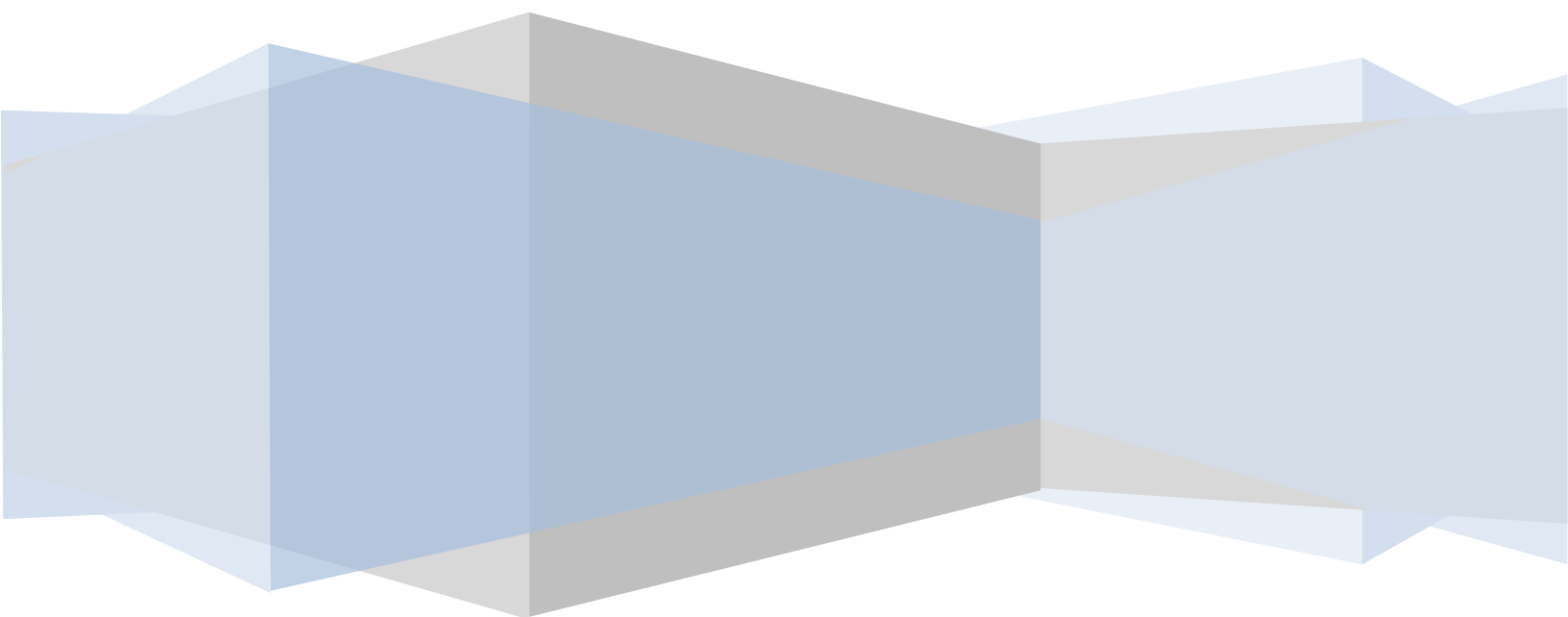


Cognizant Technology Solutions

# Exercises - Adapter

WebMethods Integration Workshop

WebMethods CoE



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# ADAPTERS

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## Introduction

The webMethods JDBC Adapter is an add-on to the webMethods Integration Server that enables you to exchange data with relational databases through the use of a JDBC driver. The adapter provides seamless and real-time communication with the database without requiring changes to your existing application infrastructure.

Using the JDBC Adapter, webMethods Integration Server clients can create and run services that execute transactions to retrieve data from, and insert and update data in, relational databases.

This document will help on the hands on for developers on creation of the adapter services using the templates Select, Insert and Update.

We expect the developers to go through the documentation and try the other adapter templates to get hands on.

## Theory

### Guides to complete

- 6-5\_JDBC\_Adapter\_Users\_Guide (Chapter 1-5)

## Practical

### Database table Structure:

Create the below table in database to start with adapters exercise.

#### Order\_Cust\_PO\_LINE Table:

Column	Data Type
PO_ID	VARCHAR(15)
LINE_IO	NUMERIC(2)
ITEM_CODE	VARCHAR(10)
ITEM	VARCHAR(20)
ITEM_CATEGORY	VARCHAR(25)
QUANTITY	NUMERIC(5)
UNIT_PRICE	NUMERIC(5)
TOTAL_PRICE	NUMERIC(10)

### Creating JDBC Adapter Connection:

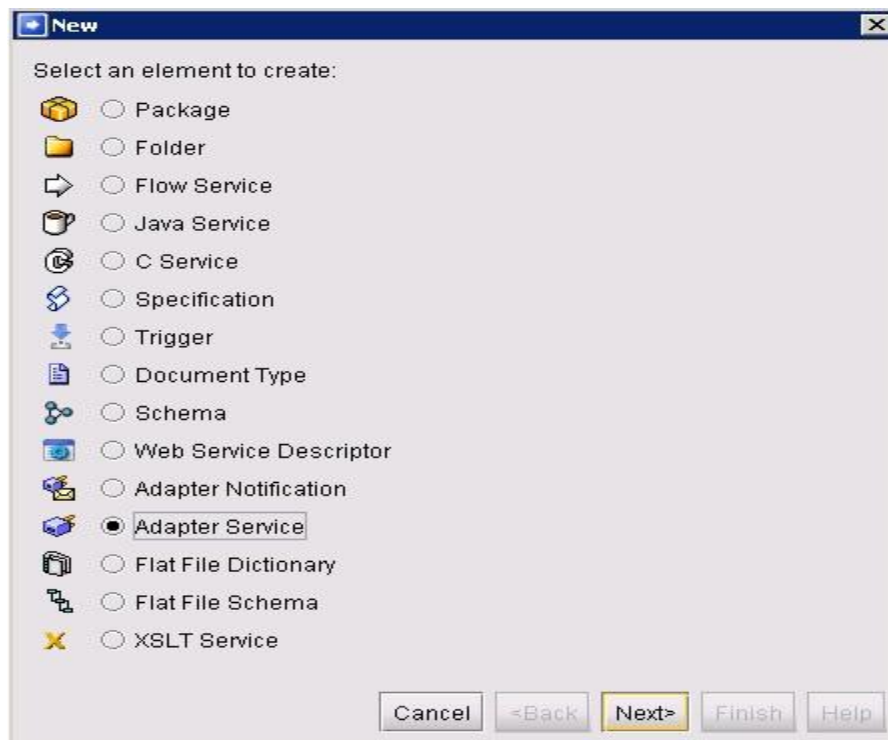
Create two JDBC Adapter Connections for Local Transaction and No Transaction with names below

