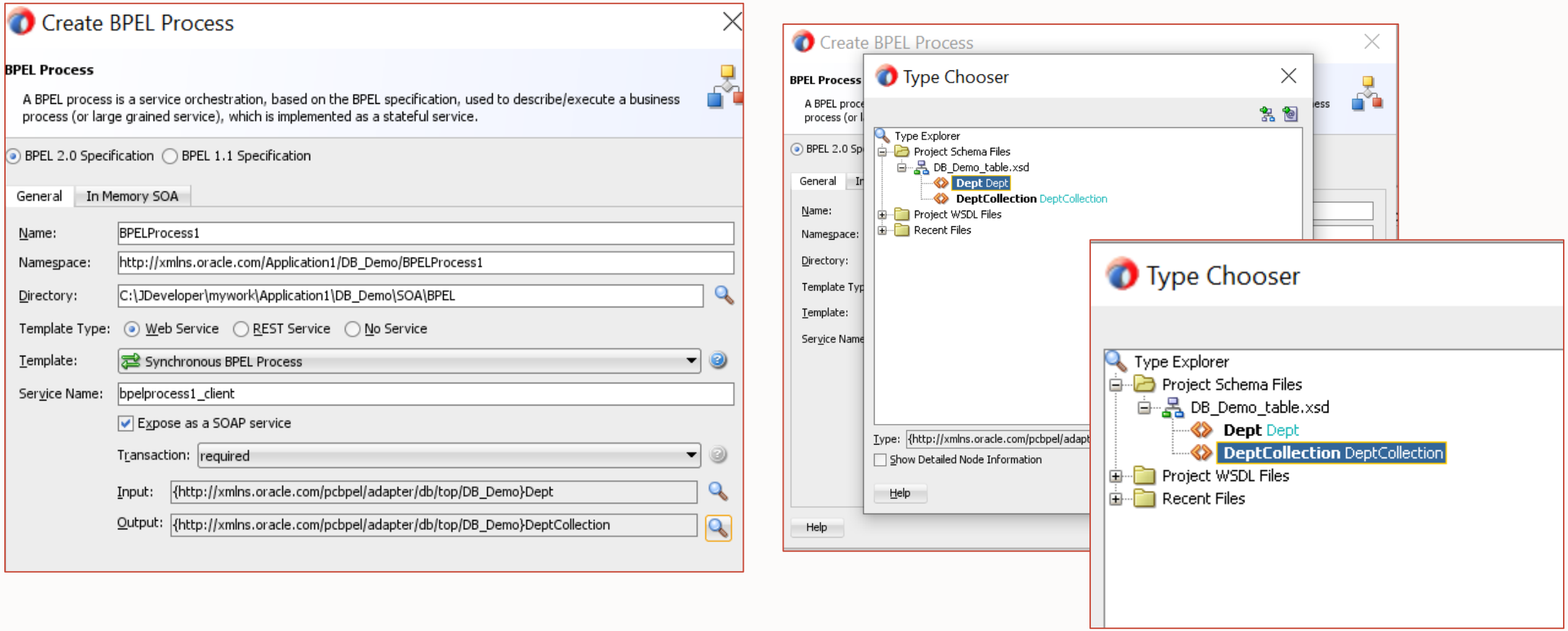
Finish


Finish
You have finished defining the Database Adapter Service : DB_Demo
When you click Finish, the wizard will create the
C:\JDeveloper\mywork\Application1\DB_Demo\SOA\WSDLs\DB_Demo.wsdl file in your project directory.
Help
< Back
Next >
Finish
Cancel

