Oracle FLEXCUBE Direct Banking

Version 12.0.1.0.0

Mobile Banking Rapid Deployment Framework

User Manual

Part No. E52306-01

About the Guide

Oracle FLEXCUBE Direct Banking Field Mapper is a Graphical User Interface (GUI) based Integration tool which provides development and maintenance of mapping of different request fields.

To put simple, this tool allows quickly creating, updating and viewing of the source system FCDB fields and target system FCDB fields and also their mapping, checking and storing them for the further use.

This document describes functionality supported by Oracle FLEXCUBE Direct Banking Field Mapper and provide in-depth guide to start working with it. User can use this tool to generate SQL scripts of the fields mapping.

Audience

This guide is intended for:

1. The business team of the bank, responsible for configuration, setup and support of the FCDB.

Abbreviations

The following abbreviations may be used within the document.

FC	FLEXCUBE Application
FCDB	FLEXCUBE Direct Banking
XML	Extensible Markup Language
GUI	Graphical User Interface
API	Application Programming Interface

Table Of Contents

1. Introduction

Oracle FLEXCUBE Fields Mapper is a Graphical User Interface for creating, editing, managing and reviewing the mapping of request fields of FCDB and their corresponding SQL script generation.

The editor makes creating and editing fields mapping and SQL script generation easy. It represents all elements graphically through property panels and a graph component to give the user a better understanding and an overview of the mapped fields. The final output of the editor is SQL script for MOBILEENABLERFIELDMAP and MOBILEENABLERDEFAULTFIELDMAP table.

Oracle FLEXCUBE Fields Mapper accomplishes three main goals:

- Graphical Representation of fields mapping
- Editing/Modeling of mapping of fields.
- Generation of SQL scripts for MOBILEENABLERFIELDMAP and MOBILEENABLERDEFAULTFIELDMAP table
- Writing of mapping Script to the file system.

2. Prerequisites

Following are the prerequisites to use this tool

1. To use this tool one should have "JDK 6" or higher version of java on their machine.
2. Current version of FIELDSMAPPER.jar must be copied on the system.
3. Following jars are also required to run this tool.
    - connect.jar
    - log4j-1.2.16.jar
    - ojdbc6.jar
    - org.eclipse.draw2d.jar
    - soap.jar
    - xalan.jar
    - xercesImpl.jar

- xmlparserv2.jar
- xml-apis.jar
- swt3.4.jar
- serializer.jar

3. How to Run this tool

This tool can be run in following two ways:

- To run this tool, double click FIELDSMAPPER.jar, if JDK 6 is available in the recommended programs to execute jar files.