- connOrderDB\_LT
- connOrderDB\_NT

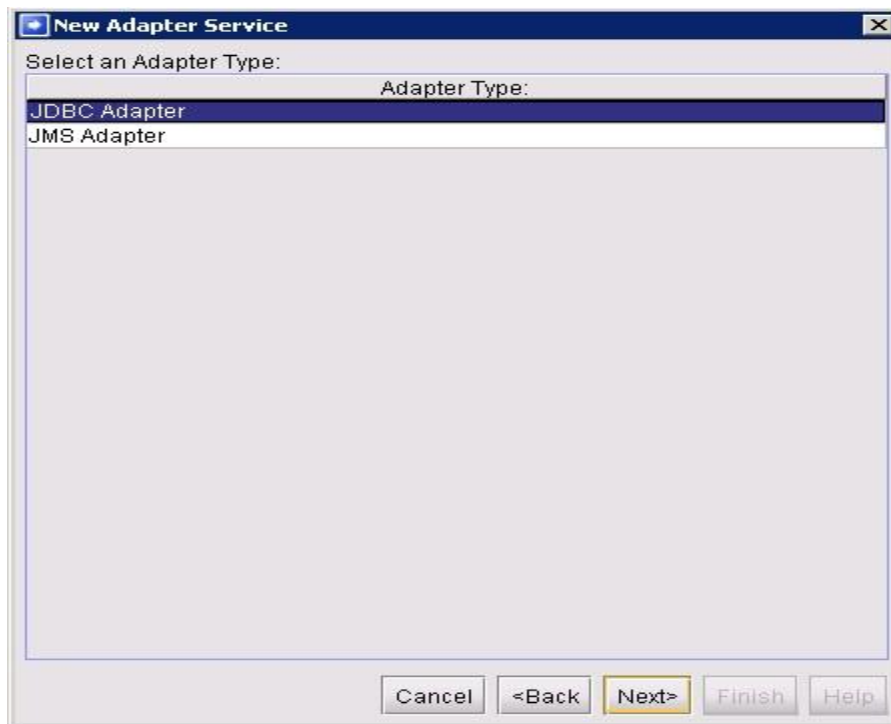
## INSERT ADAPTER CREATION

### Steps to create INSERT Adapter Service:

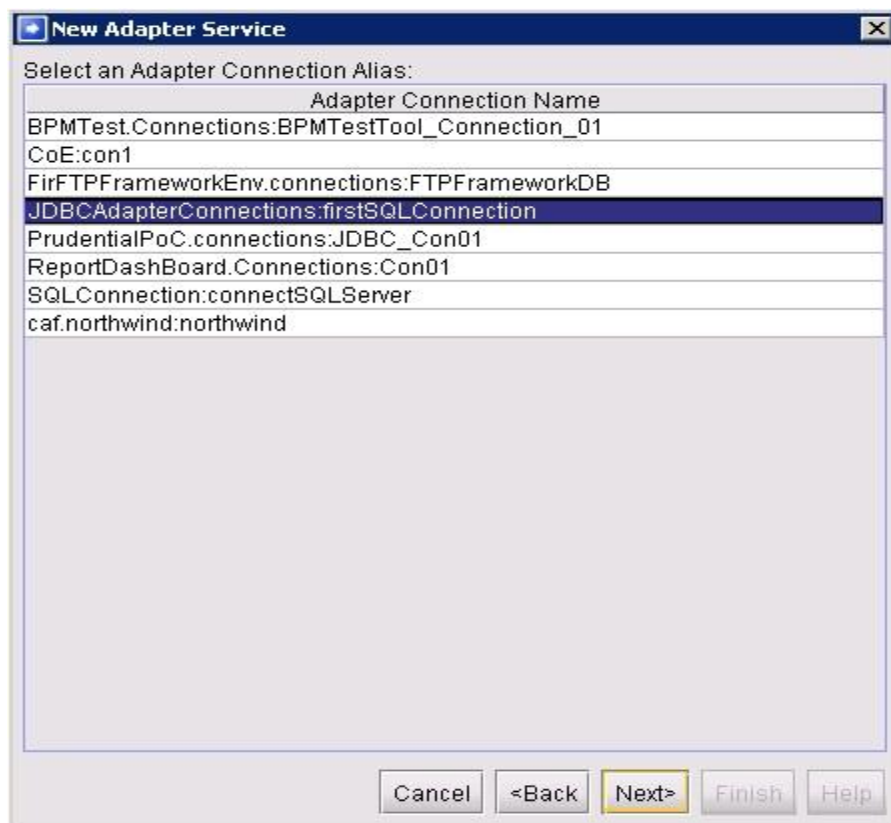
- 1) Right click on adapter folder select **New** -> **All Choices**. Developer opens the **New** wizard.
- 2) Select **Adapter Service** from the list of elements and click **Next**.



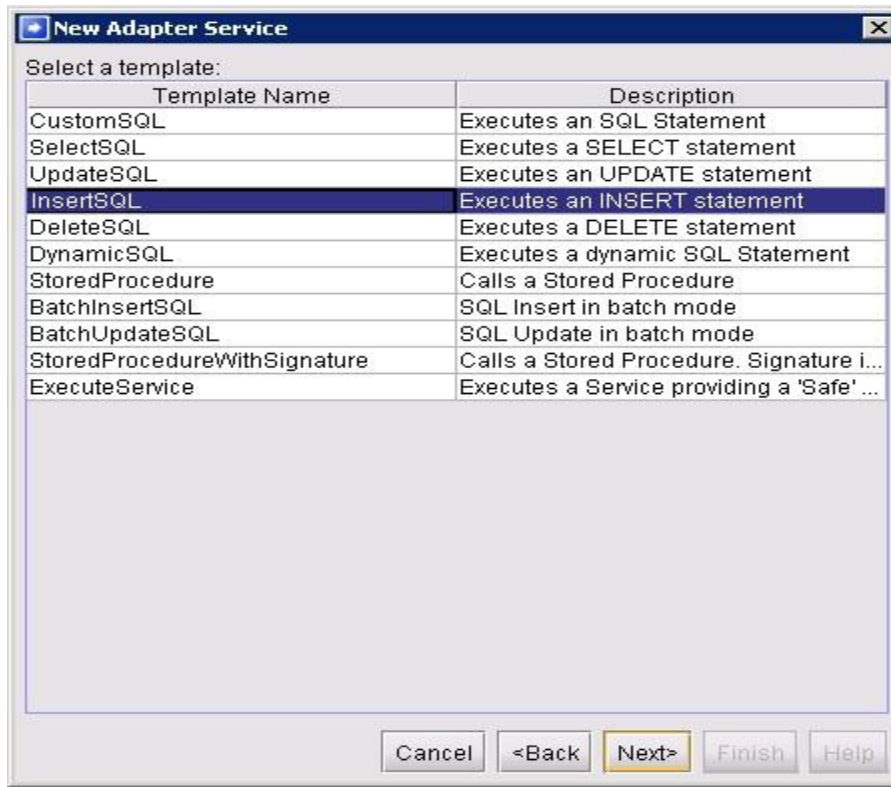
- 3) Select **JDBC Adapter** as the adapter type and click **Next**.



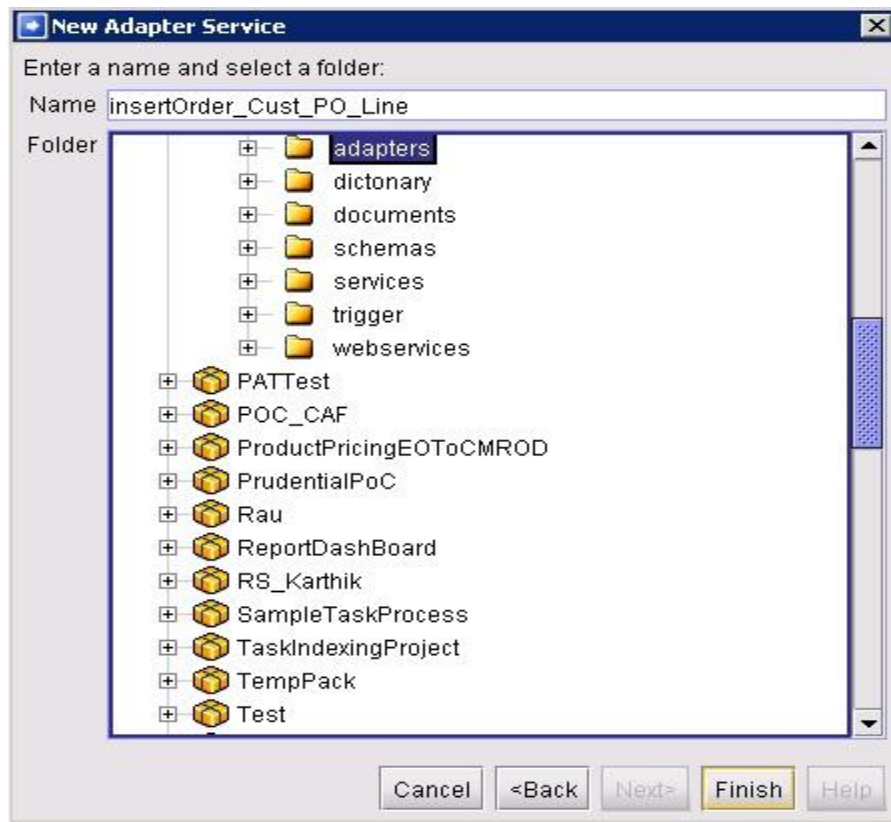
- 4) Select the appropriate **Adapter Connection Name** and click **Next**.