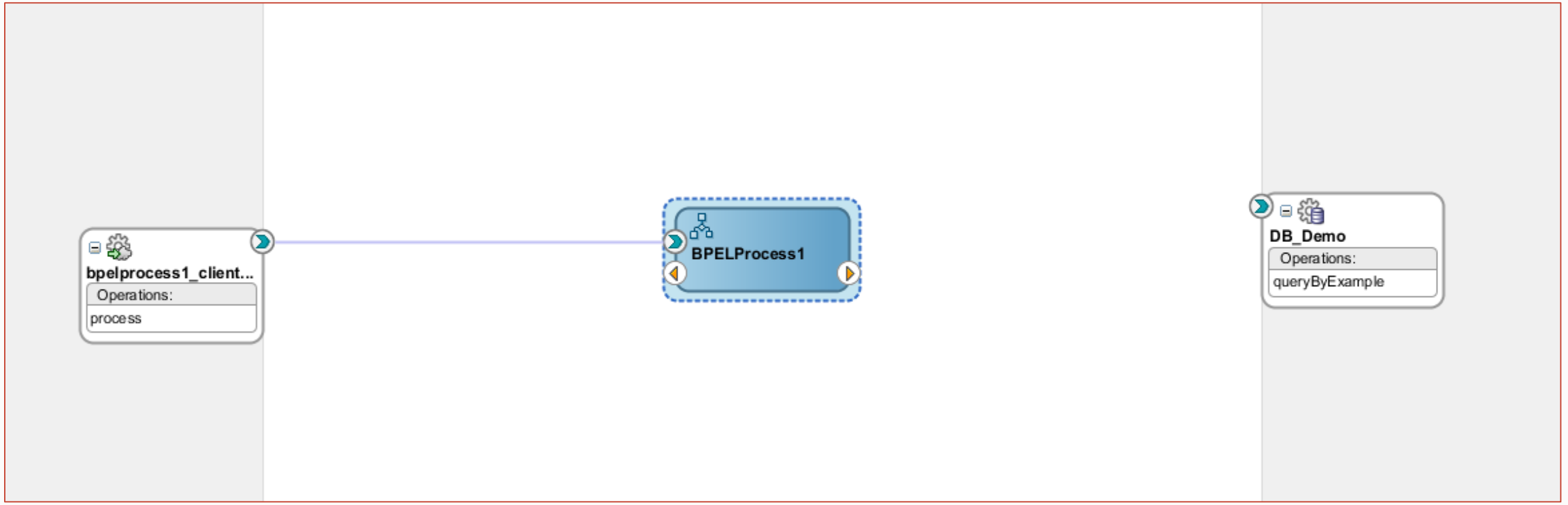
Drag BPEL Process



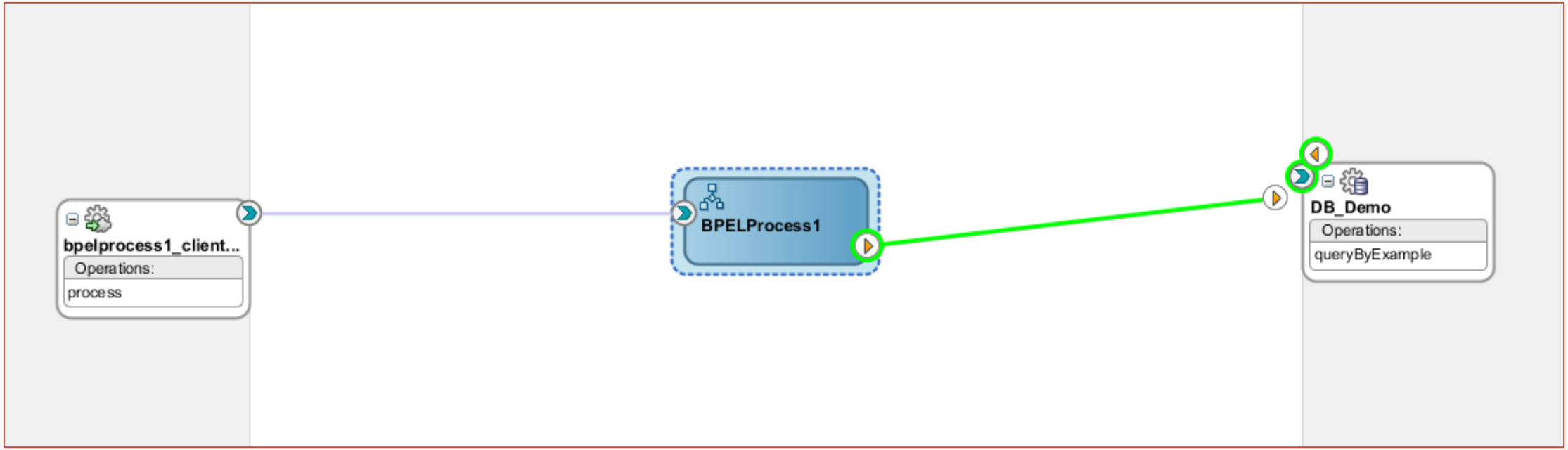
Synchronous Process



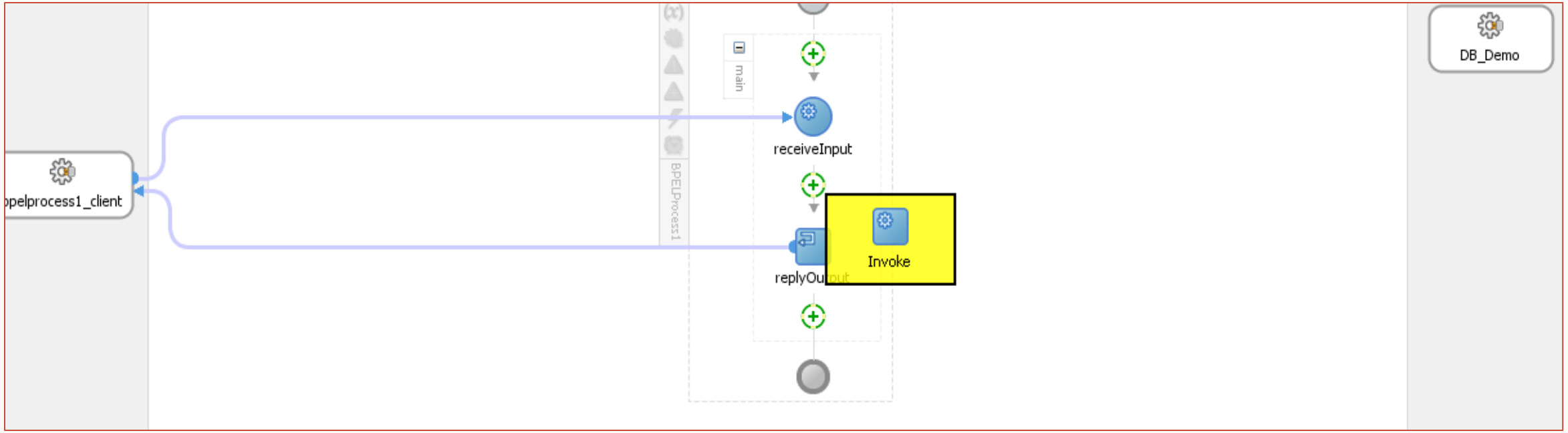
BPEL Interface



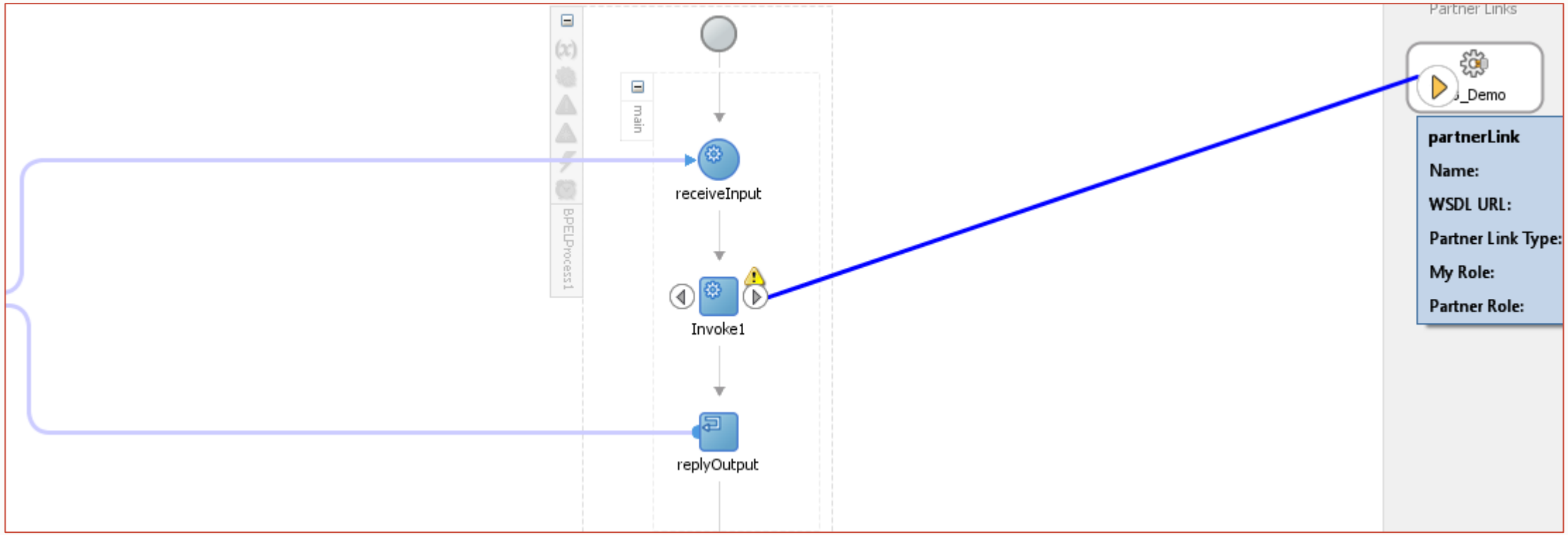
Link BPEL to DB Adapter



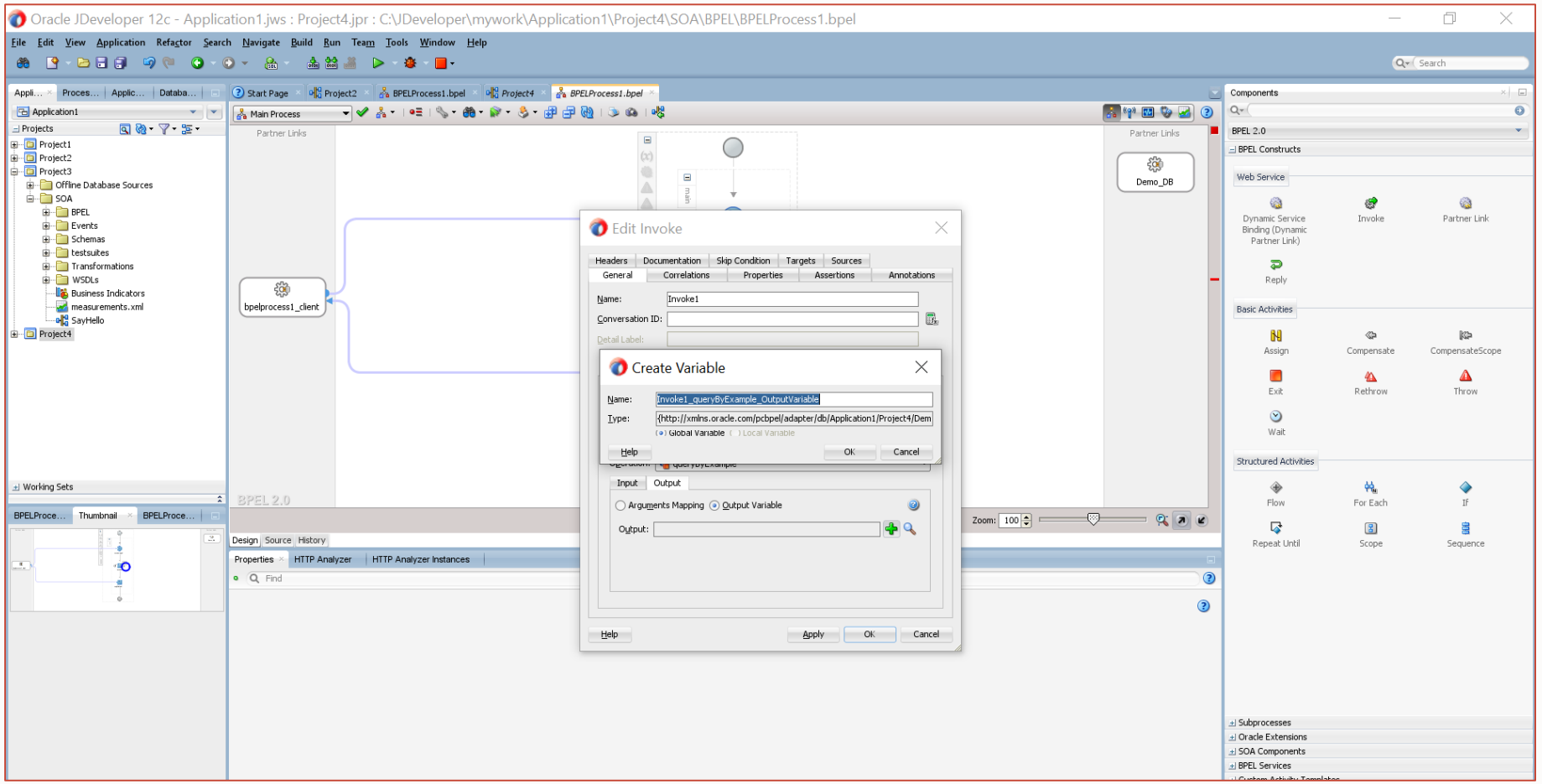
Drag Invoke



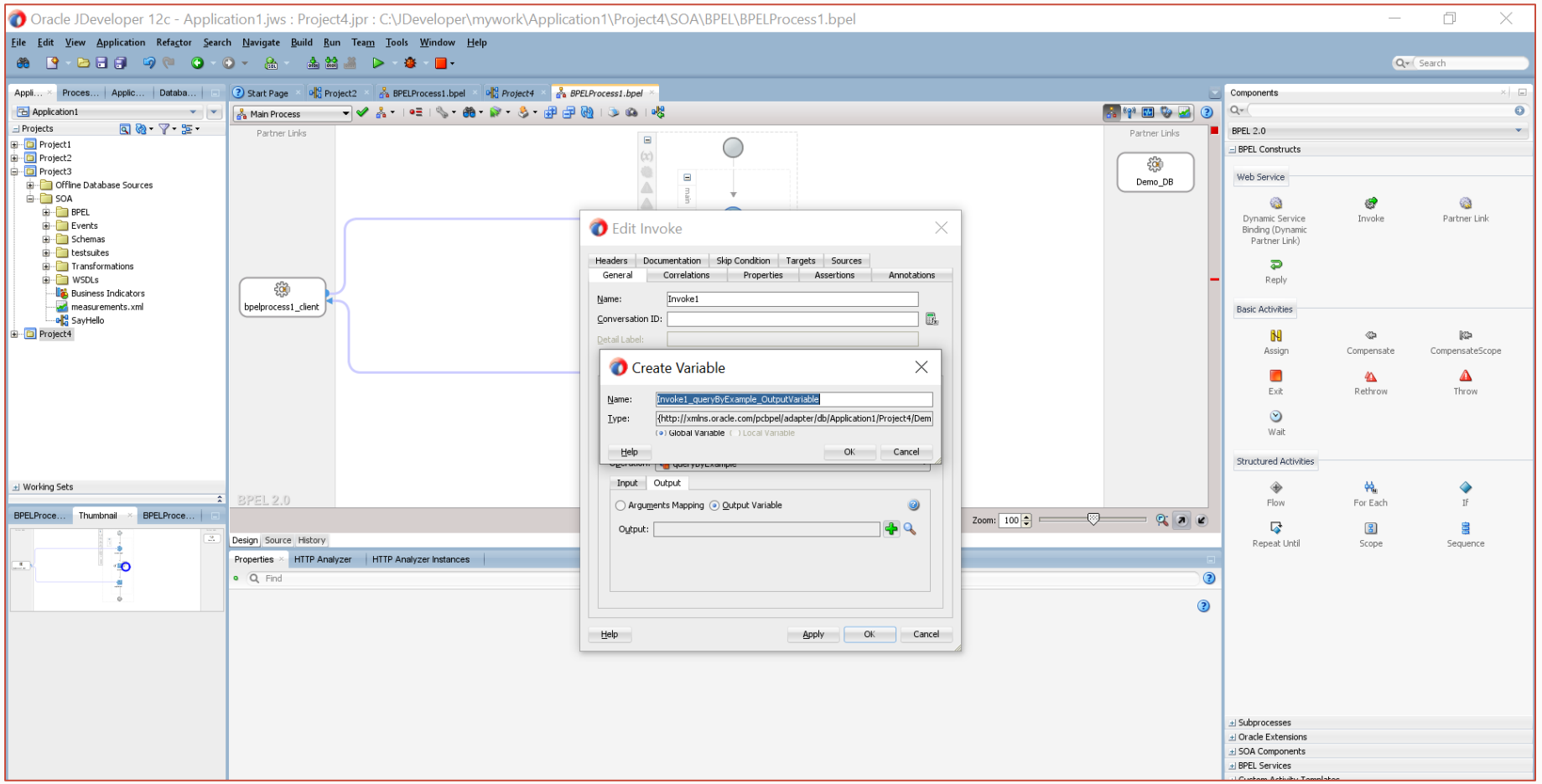
Link Invoke to DB Adapter



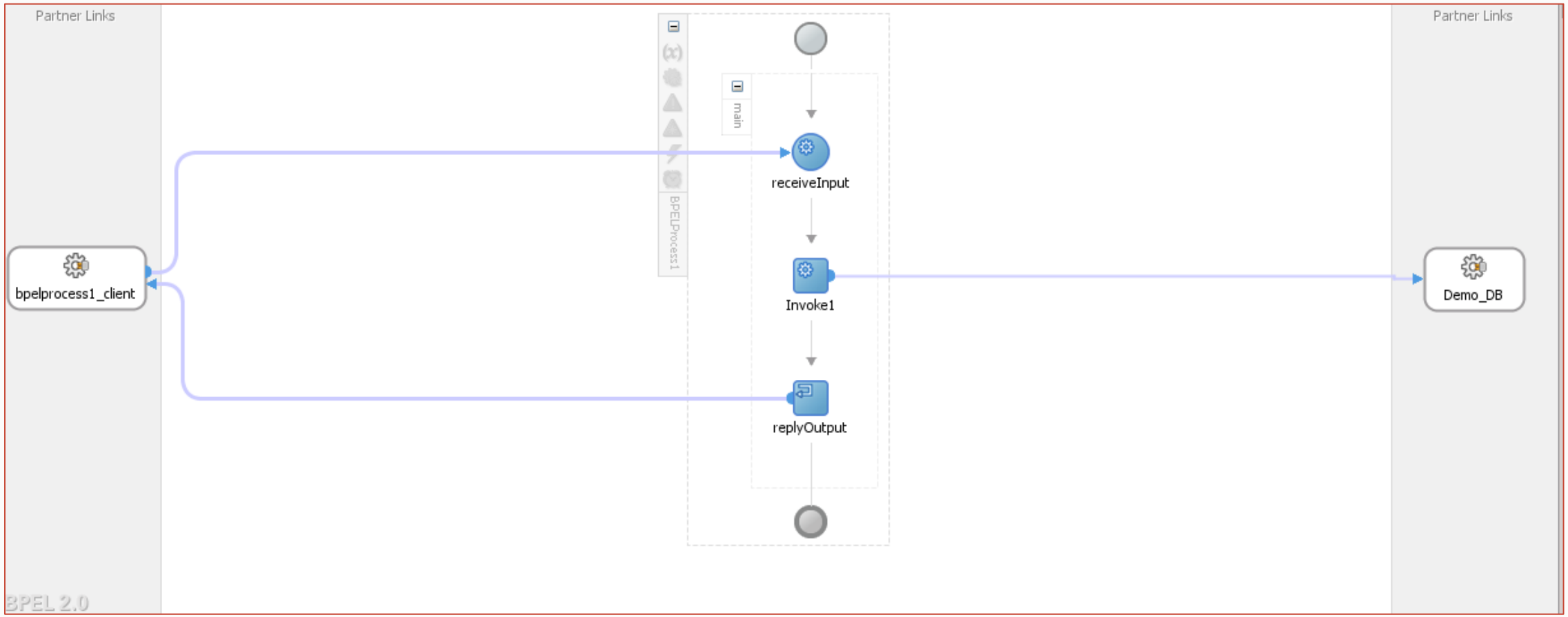
Create Invoke Input Variable



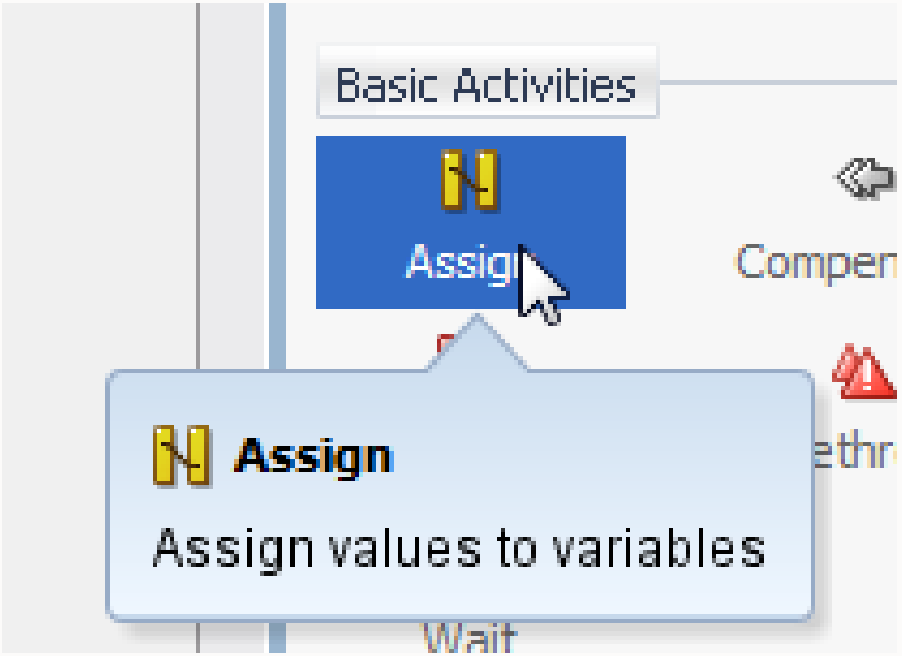
Create Invoke Output Variable



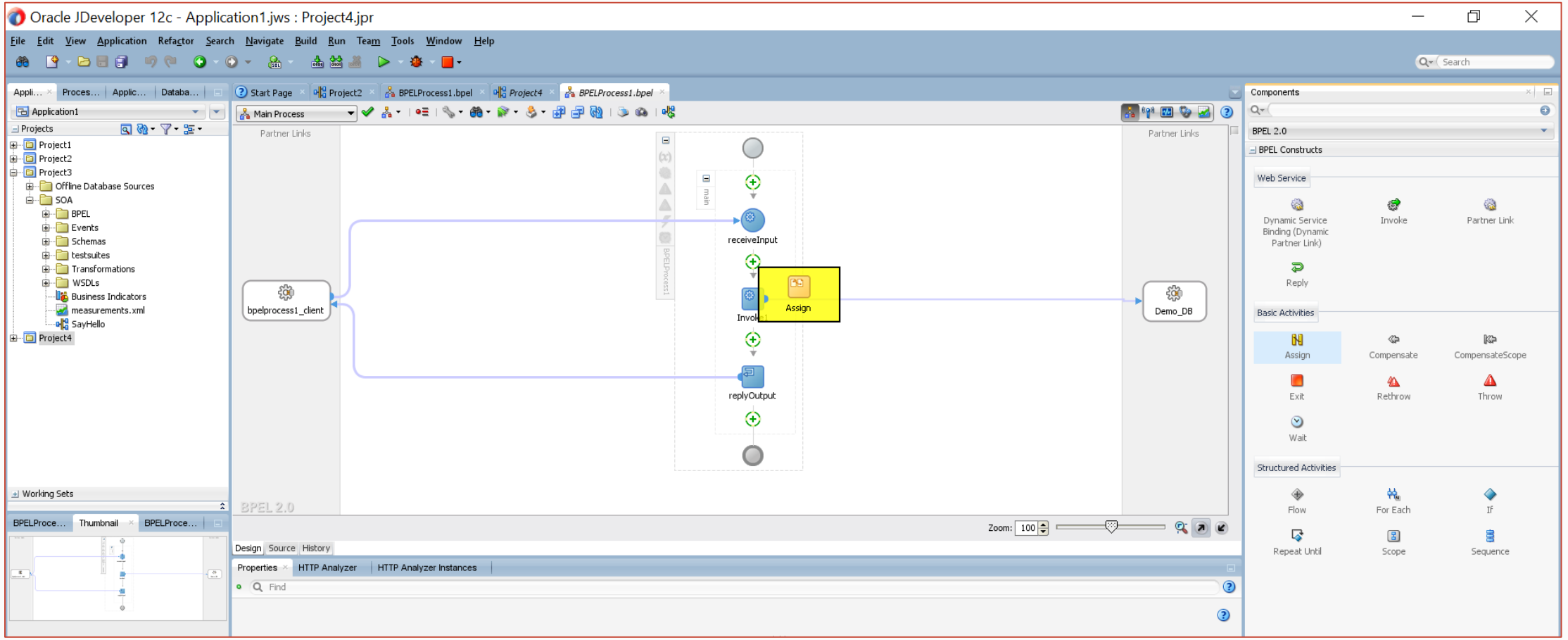