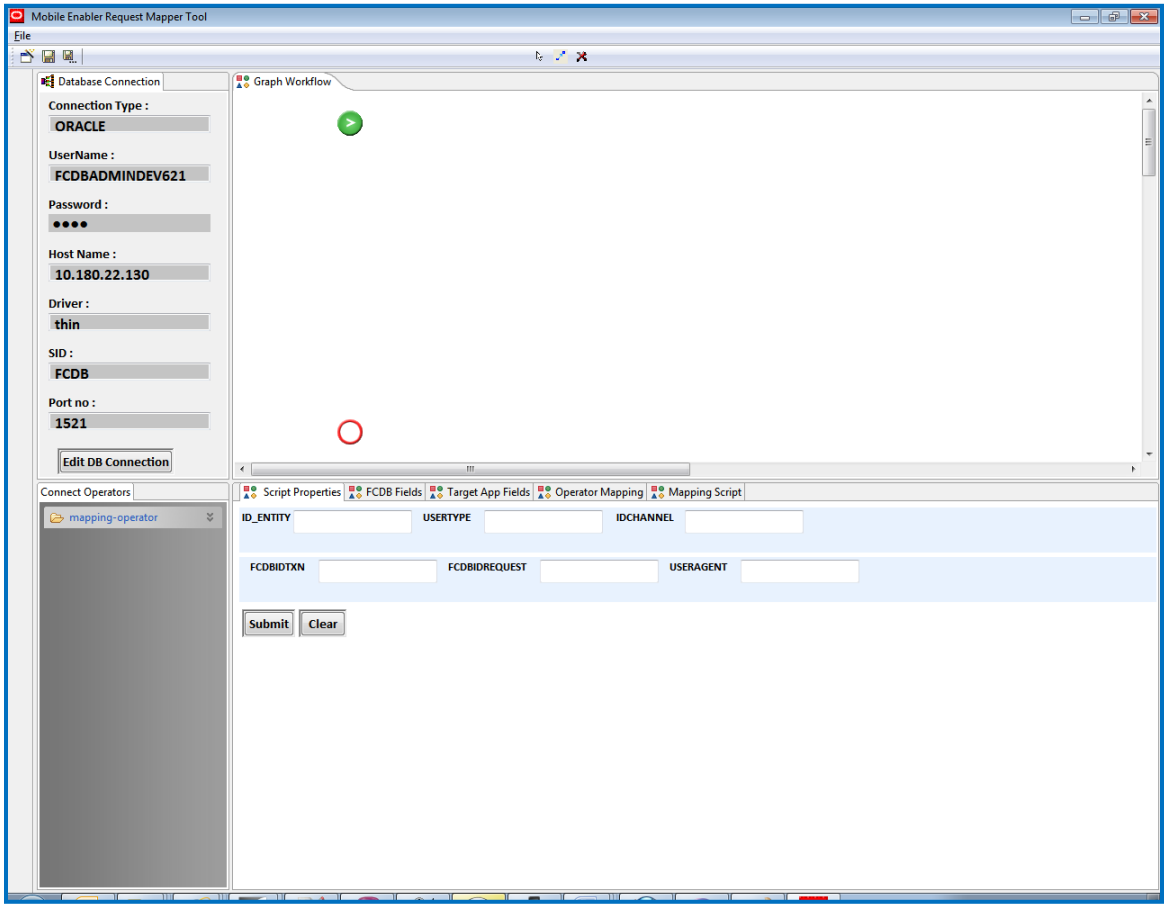
OR

- Use command java –jar FIELDSMAPPER.jar to execute the jar file.

4. Understanding this Tool

On executing FIELDSMAPPER.jar a splash screen opens with a progress bar in the bottom as shown below

Once the progress bar completes, splash screen goes off the screen and the main working platform appears. The following screenshot displays the main working platform.


Mobile Enabler Request Mapper Tool
File
Database Connection
Connection Type :
ORACLE
UserName :
FCDBADMINDEV621
Password :
Host Name :
10.180.22.130
Driver :
thin
SID :
FCDB
Port no :
1521
Edit DB Connection
Graph Workflow
Connect Operators
mapping-operator
Script Properties
FCDB Fields
Target App Fields
Operator Mapping
Mapping Script
ID_ENTITY
USERTYPE
IDCHANNEL
FCDBIDTXN
FCDBIDREQUEST
USERAGENT
Submit
Clear

5. FLEXCUBE Fields Mapper Menu Bar

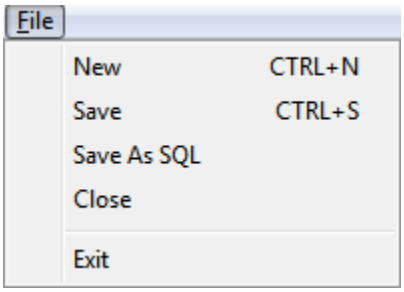
Menu bar in Fields Mapper is divided in two rows. First contains several menus under which there are several sub menus which provide some basic functionality. Second row consists of buttons which are shortcut for menus.

This is having links for frequently used functionalities in Fields Mapper. Links for the actions like creating and manipulating mapping scripts files and elements are provided.

The actions in the main menu are organized in the following groups:

5.1. File Menu

This menu contains functionality similar to the file menu in any MS-Office utility. Sub menus in this menu are



New	Start developing new script
Save	Save the modified script
Save As SQL	Save the script on hard disk as .sql file
Close	Close current window
Exit	Exit from Oracle FLEXCUBE Fields Mapper

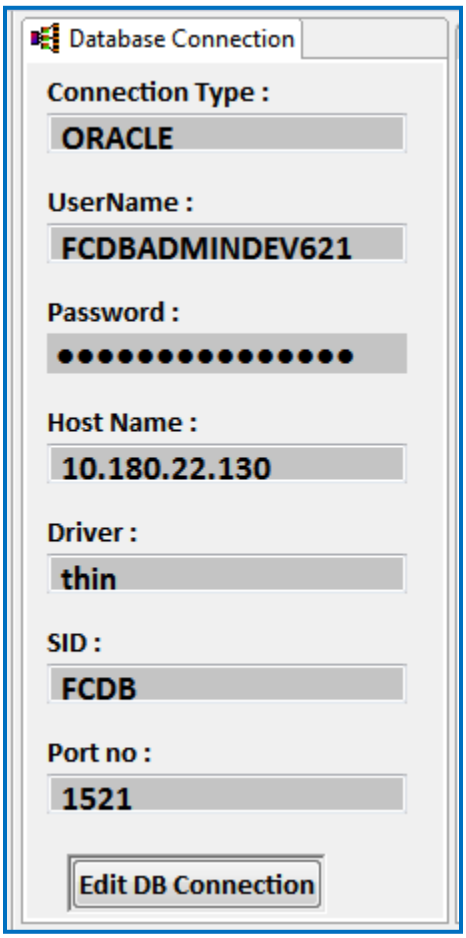
5.2. Menu Buttons

A Panel below Main Menu Bar contains different shortcut buttons for some of the important functionalities. Currently it contains eight buttons which provide following functionality.

New	This will open a new window to be created.
Save	This is used to save the created / modified script in file system.
Save As...	This is used to save a copy of generated script in file system.
Selection	This is used to selects the normal cursor.
Connector...	This is used to connect one operator to other operator in the chain.
Delete component	This is used to delete the selected component which may be link between two operators, operator source mapping etc..