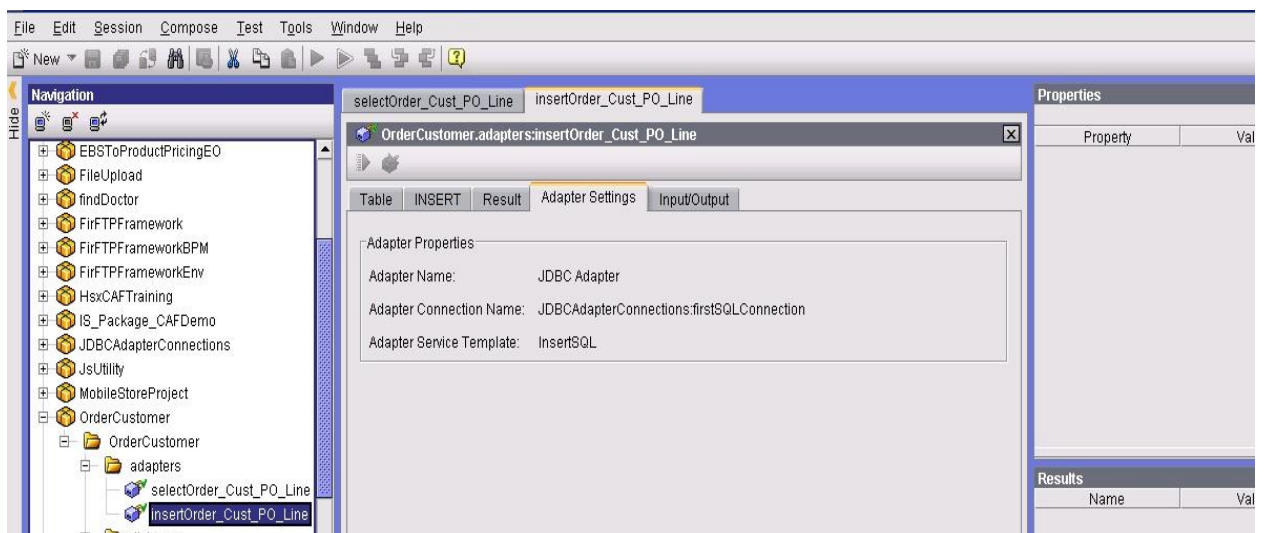
- 5) Select the **InsertSQL** template and click **Next**.



- 6) Type a unique name for the service and select the appropriate folder. Click **Finish**.

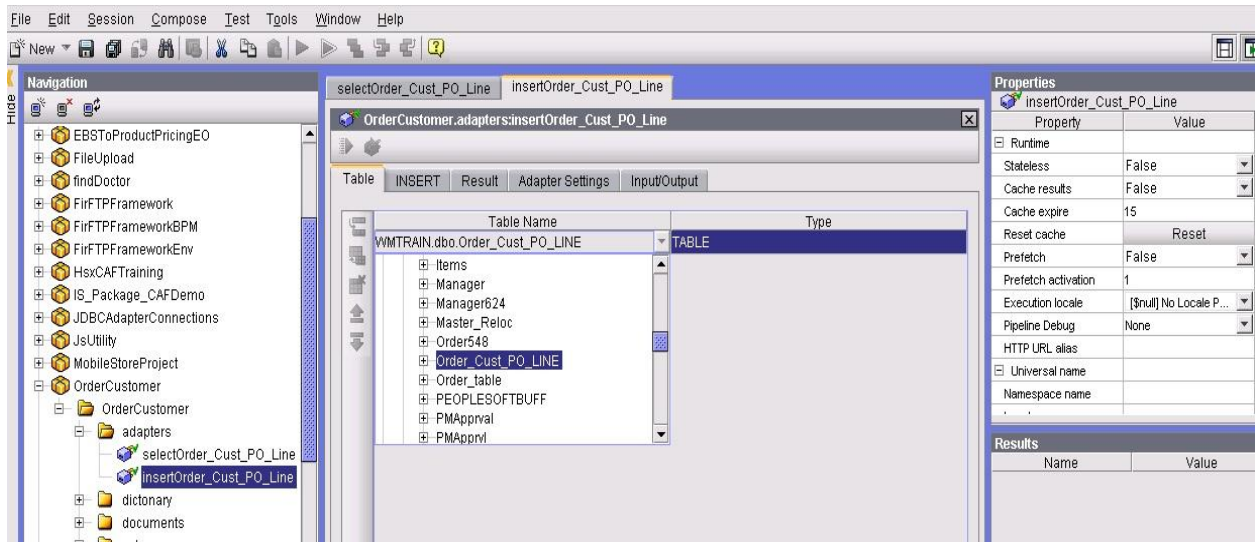


The adapter service editor for the adapter service appears. You can select the **Adapter Settings** tab at any time to confirm adapter service properties such as the **Adapter Name**, **Adapter Connection Name**, and **Adapter Service Template**, as necessary.





7) Select the **Table** tab to configure the database table to be updated.



- 8) Select the **INSERT** tab and use the **Column**, **Column Type**, **JDBC Type** and **Expression** fields on the top row of the tab to define the columns and fields to be inserted.

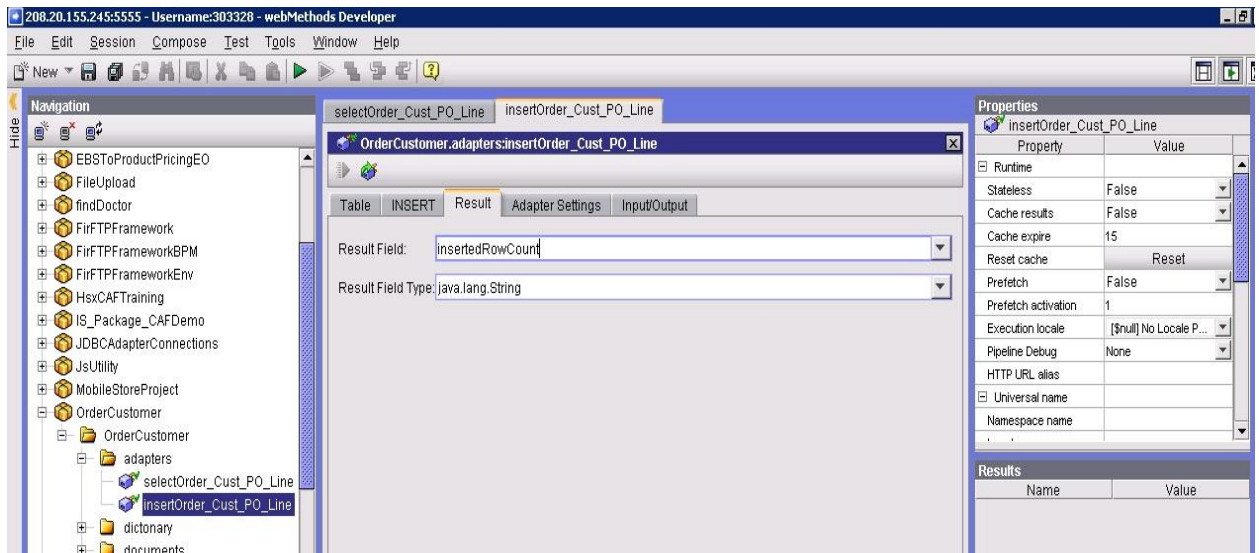
The screenshot shows the webMethods Developer interface. The left pane displays a project tree with the 'OrderCustomer' project selected, and the 'insertOrder\_Cust\_PO\_Line' adapter highlighted. The main workspace shows the 'INSERT' tab of the 'OrderCustomer.adapters.insertOrder\_Cust\_PO\_Line' adapter. The 'INSERT' tab contains two tables: one for defining columns and their types, and another for mapping input fields to those columns. The 'Properties' pane on the right shows runtime properties for the adapter, and the 'Results' pane at the bottom right is empty.

Column	Column Type	JDBC Type	Expression
PO_ID	varchar(15)	VARCHAR	?
LINE_IO	numeric(2)	NUMERIC	?
ITEM_CODE	varchar(10)	VARCHAR	?
ITEM	varchar(20)	VARCHAR	?
ITEM_CATEGORY	varchar(25)	VARCHAR	?
QUANTITY	numeric(5)	NUMERIC	?
UNIT_PRICE	numeric(5)	NUMERIC	?
TOTAL_PRICE	numeric(10)	NUMERIC	?

Column	Column Type	JDBC Type	Input Field	Input Field Type
PO_ID	varchar(15)	VARCHAR	PO_ID	java.lang.String
LINE_IO	numeric(2)	NUMERIC	LINE_IO	java.lang.String
ITEM_CODE	varchar(10)	VARCHAR	ITEM_CODE	java.lang.String
ITEM	varchar(20)	VARCHAR	ITEM	java.lang.String
ITEM_CATEGORY	varchar(25)	VARCHAR	ITEM_CATEGORY	java.lang.String
QUANTITY	numeric(5)	NUMERIC	QUANTITY	java.lang.String
UNIT_PRICE	numeric(5)	NUMERIC	UNIT_PRICE	java.lang.String
TOTAL_PRICE	numeric(10)	NUMERIC	TOTAL_PRICE	java.lang.String

- 9) Use the **Result** tab's **Result Field** and **Result Field Type** to specify the output field name and corresponding field types for the resulting number of rows that have been inserted.