Invoke made Successfully



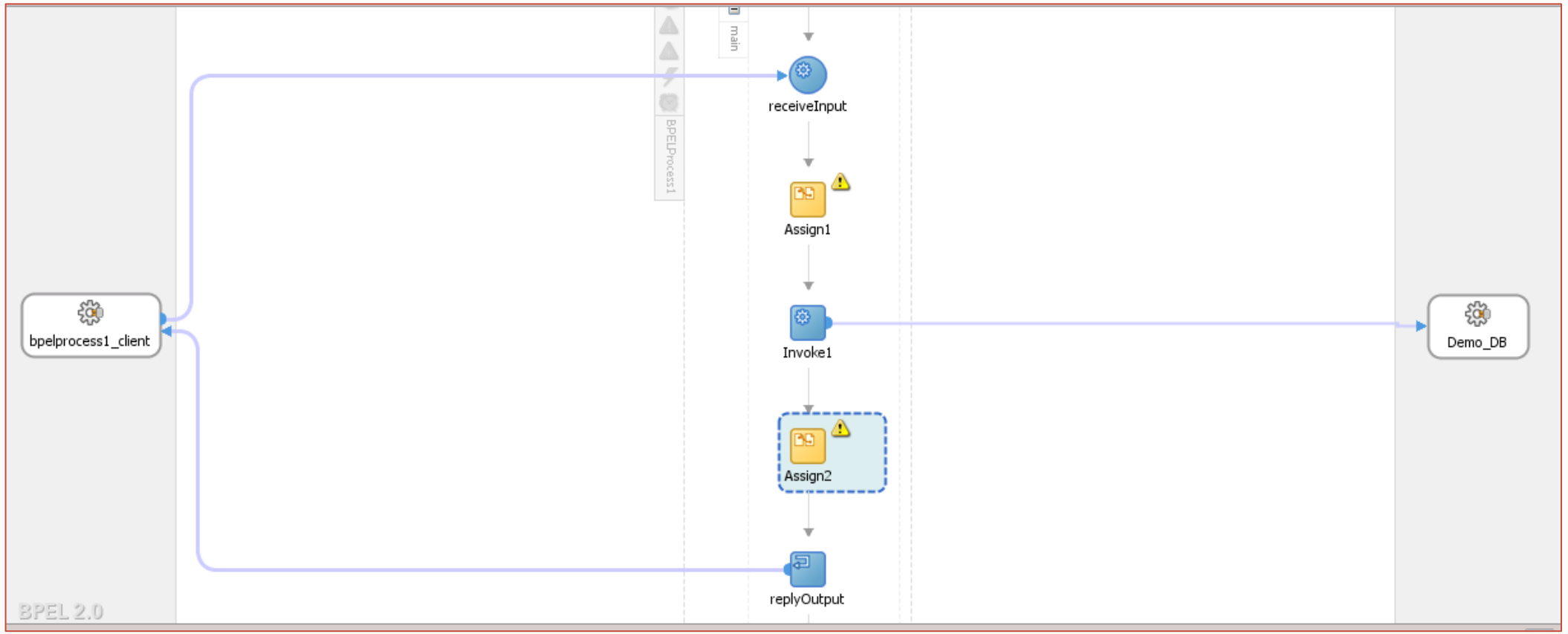
Select Assign Activity



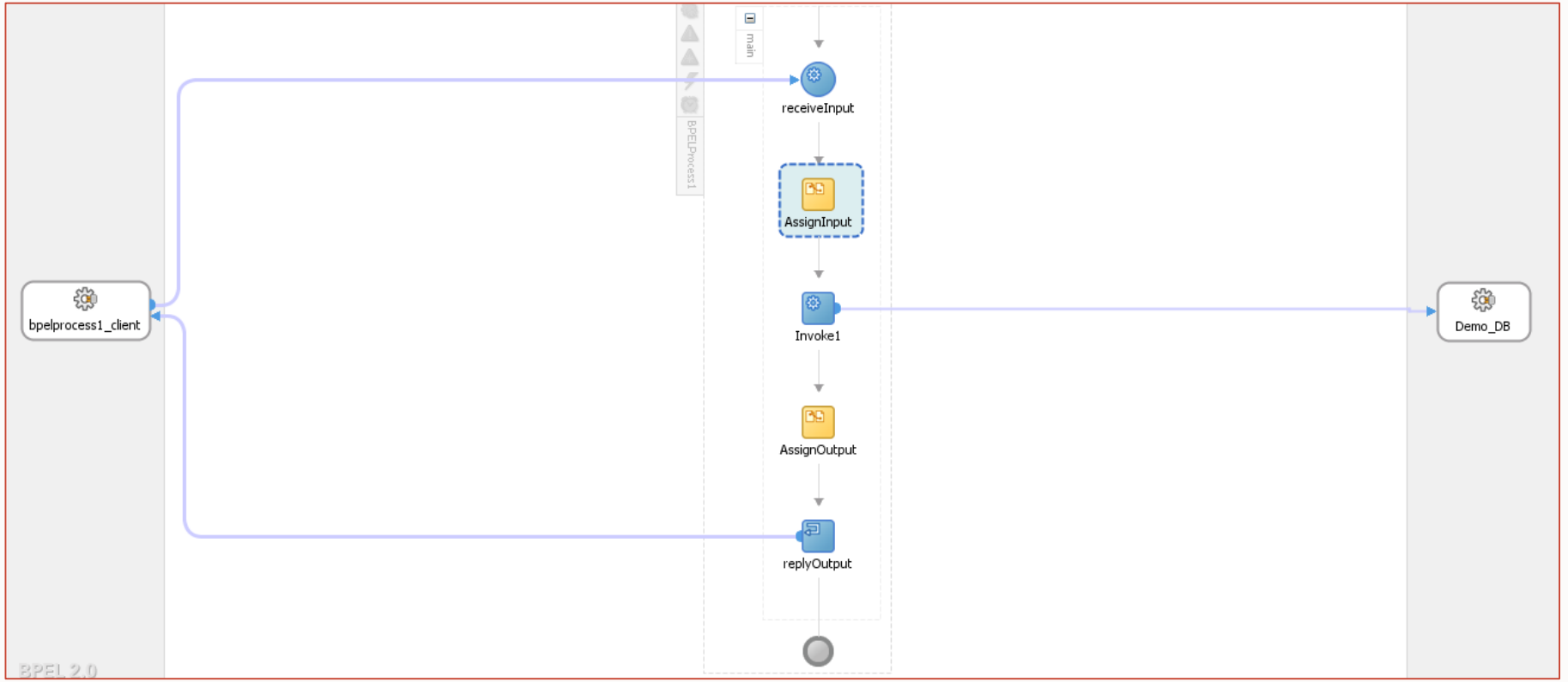
Drag Assign Activity



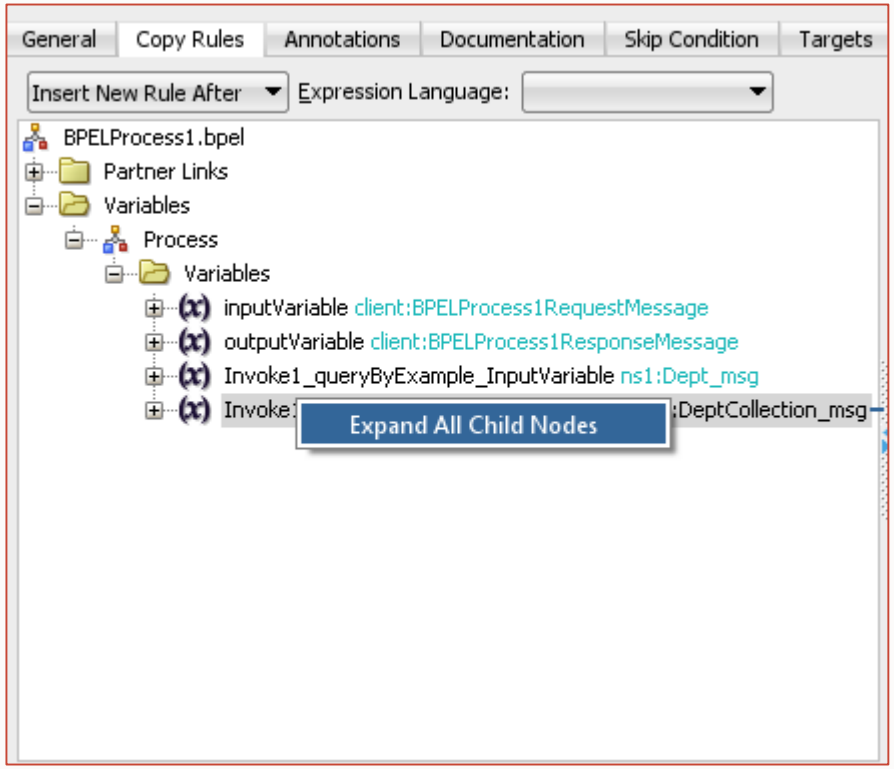
Drop Assign

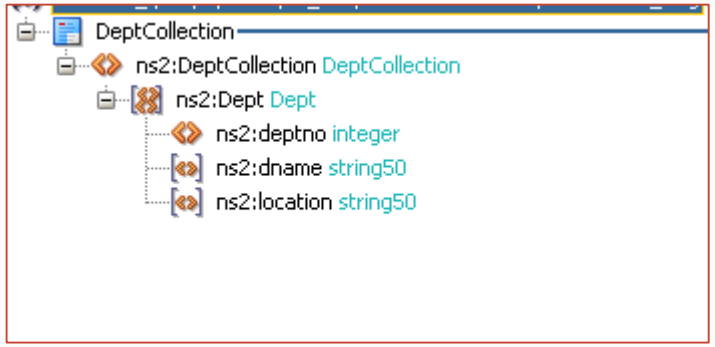

main
BPELProcess1
receiveInput
Assign1
bpelprocess1_client
Invoke1
Demo_DB
Assign2
replyOutput
BPEL 2.0

Edit Assign

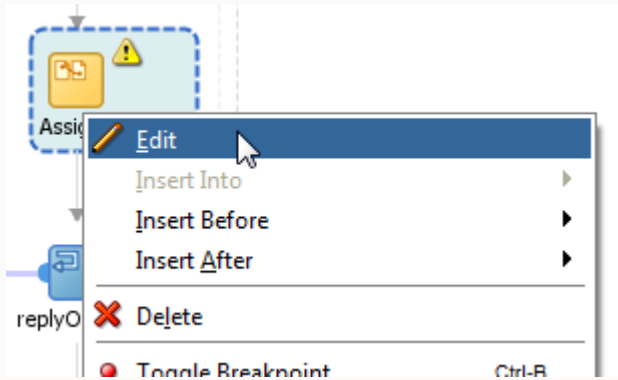

main
receiveInput
BPELProcess1
AssignInput
bpelprocess1_client
Invoke1
Demo_DB
AssignOutput
replyOutput
BPEL 2.0

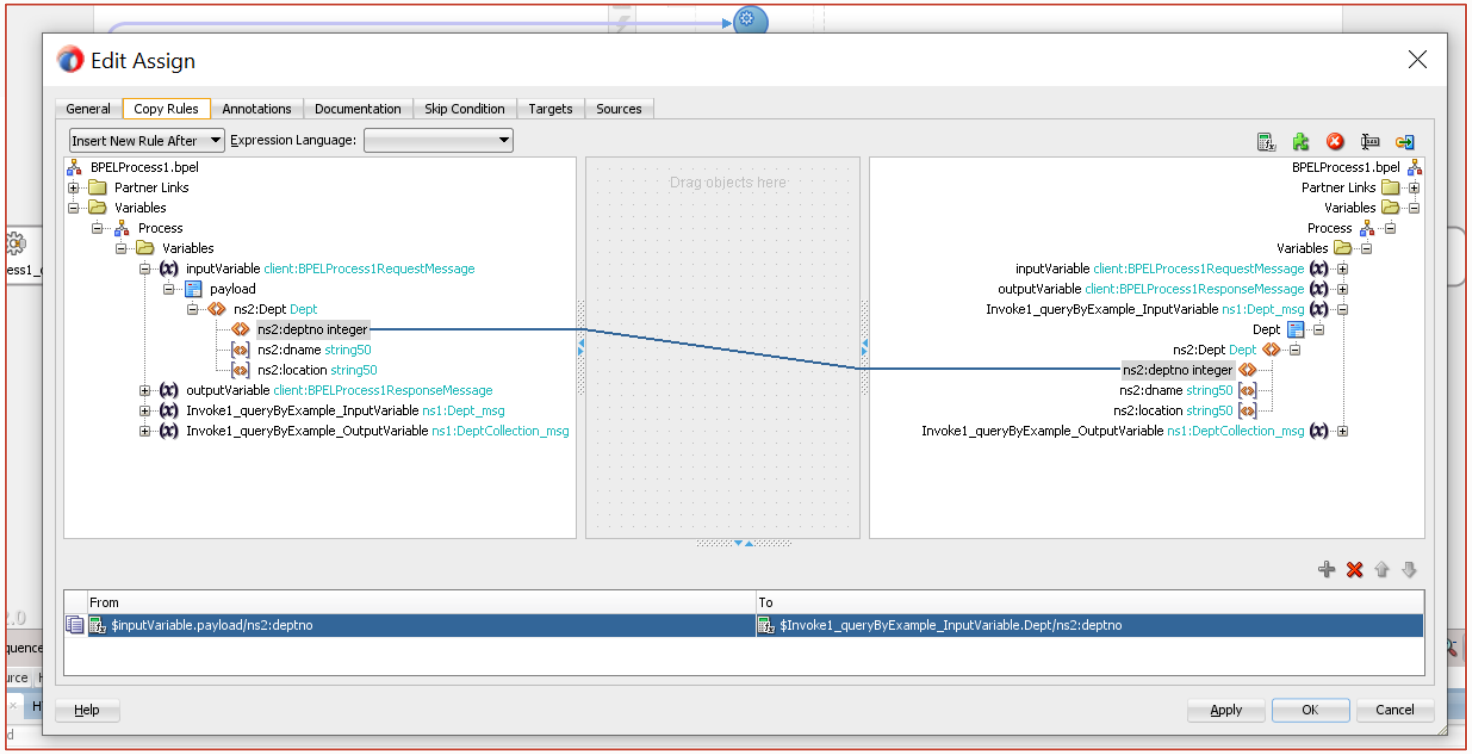
Expand All Child



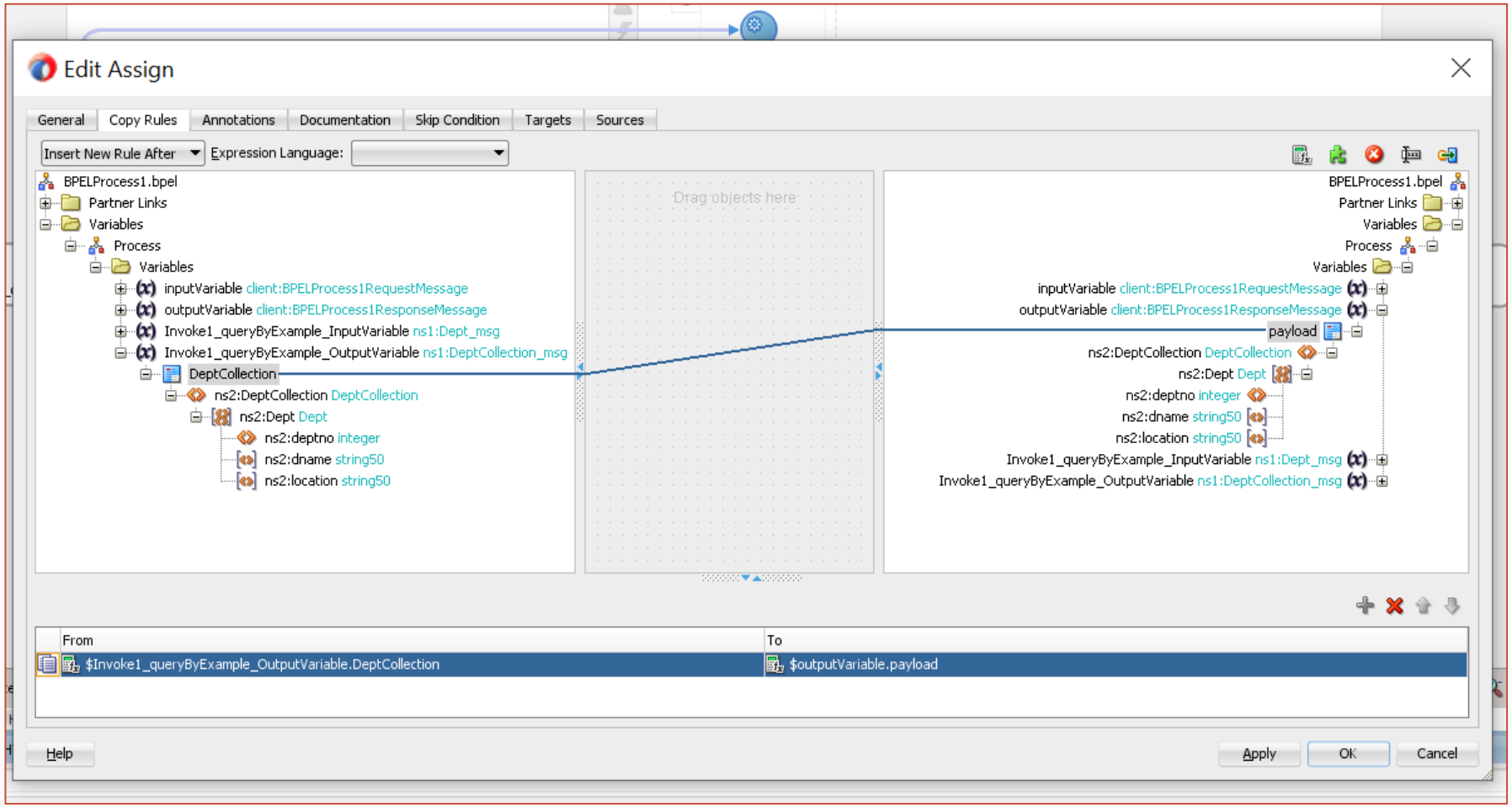


Edit Assign Input



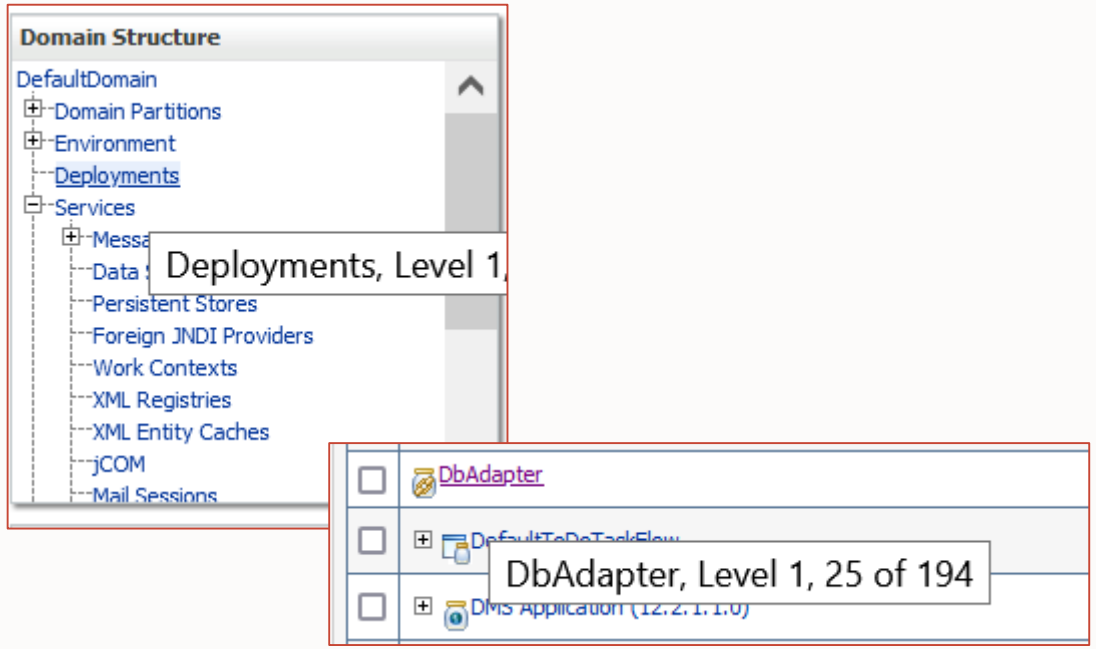


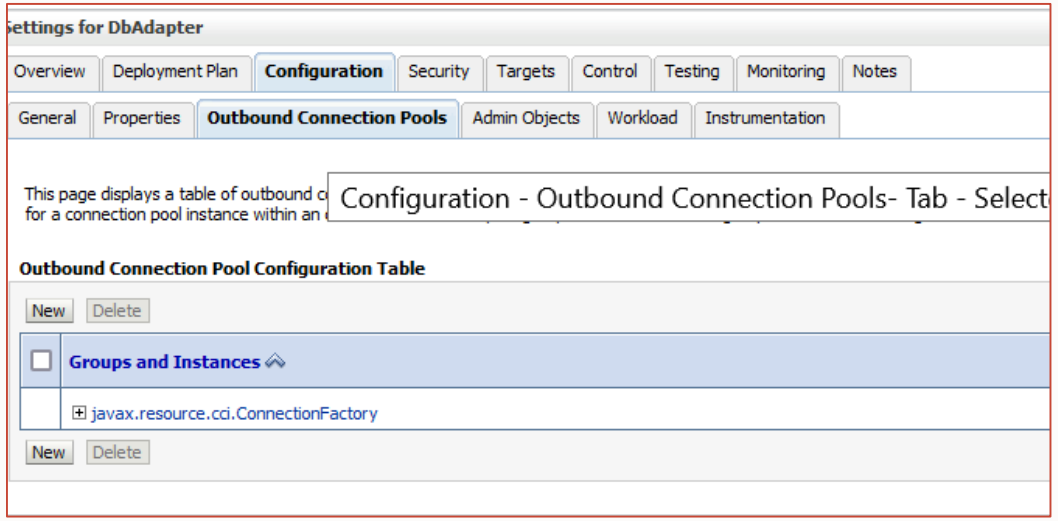
Edit Assign Output



Deployment

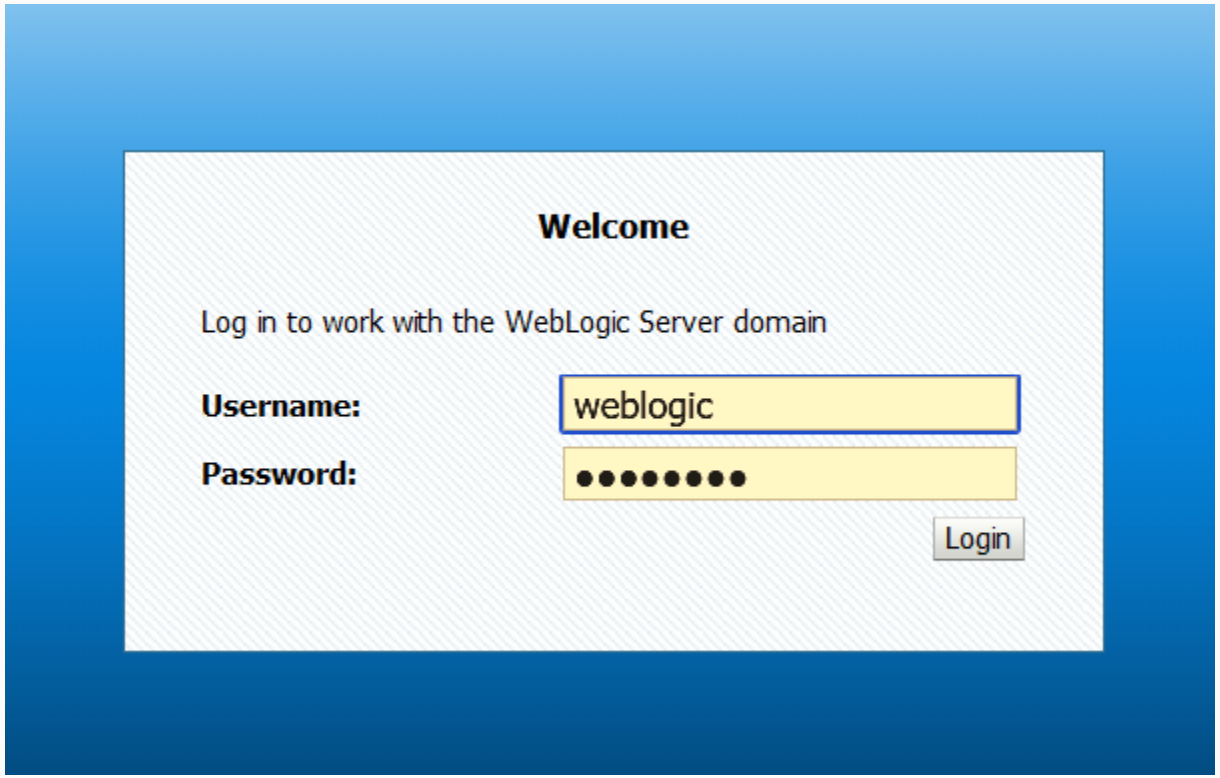
Setting Connection Factory for Database Adapter