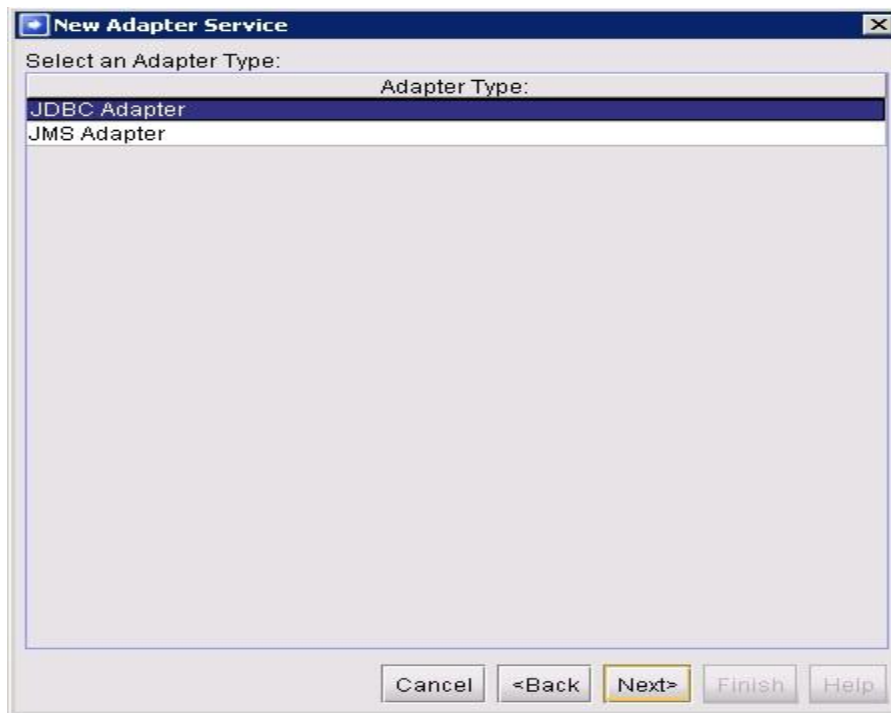
## Update ADAPTER CREATION

### Steps to create UPDATE Adapter Service:

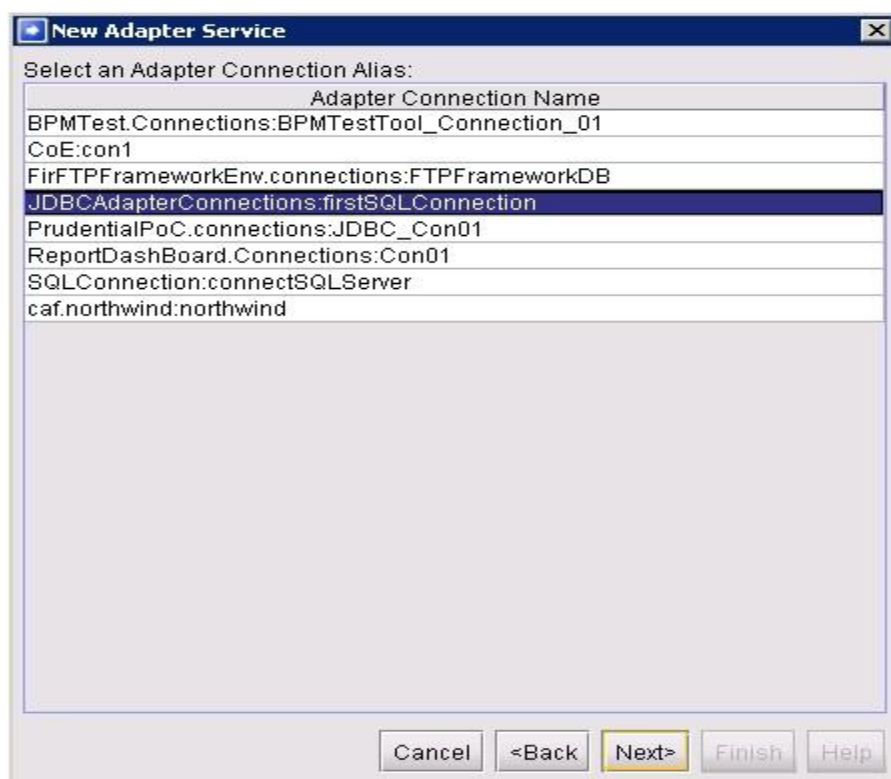
- 1) Right click on adapter folder select **New** -> **All Choices**. Developer opens the **New** wizard.
- 2) Select **Adapter Service** from the list of elements and click **Next**.



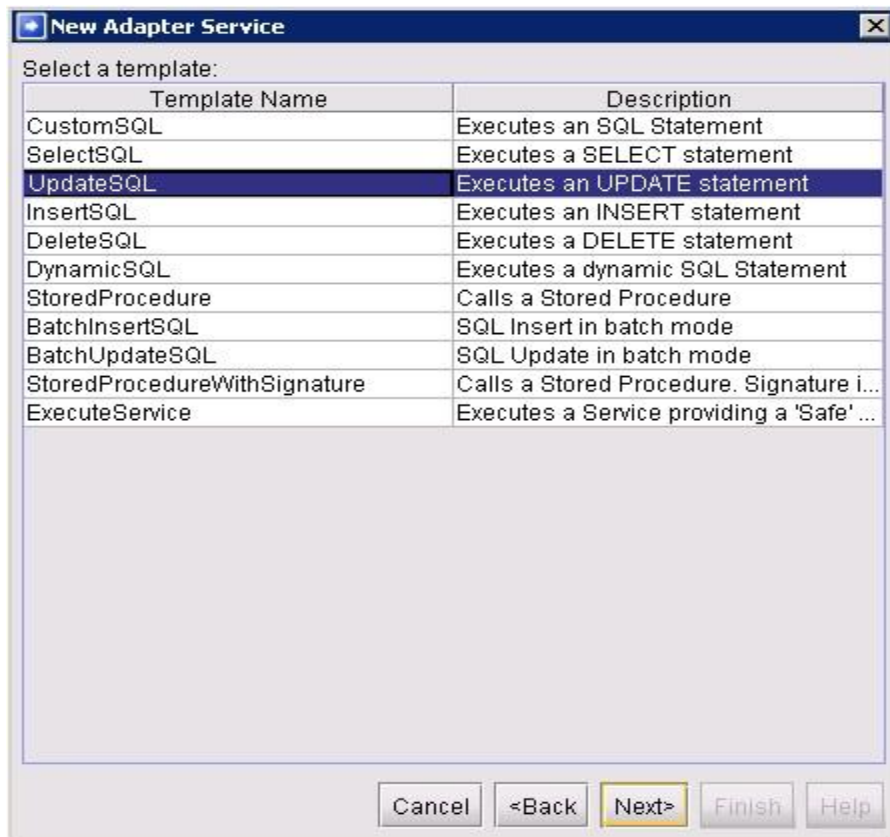
- 3) Select **JDBC Adapter** as the adapter type and click **Next**.



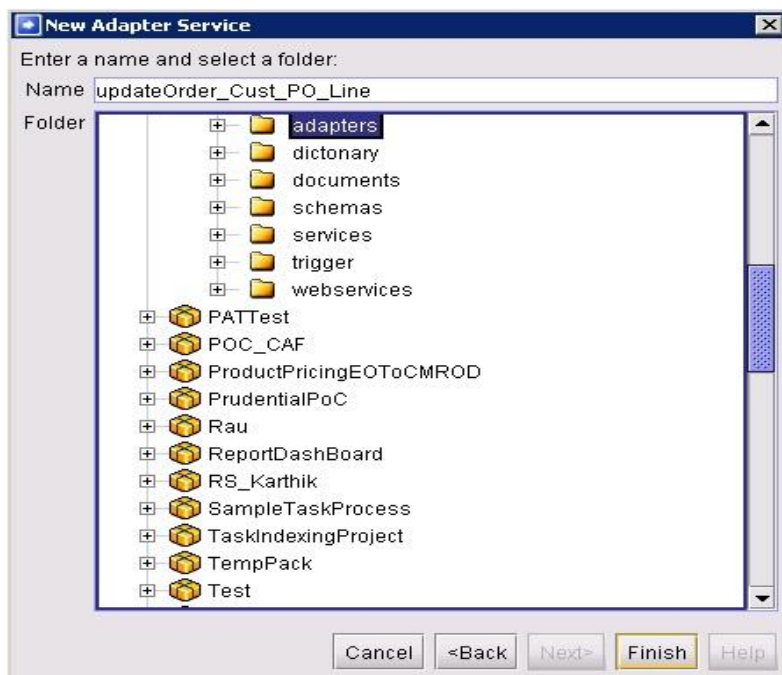
- 4) Select the appropriate **Adapter Connection Name** and click **Next**.



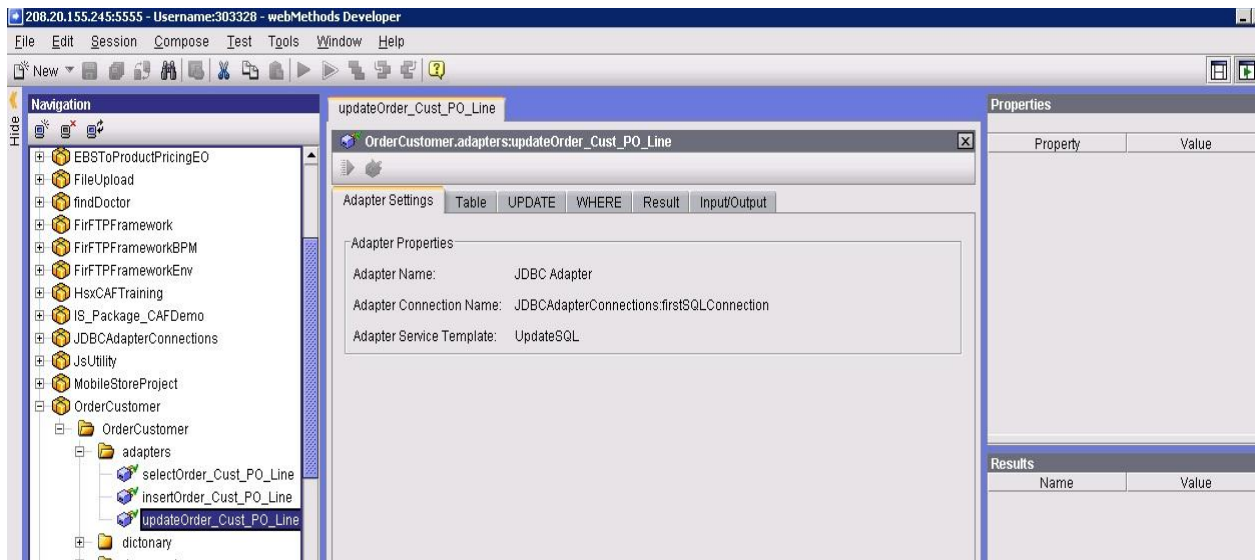
- 5) Select the **UpdateSQL** template and click **Next**.



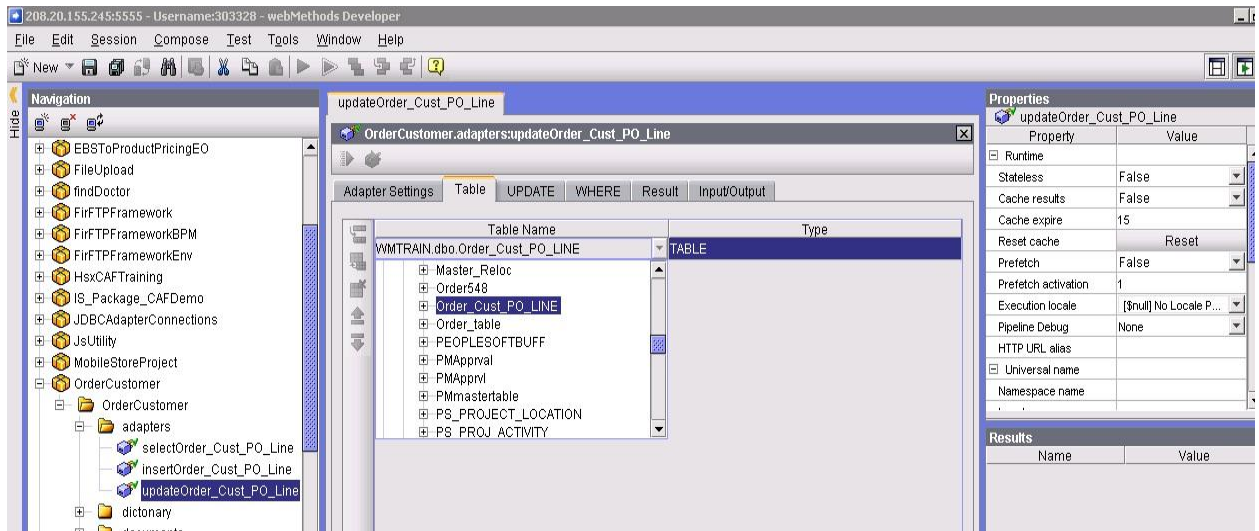
6) Type a unique name for the service and select the appropriate folder. Click **Finish**.



The adapter service editor for the adapter service appears. You can select the **Adapter Settings** tab at any time to confirm adapter service properties such as the **Adapter Name**, **Adapter Connection Name**, and **Adapter Service Template**, as necessary.

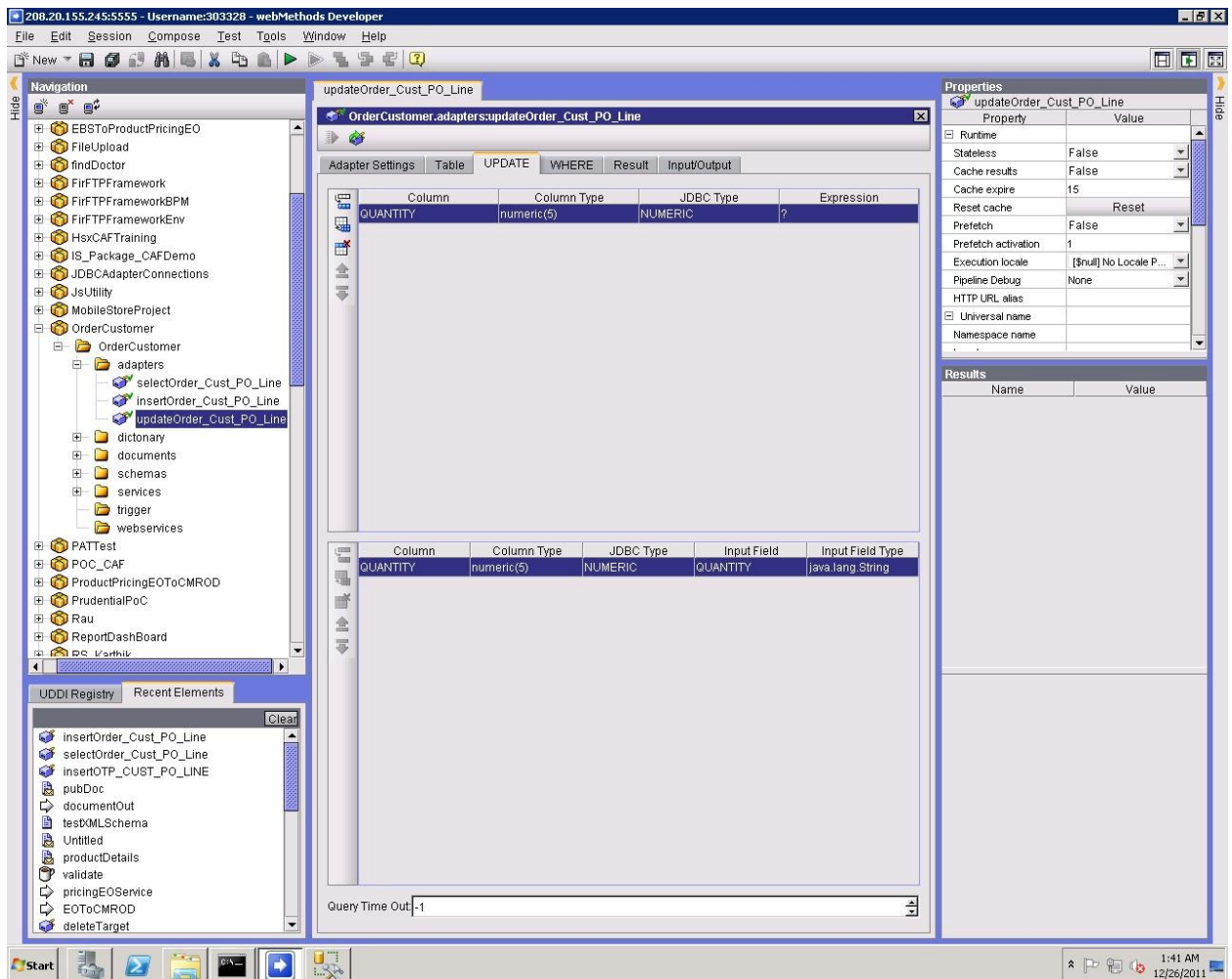


7) Select the **Table** tab to configure the database table to be updated.