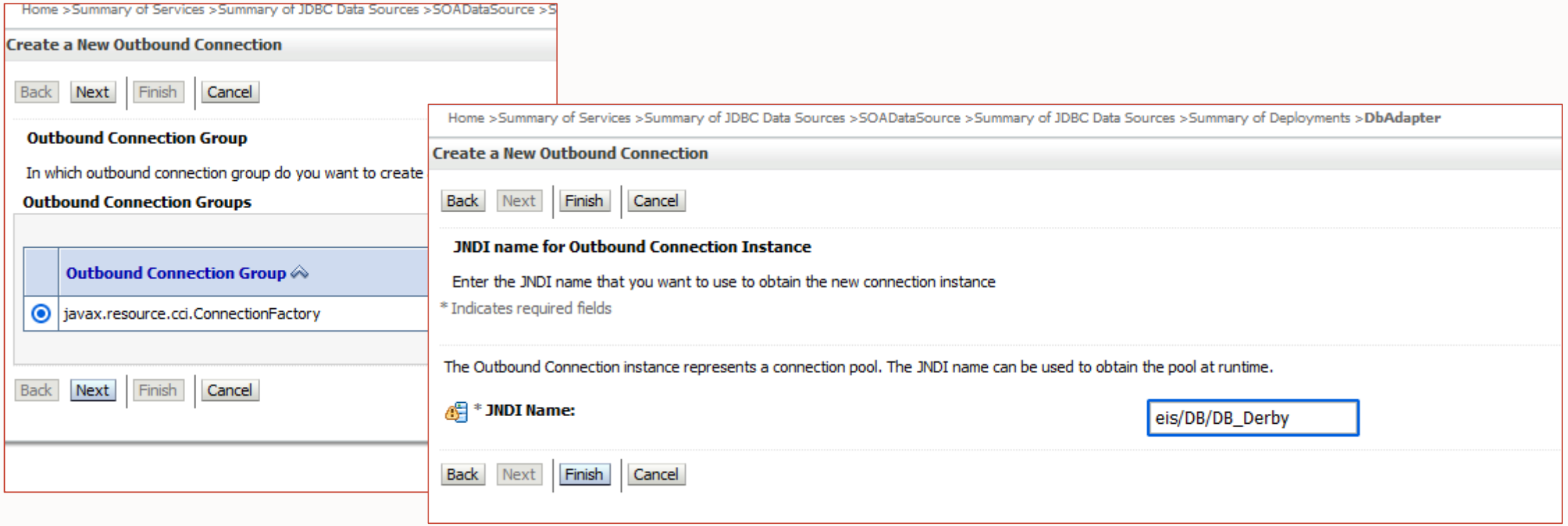


Login to WebLogic Console

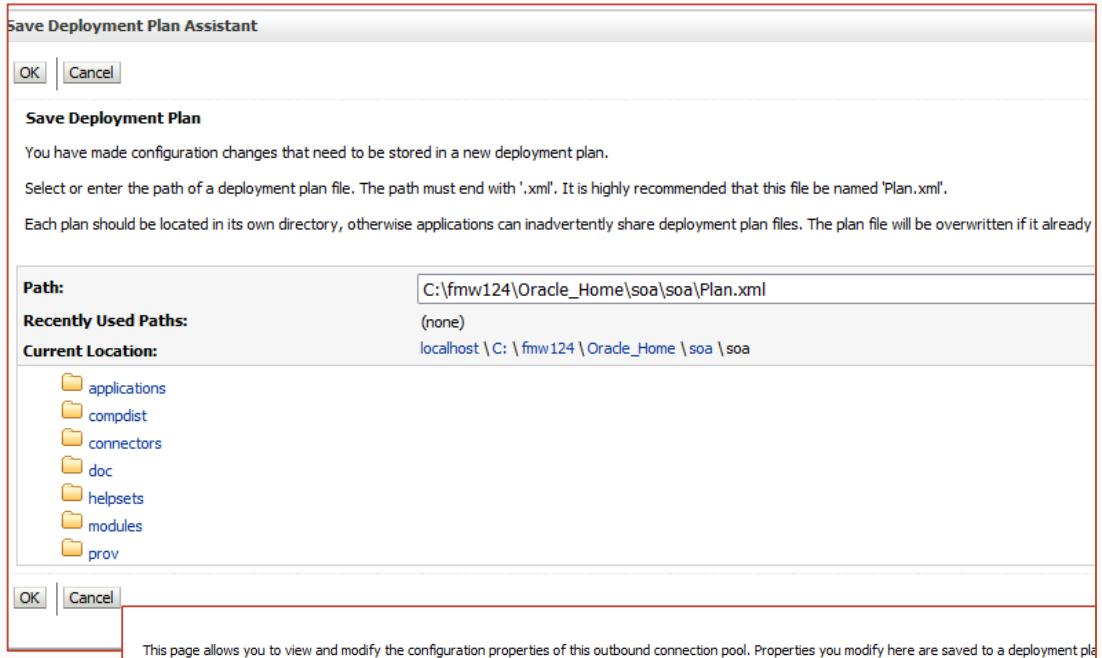
http://host:port/console

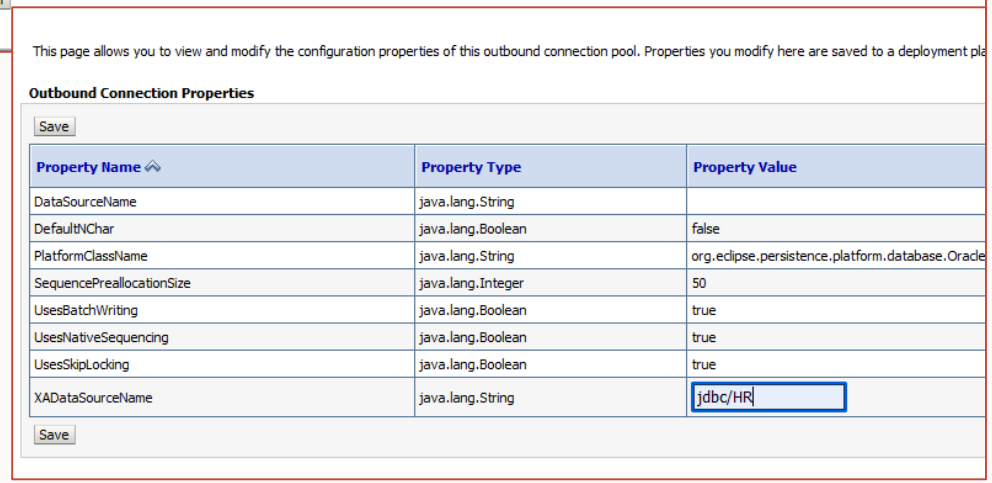


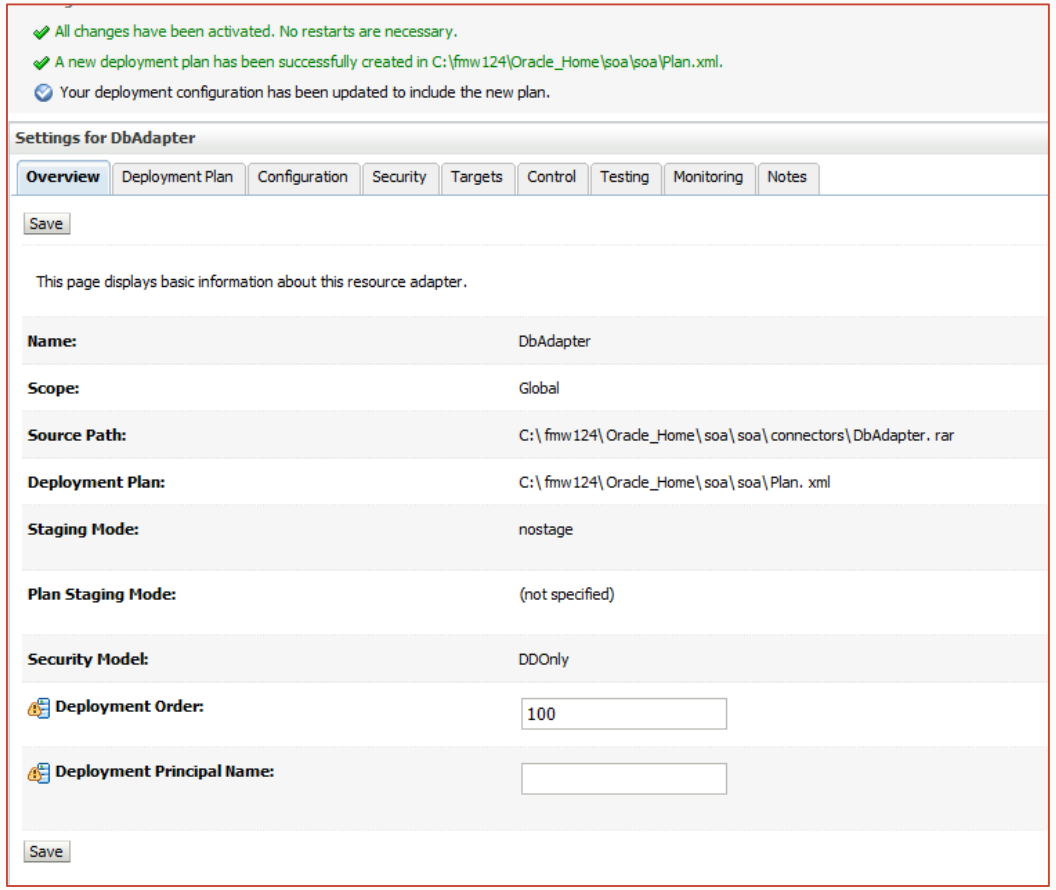
Create Outbound Connection Pool



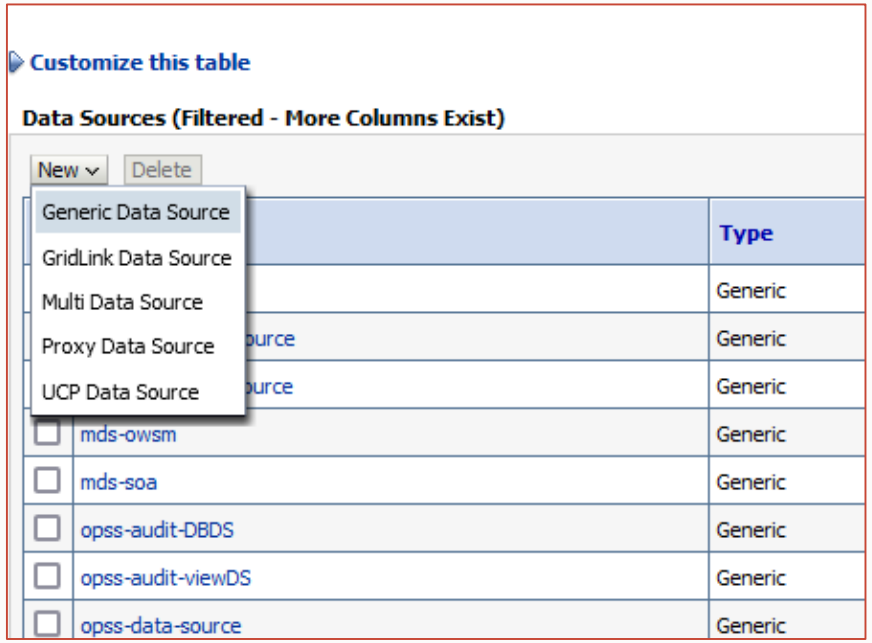
Save Changes

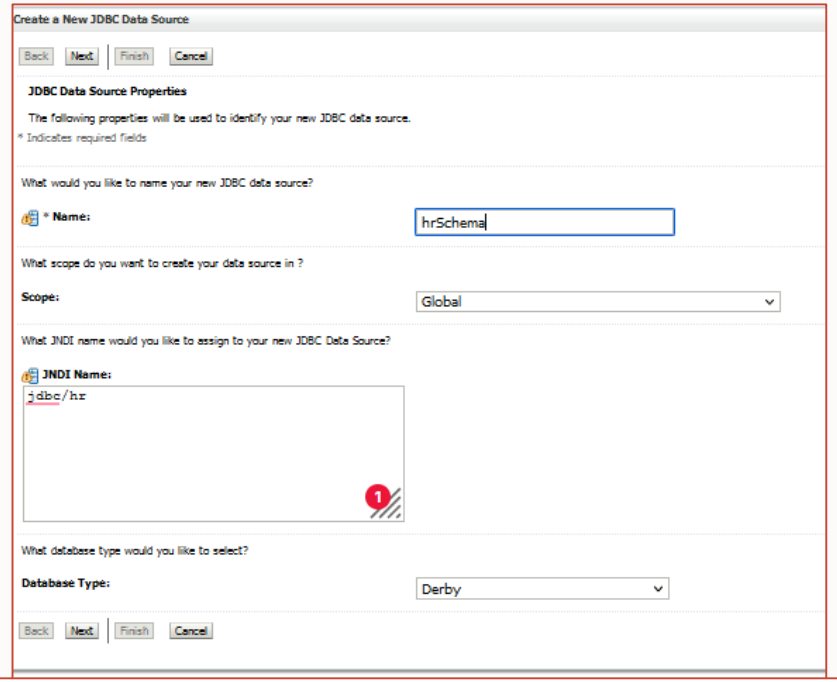


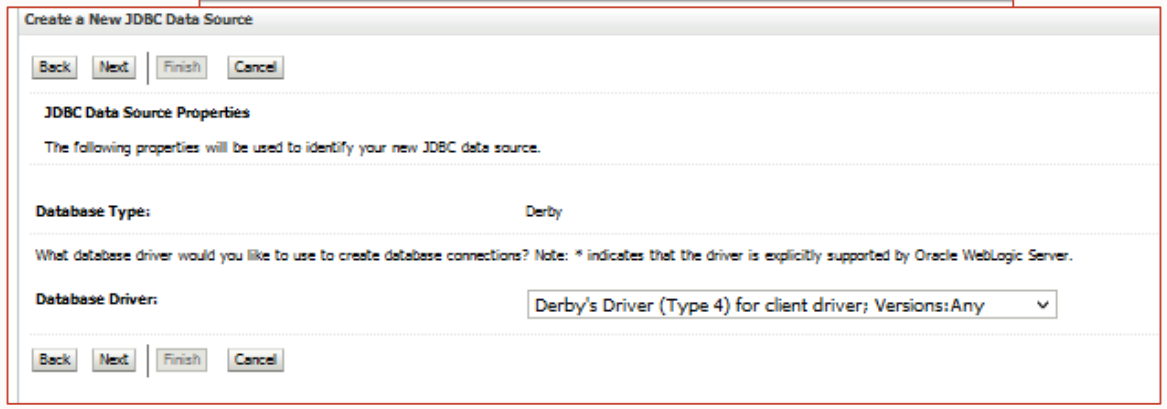




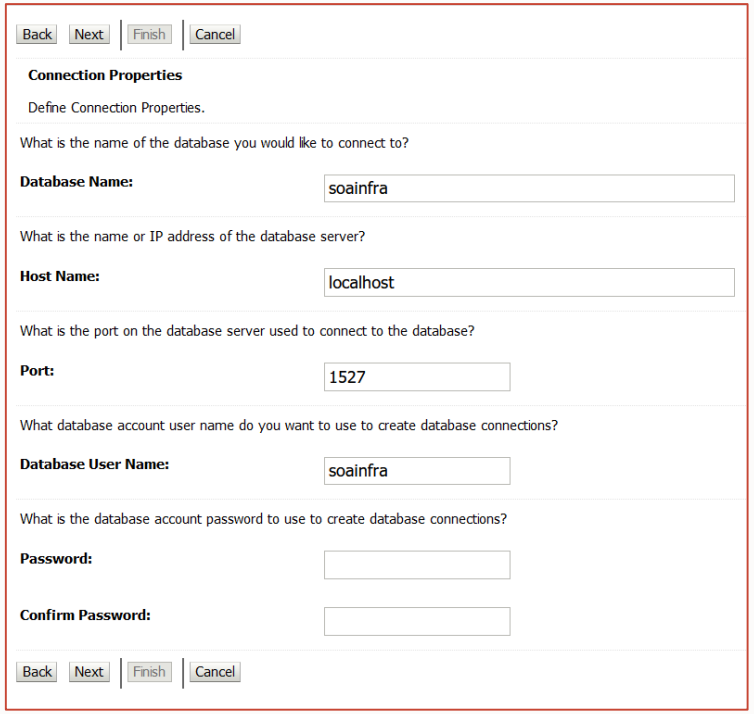
Create Data Source

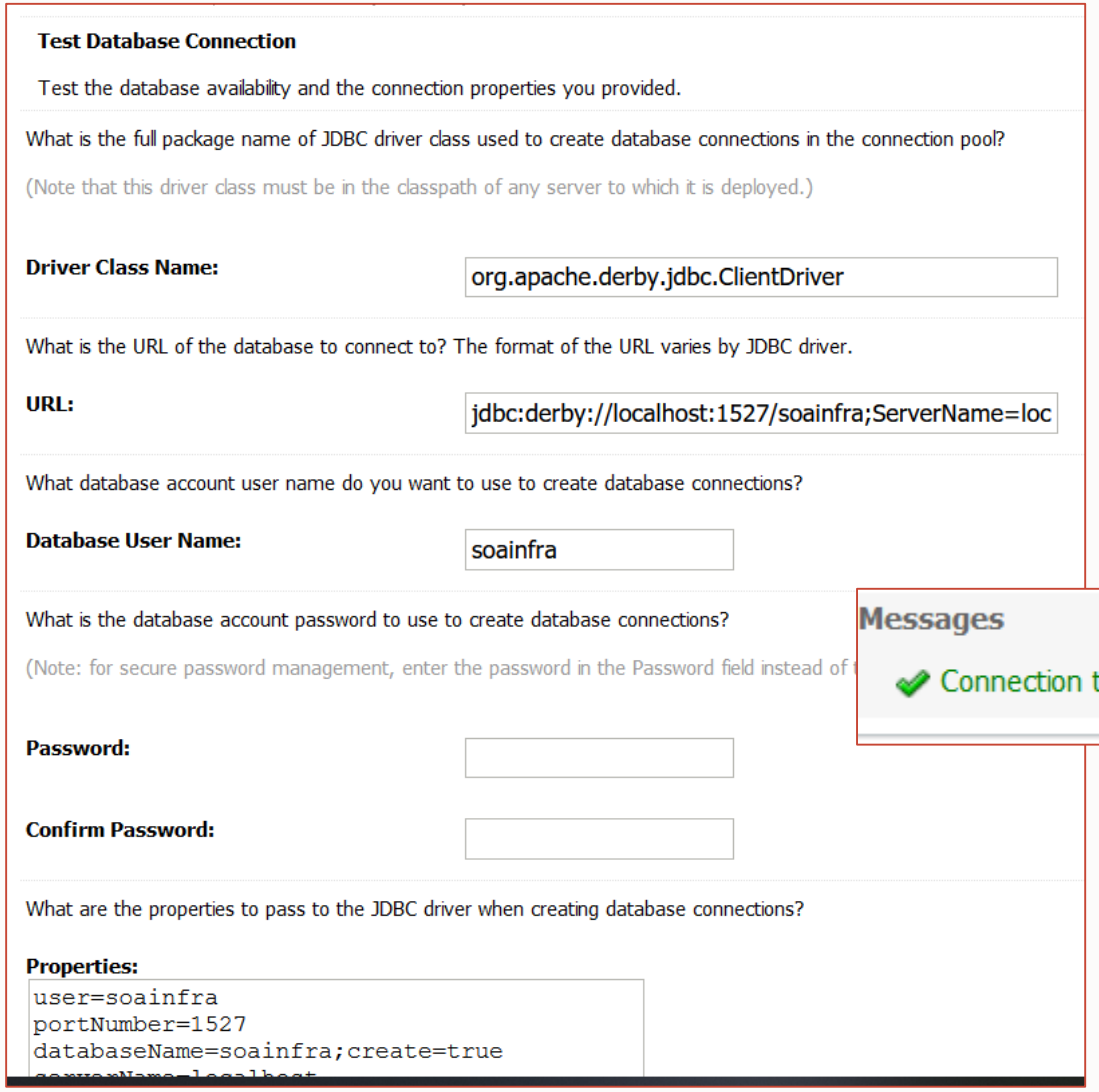


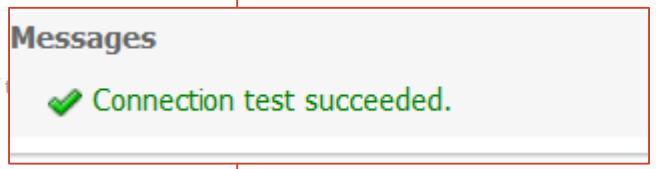




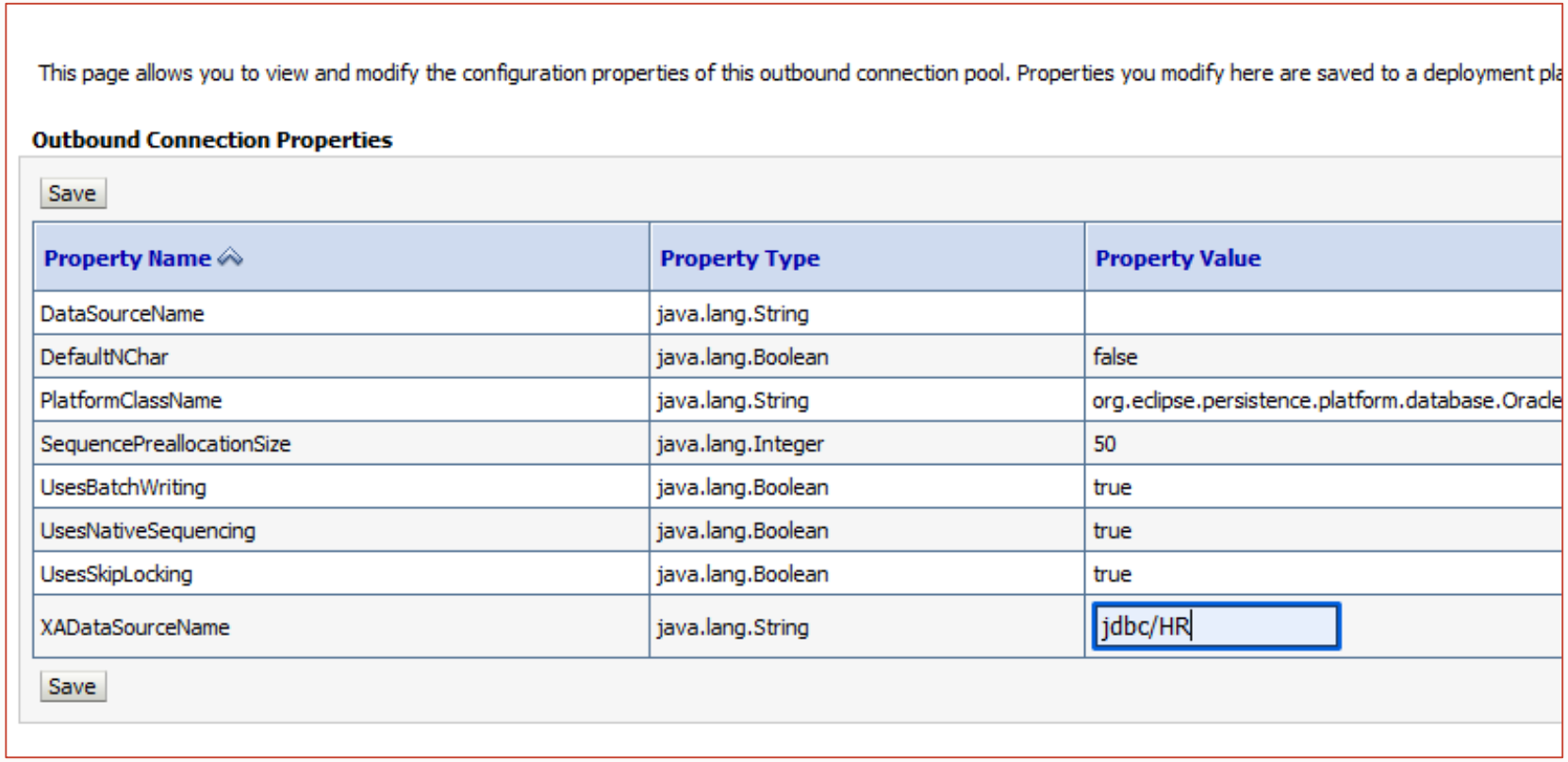
Connection Details - Test



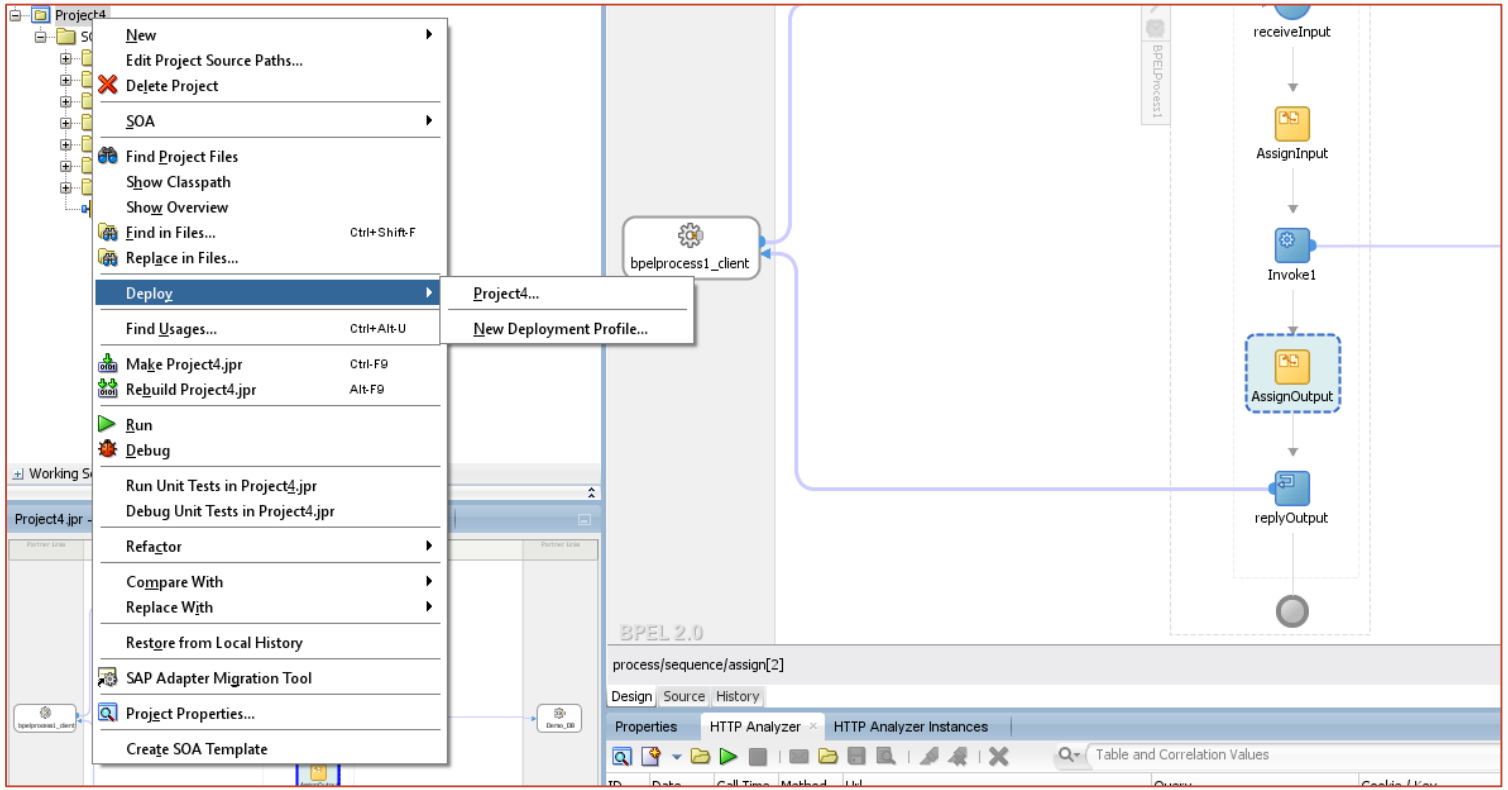




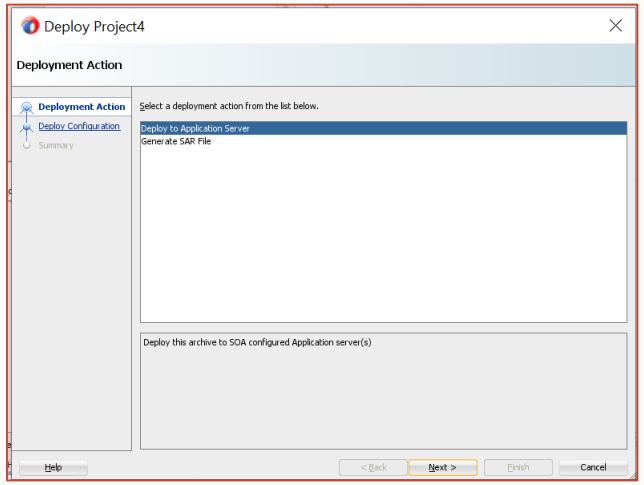
Add the DataSouce to Connection Factory

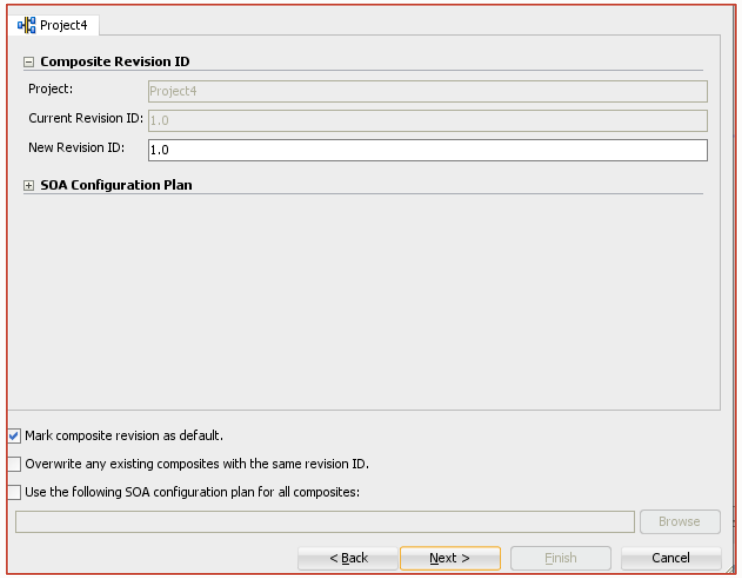


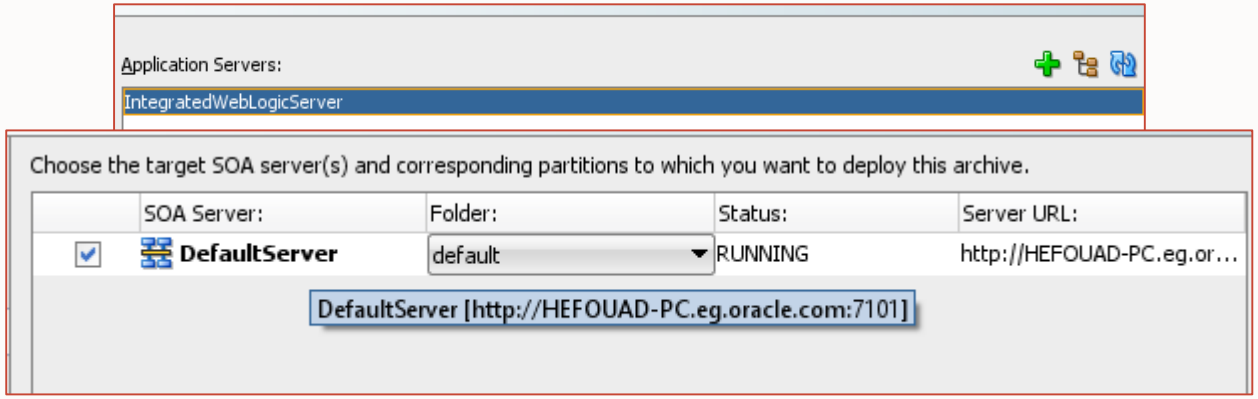
Deploy to Server



Deploy to Integrated Server







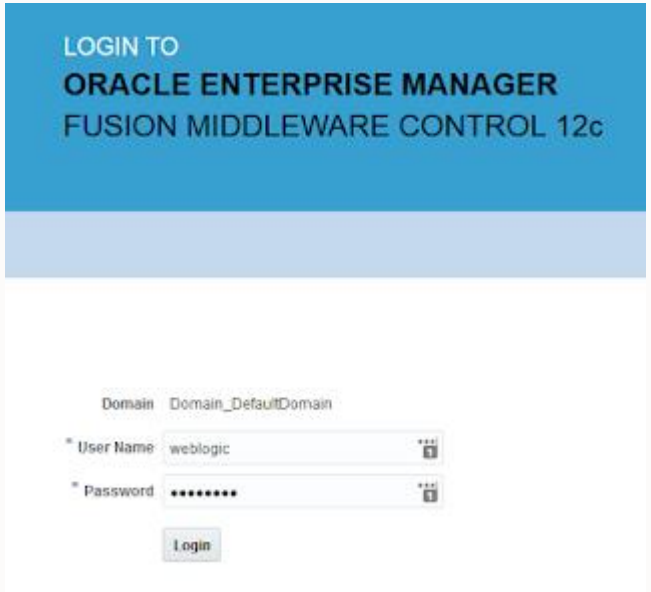
Verify Deployment

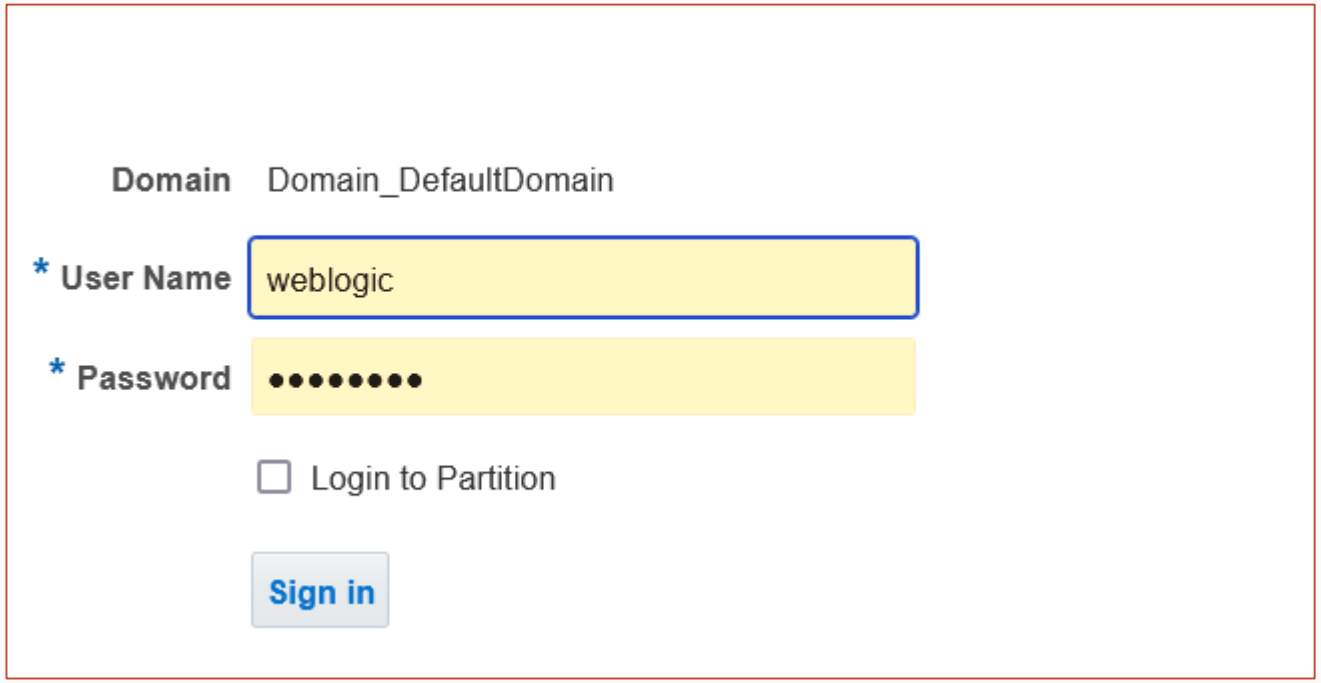
```
Buildfile: C:\mwKW\soa\bin\ant-sca-compile.xml