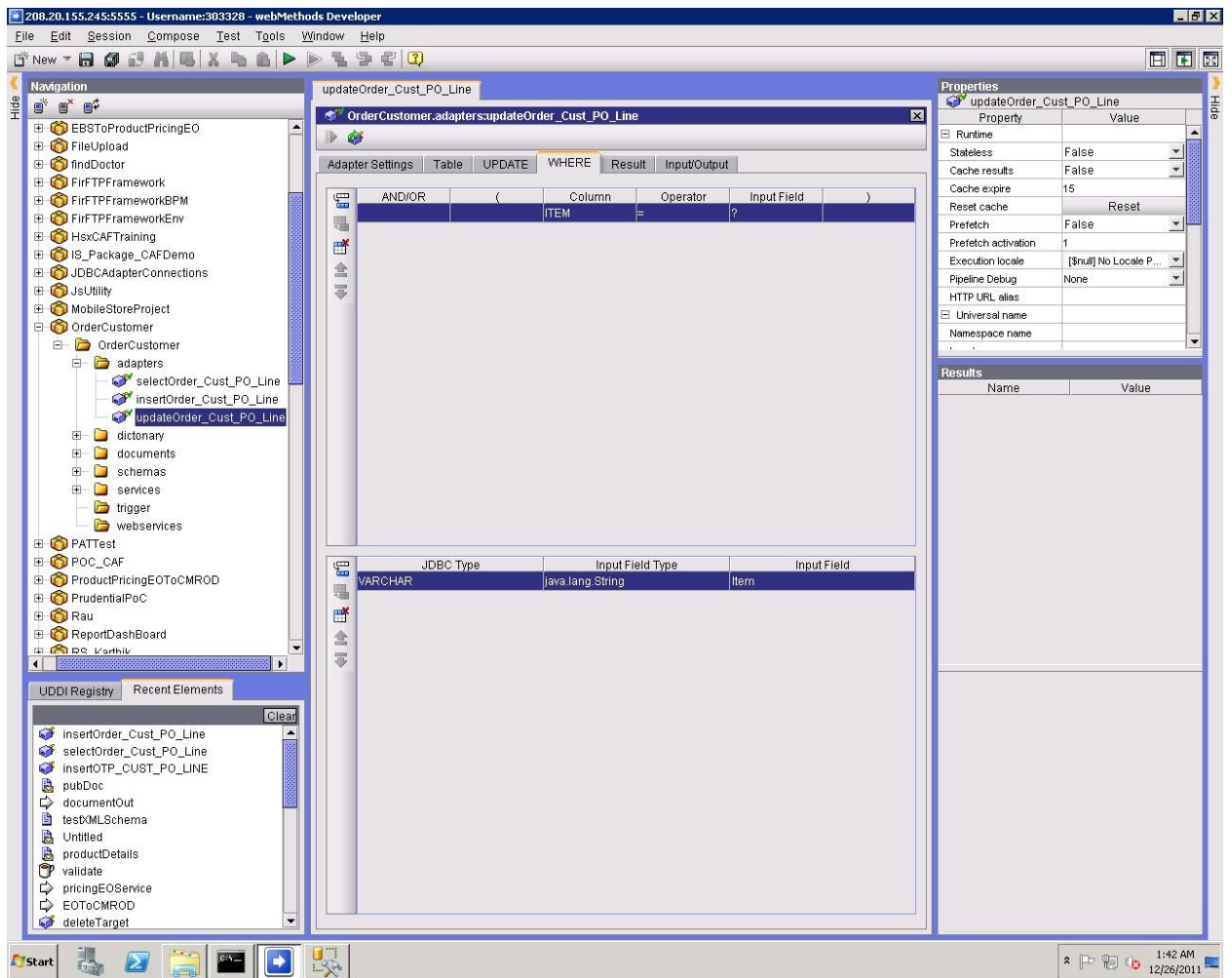


- 8) Select the **UPDATE** tab and use the **Column**, **Column Type**, **JDBC Type** and **Expression** fields on the top row of the tab to define the columns and fields.

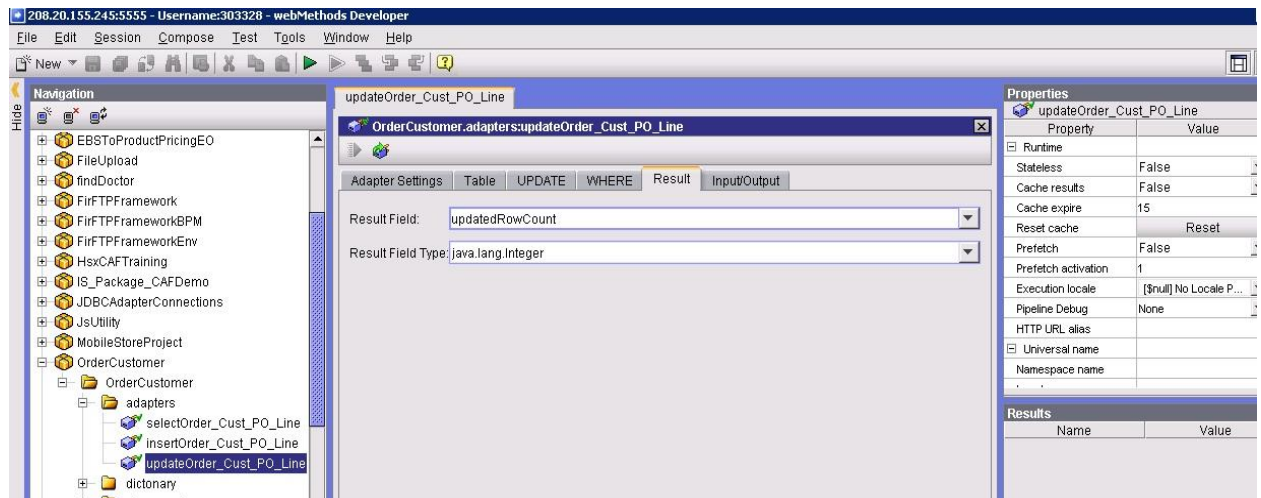




9) Use the **WHERE** tab to specify the conditions for selecting information.



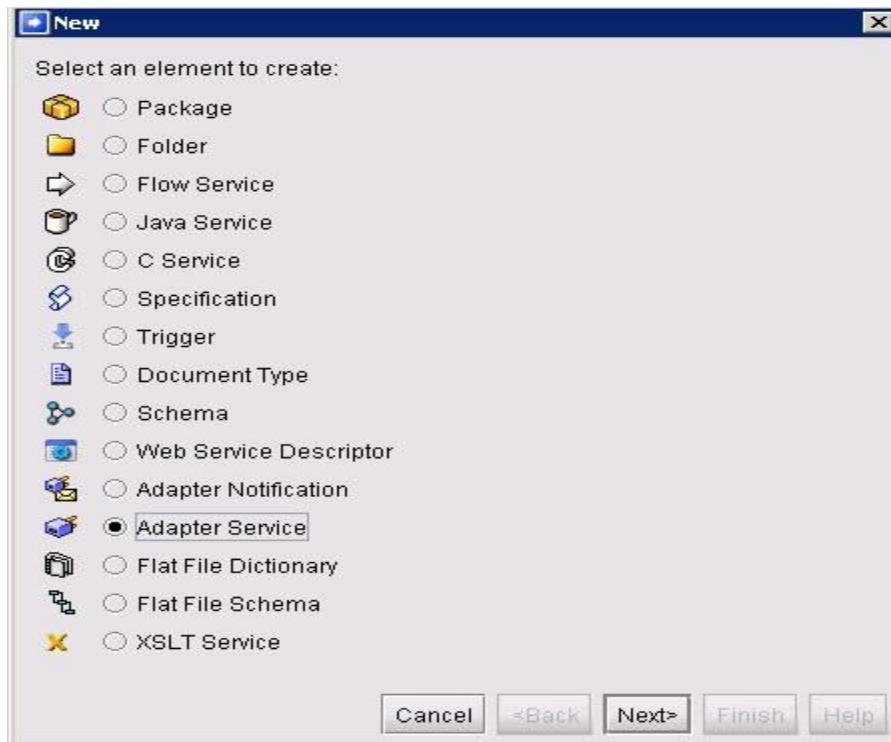
- 10) Use the **Result** tab's **Result Field** and **Result Field Type** to specify the output field name and corresponding field types for the resulting number of rows that have been updated.



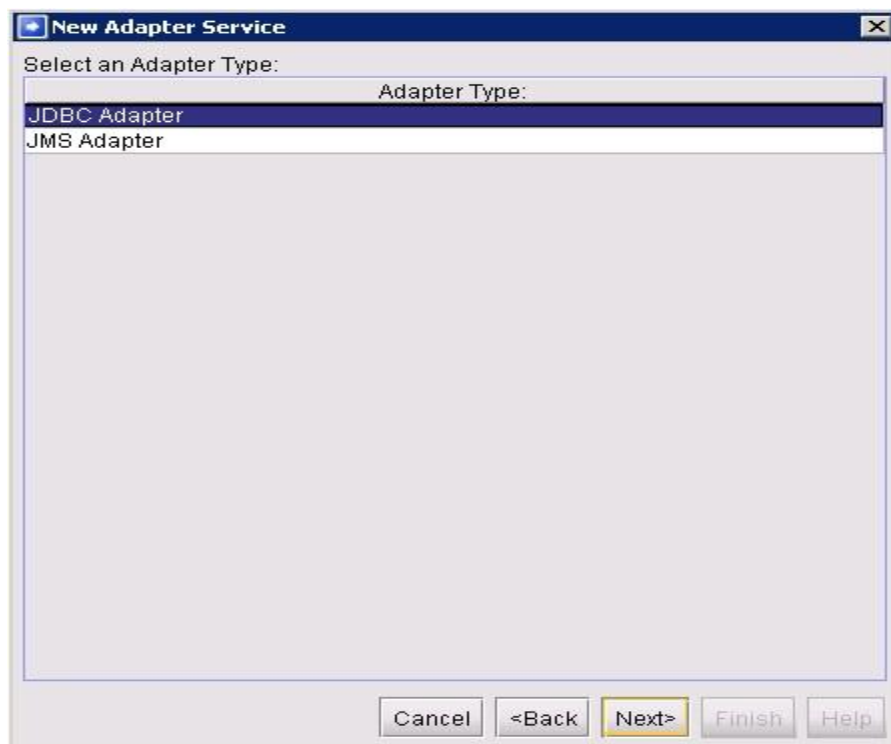
## SELECT ADAPTER CREATION

### Steps to create SELECT Adapter Service:

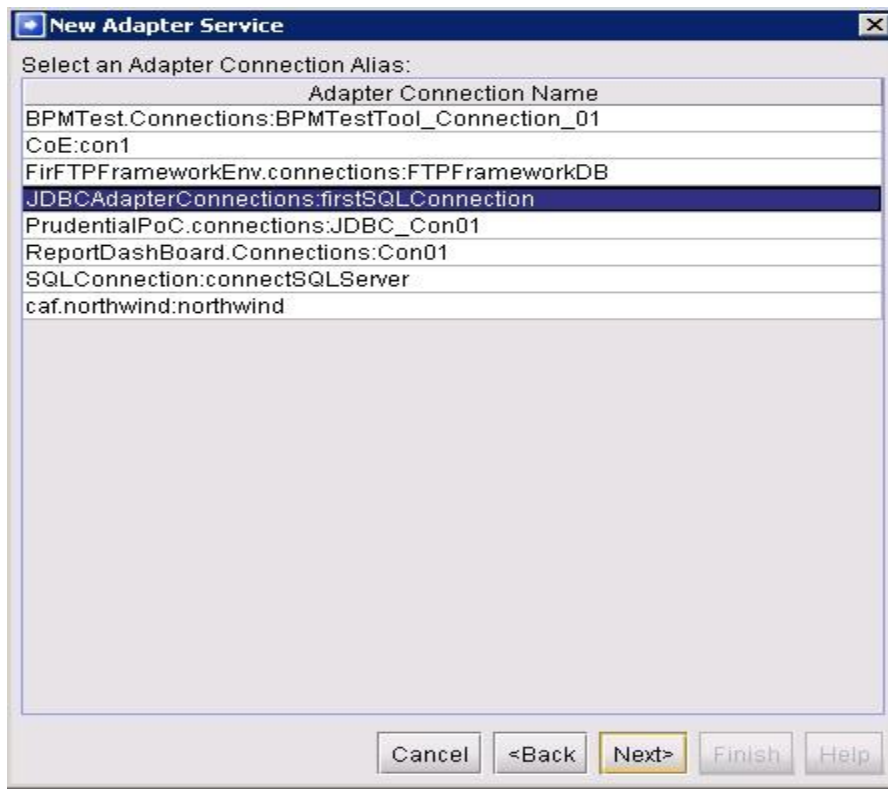
- 1) Right click on adapter folder select **New -> All Choices**. Developer opens the **New** wizard.
- 2) Select **Adapter Service** from the list of elements and click **Next**.



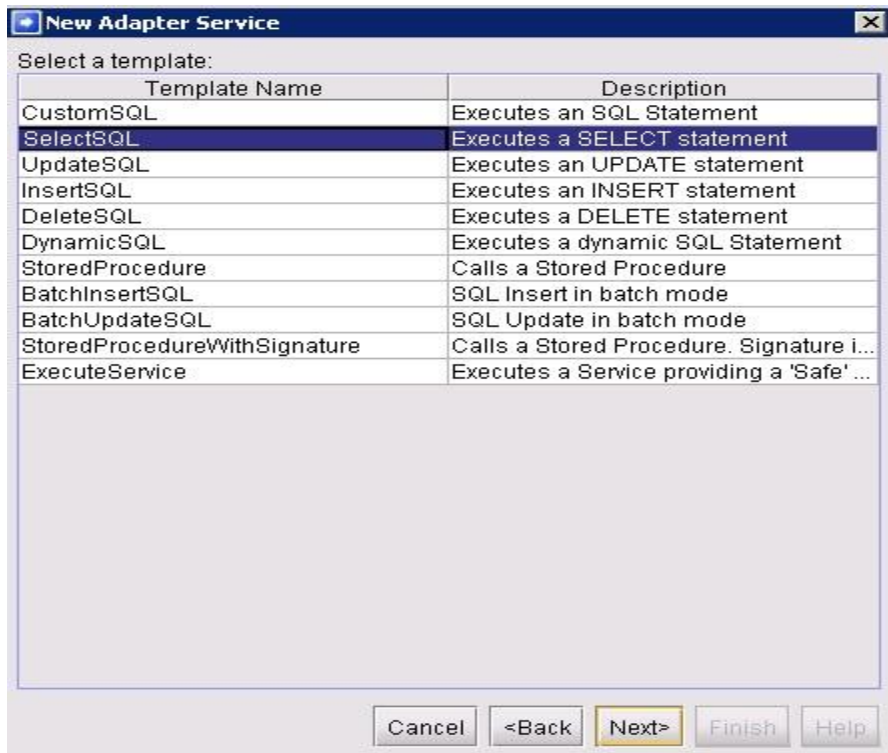
3) Select **JDBC Adapter** as the adapter type and click **Next**.



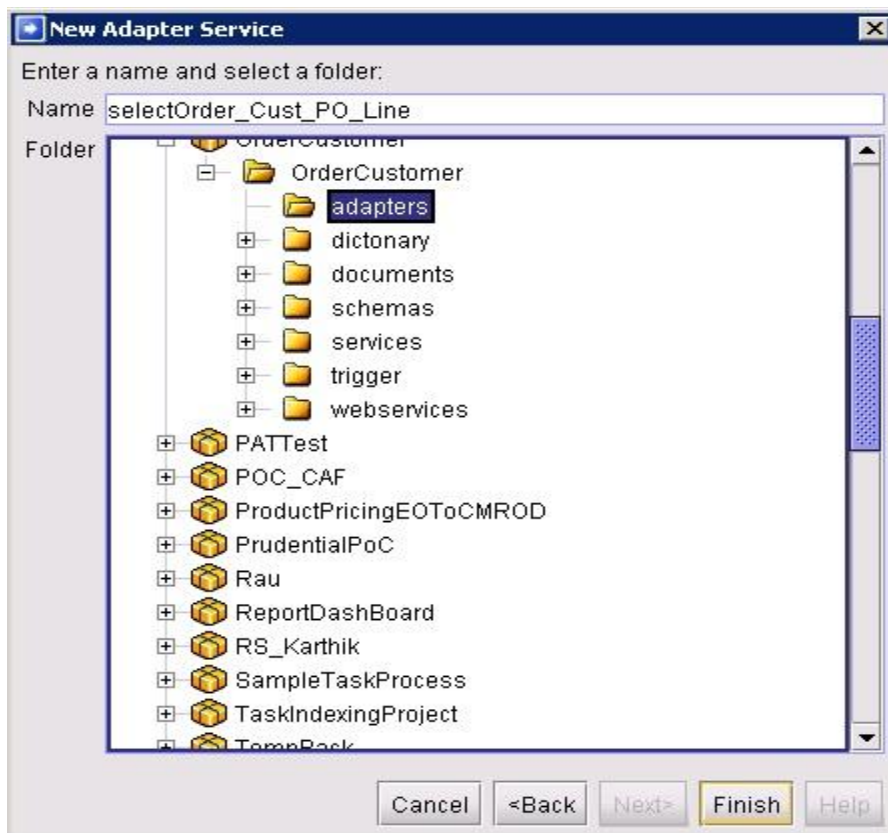
- 4) Select the appropriate **Adapter Connection Name** and click **Next**.