scac:
    [input] skipping input as property scac.input has already been set.
     [scac] Validating composite "C:\JDeveloper\mywork\Application1\Project4\SOA\composite.xml"
     [scac] Setting BPELC option 'classpath' to C:\mwKW\soa\soa\modules\oracle.bpm.client_11.1.1\oracle.bpm.bpm-services.interface.jar;C:\mwKW\soa\soa\modules\oracle.bpm.client_11.1.1\

BUILD SUCCESSFUL
Total time: 8 seconds
```

```
[11:11:01 PM] ----  Deployment started.  ----
[11:11:01 PM] Target platform is  (Weblogic 12.x).
[11:11:01 PM] Running dependency analysis...
[11:11:01 PM] Building...
[11:11:10 PM] Deploying profile...
[11:11:10 PM] WARNING: Connection DB_Derby has no password. DB_Derby-jdbc.xml file not generated for connection DB_Derby.
[11:11:11 PM] Wrote Archive Module to C:\JDeveloper\mywork\Application1\Project4\deploy\sca_Project4.jar
[11:11:11 PM] Deploying sca_Project4.jar to partition "default" on server DefaultServer [http://HEF0UAD-PC.eg.oracle.com:7101]
[11:11:11 PM] Processing sar=/C:/JDeveloper/mywork/Application1/Project4/deploy/sca_Project4.jar
[11:11:11 PM] Adding sar file - C:\JDeveloper\mywork\Application1\Project4\deploy\sca_Project4.jar
[11:11:11 PM] Preparing to send HTTP request for deployment
[11:11:11 PM] Creating HTTP connection to host:HEF0UAD-PC.eg.oracle.com, port:7101
[11:11:11 PM] Sending internal deployment descriptor
[11:11:11 PM] Sending archive - sca_Project4.jar
[11:11:12 PM] Received HTTP response from the server, response code=200
[11:11:12 PM] Successfully deployed archive sca_Project4.jar with 0 warning/severe messages to partition "default" on server DefaultServer [http://HEF0UAD-PC.eg.oracle.com:7101]
[11:11:12 PM] Elapsed time for deployment:  11 seconds
[11:11:12 PM] ----  Deployment finished.  ----
```

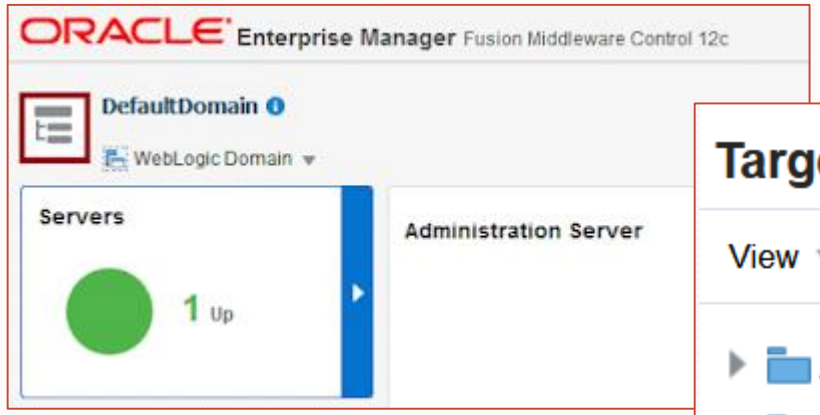
Deployment messages

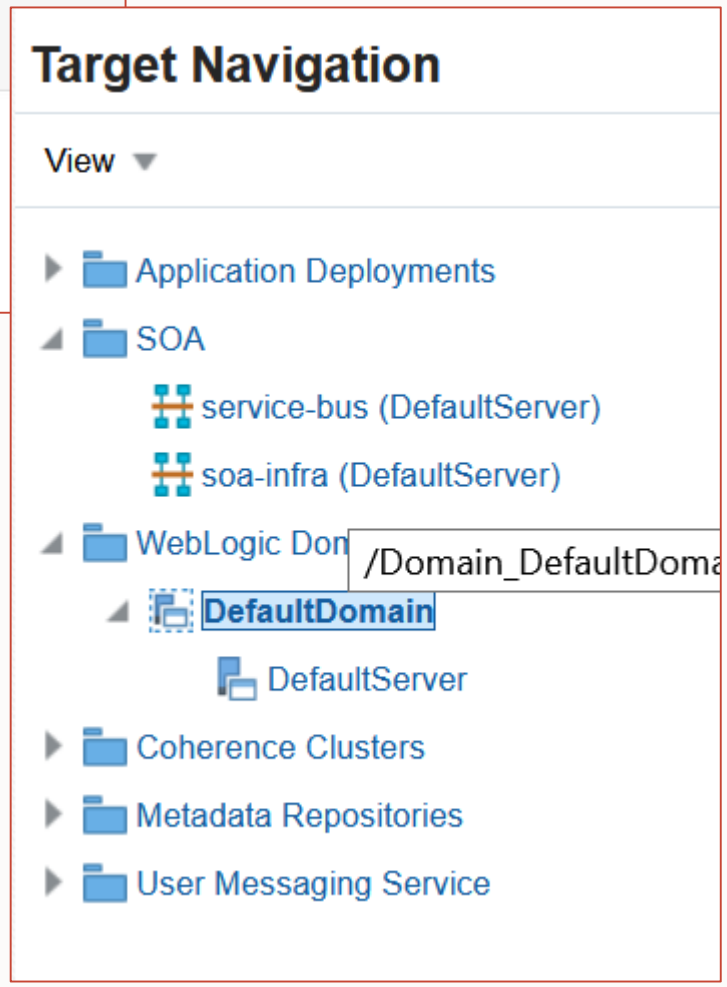
EM

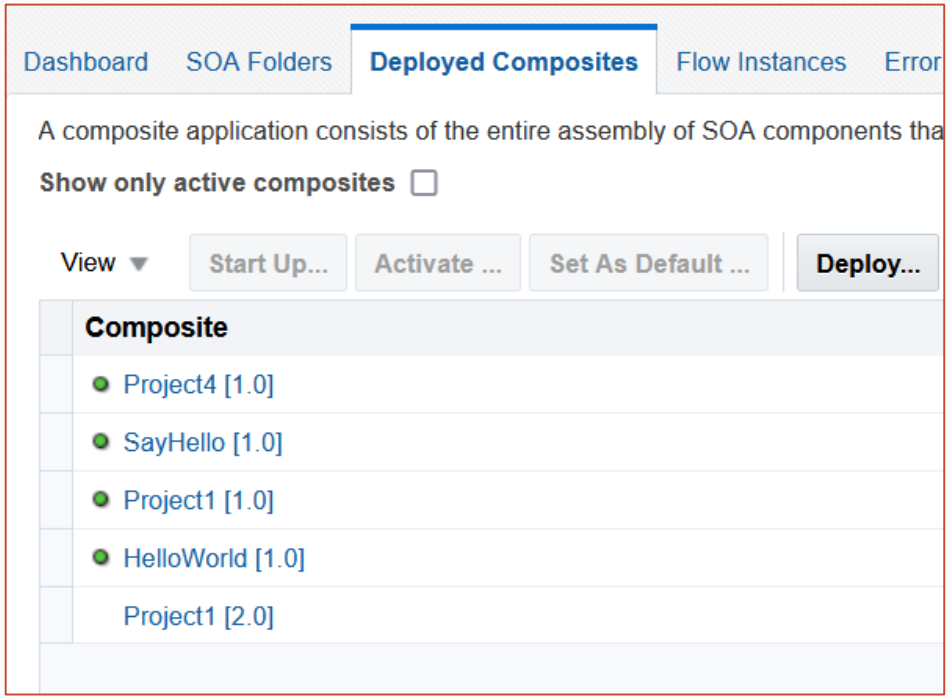

LOGIN TO
ORACLE ENTERPRISE MANAGER
FUSION MIDDLEWARE CONTROL 12c
Domain
Domain_DefaultDomain
* User Name
weblogic
* Password
Login