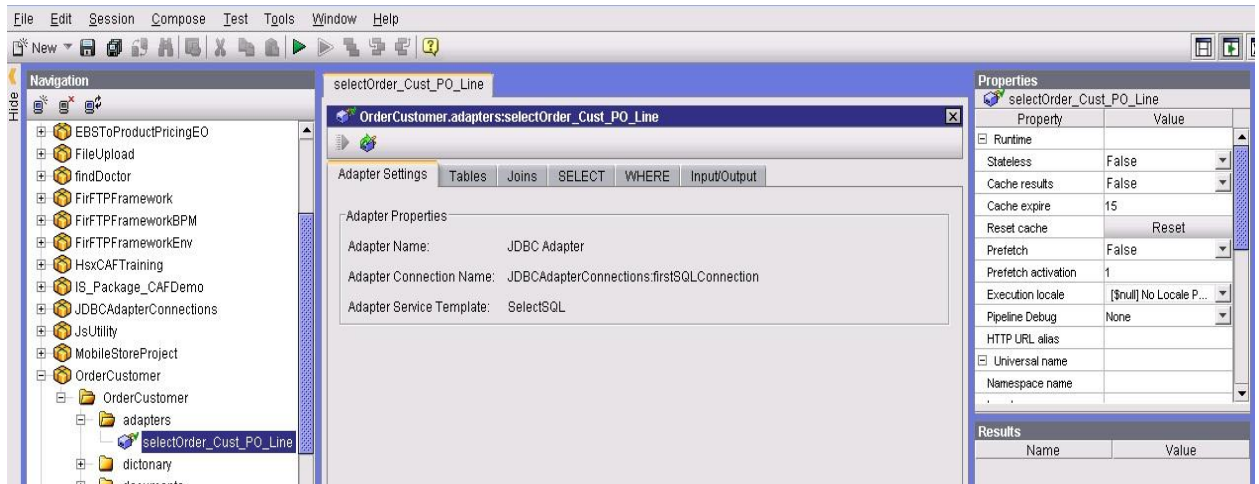
- 5) Select the **SelectSQL** template and click **Next**.



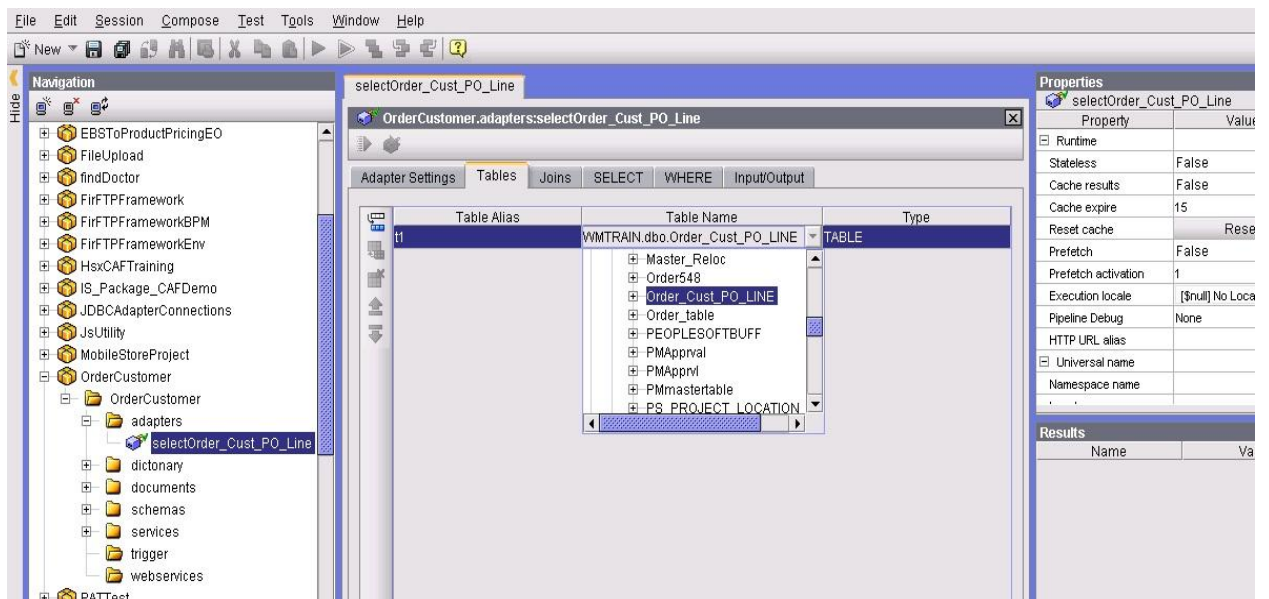
6) Type a unique name for the service and select the appropriate folder. Click **Finish**.



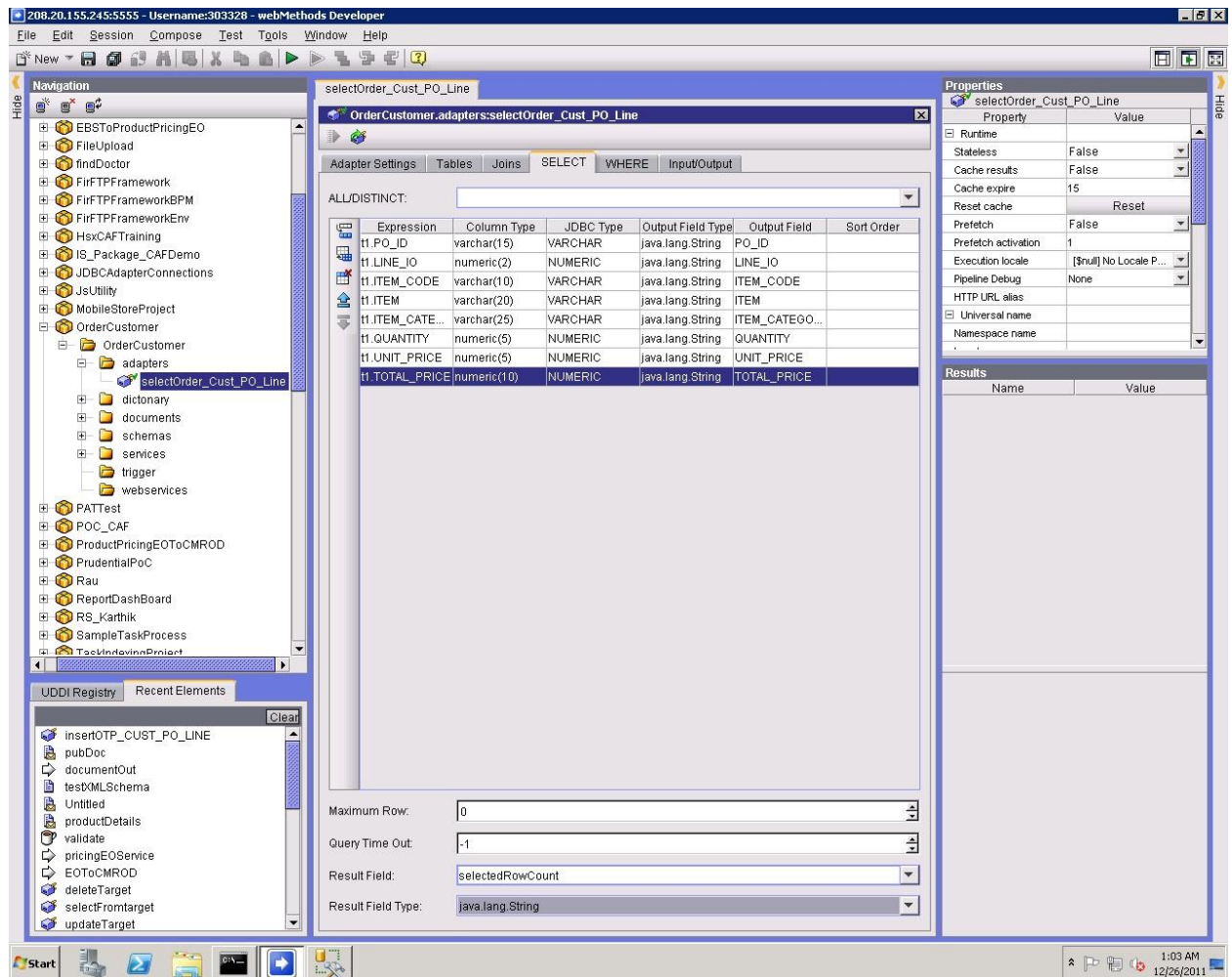
The adapter service editor for the adapter service appears. You can select the **Adapter Settings** tab at any time to confirm adapter service properties such as the **Adapter Name**, **Adapter Connection Name**, and **Adapter Service Template**, as necessary.



7) Select the **Tables** tab to configure the database table (or tables).



- 8) Use the **SELECT** tab to define the columns and fields to be selected. Under this tab use **Maximum Row**, **Query Time Out**, **Result Field** and **Result Field Type** to control output and for the resulting number of rows that have been selected.



## Adapter Notification

Simulate the following actions for Adapter Notifications

- Create an adapter notification for the table employees.
- Check the buffer table & publishable documents which got automatically created.
- Write a handler service for the notifier with publishable document as input.
- Create a trigger using the publishable document and the handler service
- Schedule the notification and enable it.