Domain
Domain_DefaultDomain
* User Name
weblogic
* Password
Login to Partition
Sign in

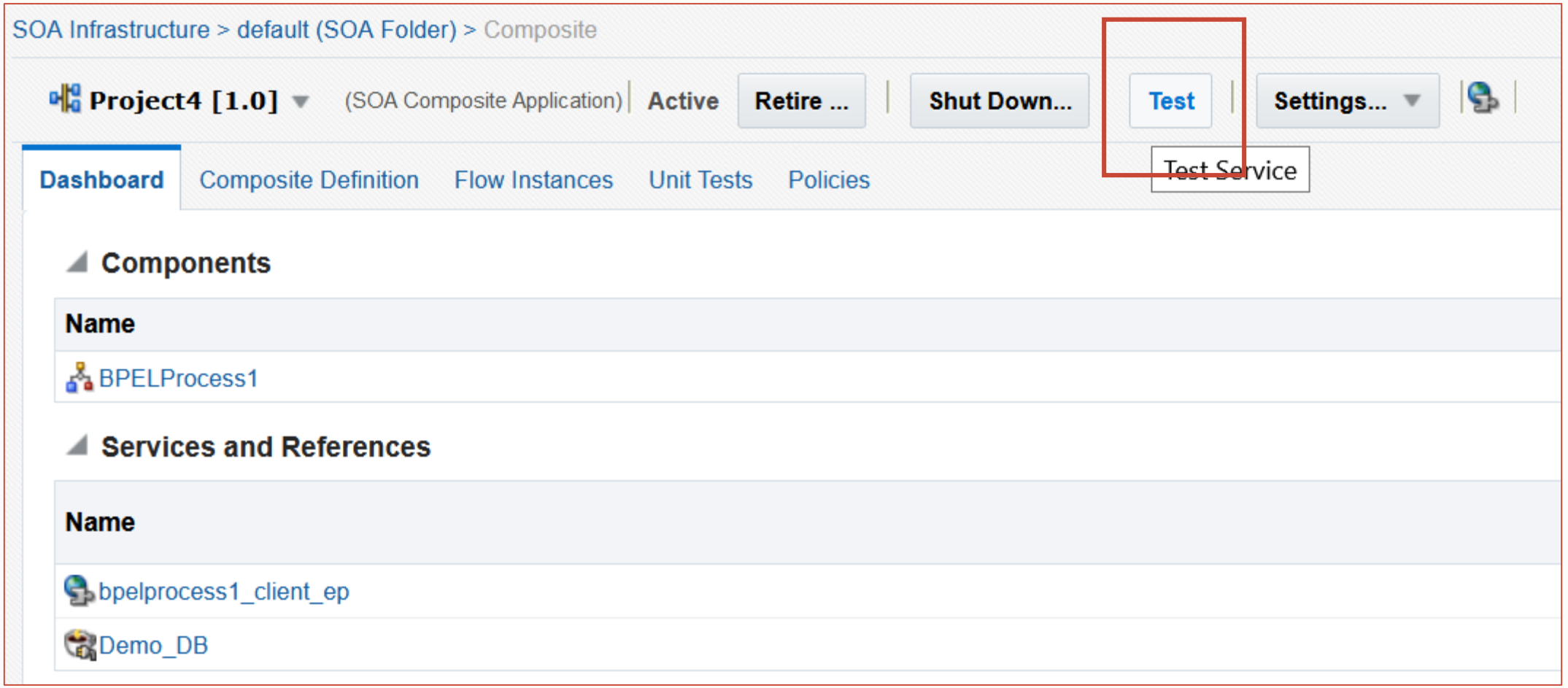
Navigation


ORACLE Enterprise Manager Fusion Middleware Control 12c
DefaultDomain
WebLogic Domain
Servers
1 Up
Administration Server

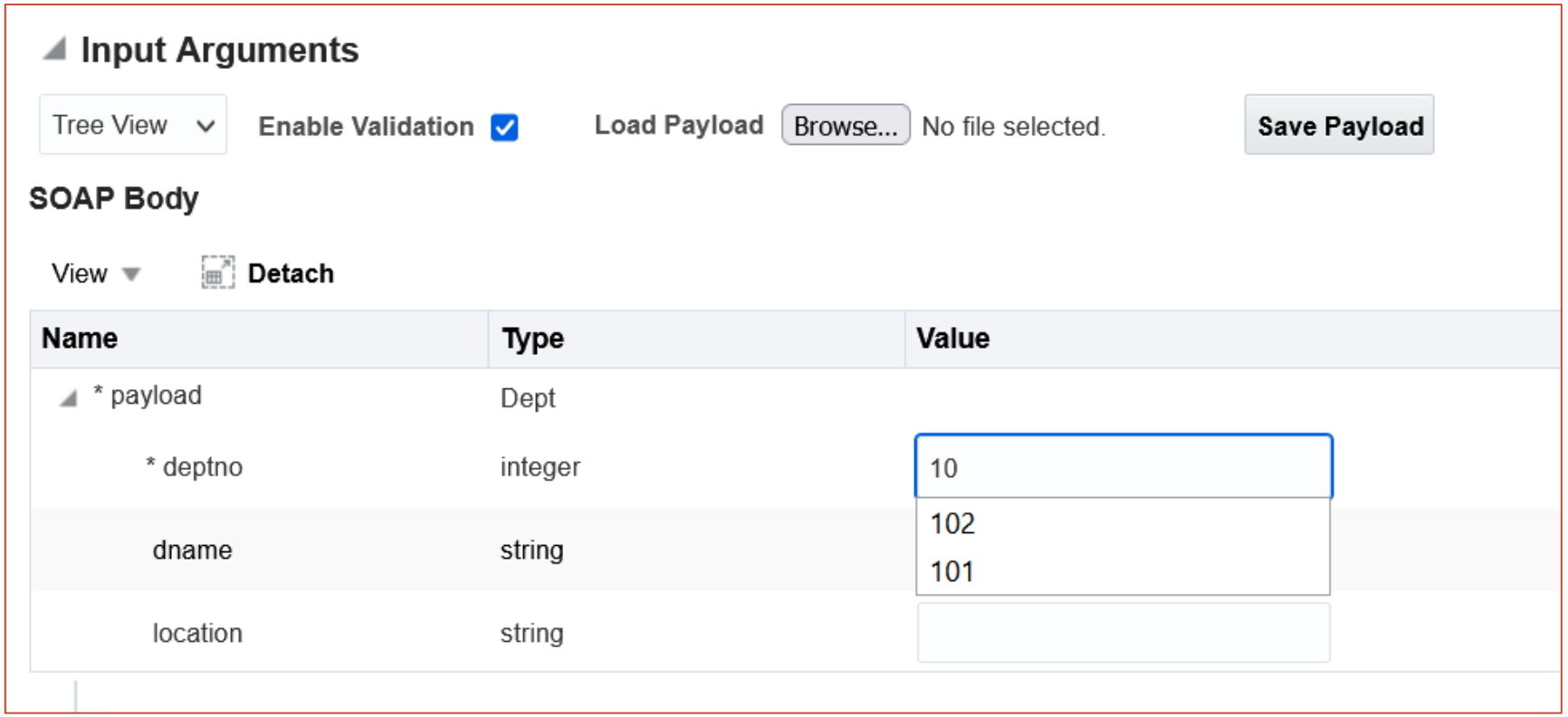

Target Navigation
View
Application Deployments
SOA
service-bus (DefaultServer)
soa-infra (DefaultServer)
WebLogic Dom
/Domain_DefaultDoma
DefaultDomain
DefaultServer
Coherence Clusters
Metadata Repositories
User Messaging Service


Dashboard
SOA Folders
Deployed Composites
Flow Instances
Error
A composite application consists of the entire assembly of SOA components tha
Show only active composites
View
Start Up...
Activate ...
Set As Default ...
Deploy...
Composite
Project4 [1.0]
SayHello [1.0]
Project1 [1.0]
HelloWorld [1.0]
Project1 [2.0]

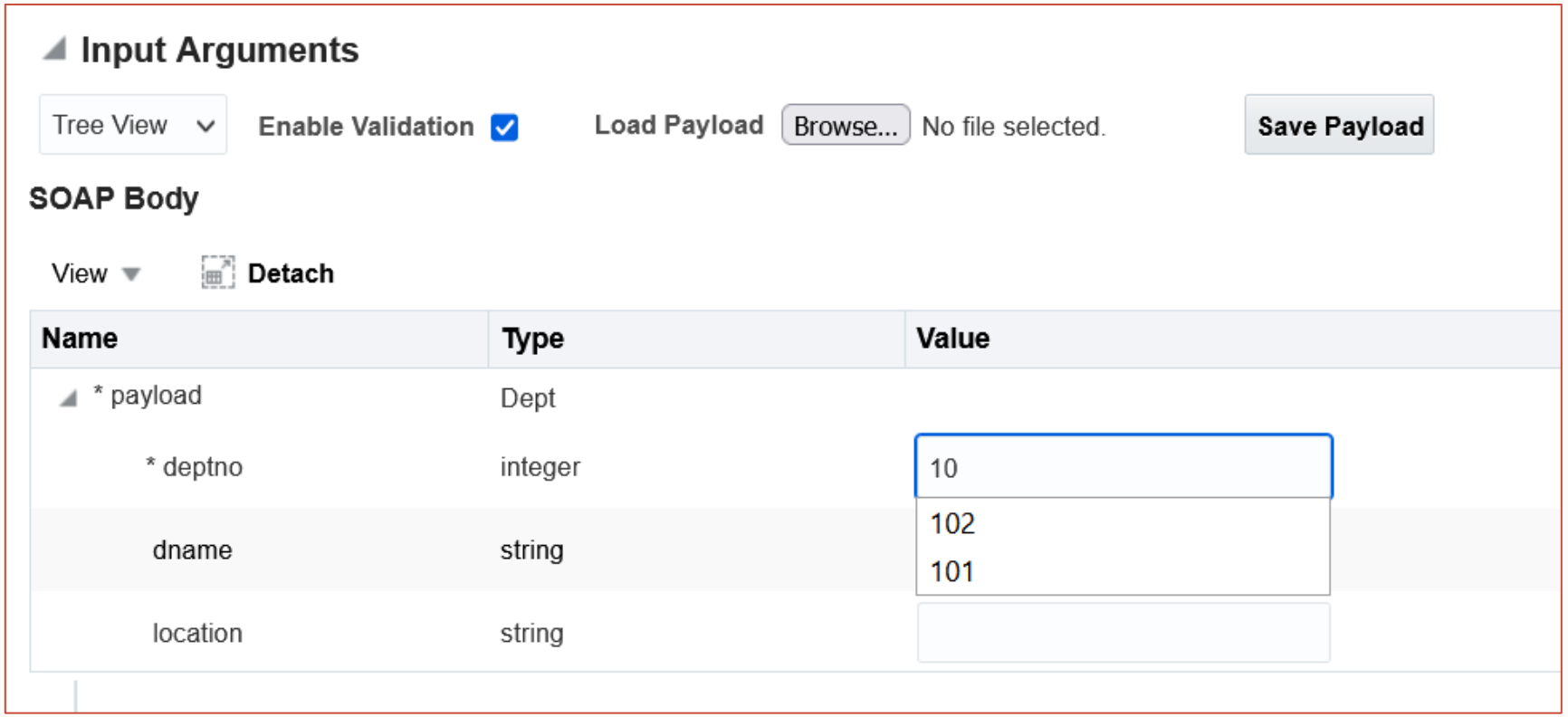
Test


SOA Infrastructure > default (SOA Folder) > Composite
Project4 [1.0]
(SOA Composite Application)
Active
Retire ...
Shut Down...
Test
Settings...
Test Service
Dashboard
Composite Definition
Flow Instances
Unit Tests
Policies
Components
Name
BPELProcess1
Services and References
Name
bpelprocess1_client_ep
Demo_DB

Input Arguments for Testing



Result


Input Arguments
Tree View
Enable Validation
Load Payload
Browse...
No file selected.
Save Payload
SOAP Body
View
Detach
Name
Type
Value
* payload
Dept
* deptno
integer
10
102
101
dname
string
location
string

Q&A

Tutorials

Topic	Website
Oracle SOA Suite	https://docs.oracle.com/en/middleware/soa-suite/soa/12.2.1.4/index.html
Product Forums	http://forums.oracle.com
Sample Code	http://www.oracle.com/technology/sample_code