6. Database Connection Window

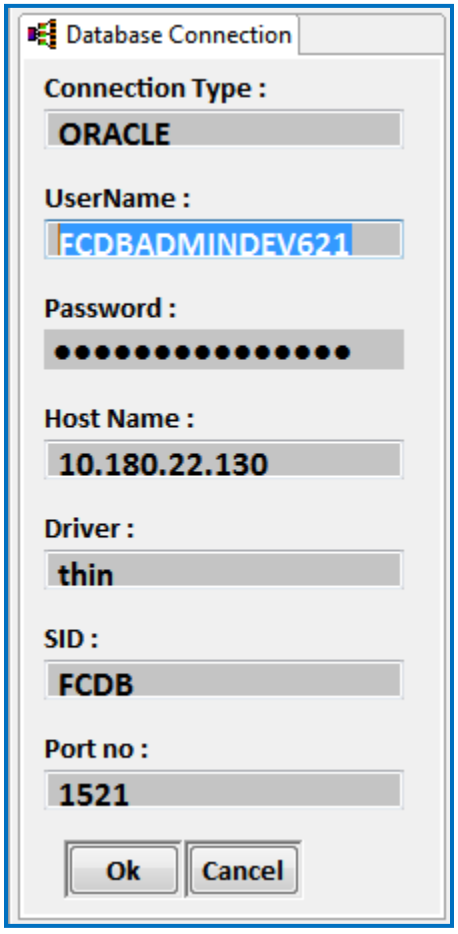
Database connection window displays the existing database connection properties. When the tool loads the existing database connection properties are also loaded and populated in this window. It allows the option to edit the connection and connect to a new database.


Database Connection
Connection Type :
ORACLE
UserName :
FCDBADMINDEV621
Password :
Host Name :
10.180.22.130
Driver :
thin
SID :
FCDB
Port no :
1521
Edit DB Connection

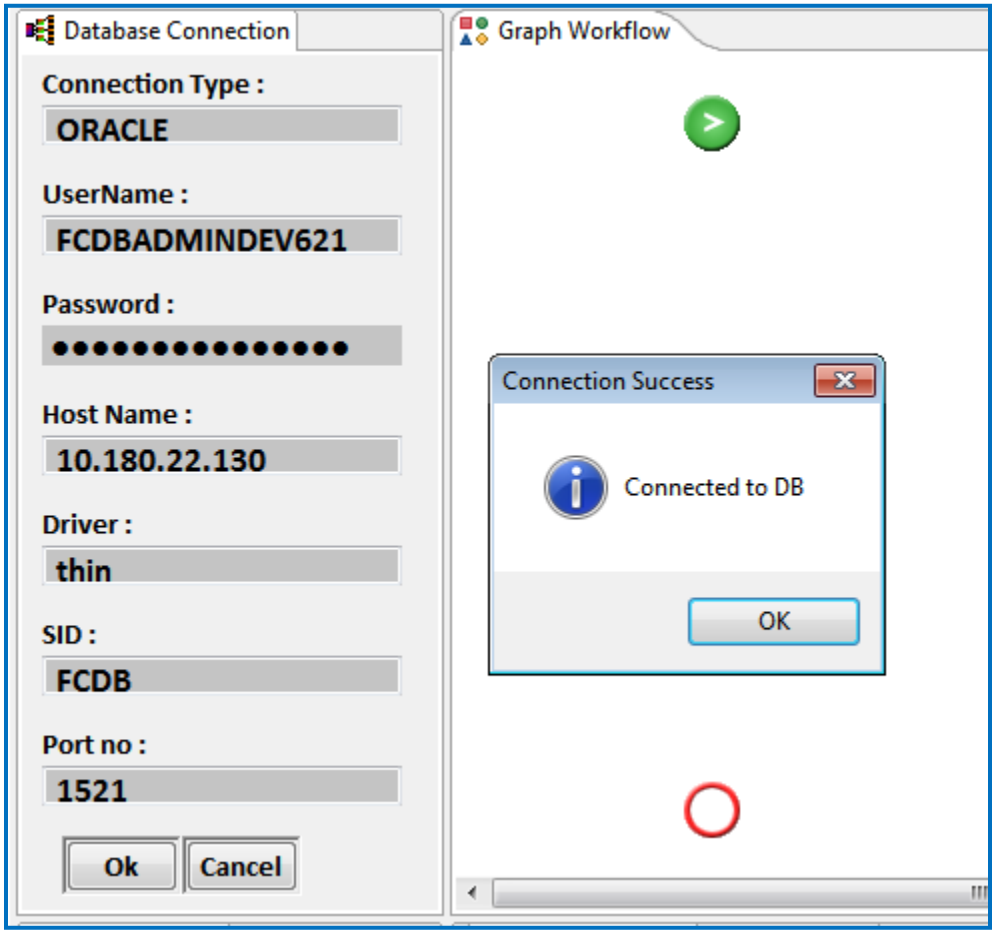
6.1. Edit DB Connection

To edit or create a new database connection

1. Click on Edit DB Connection button, all the text box will become editable.

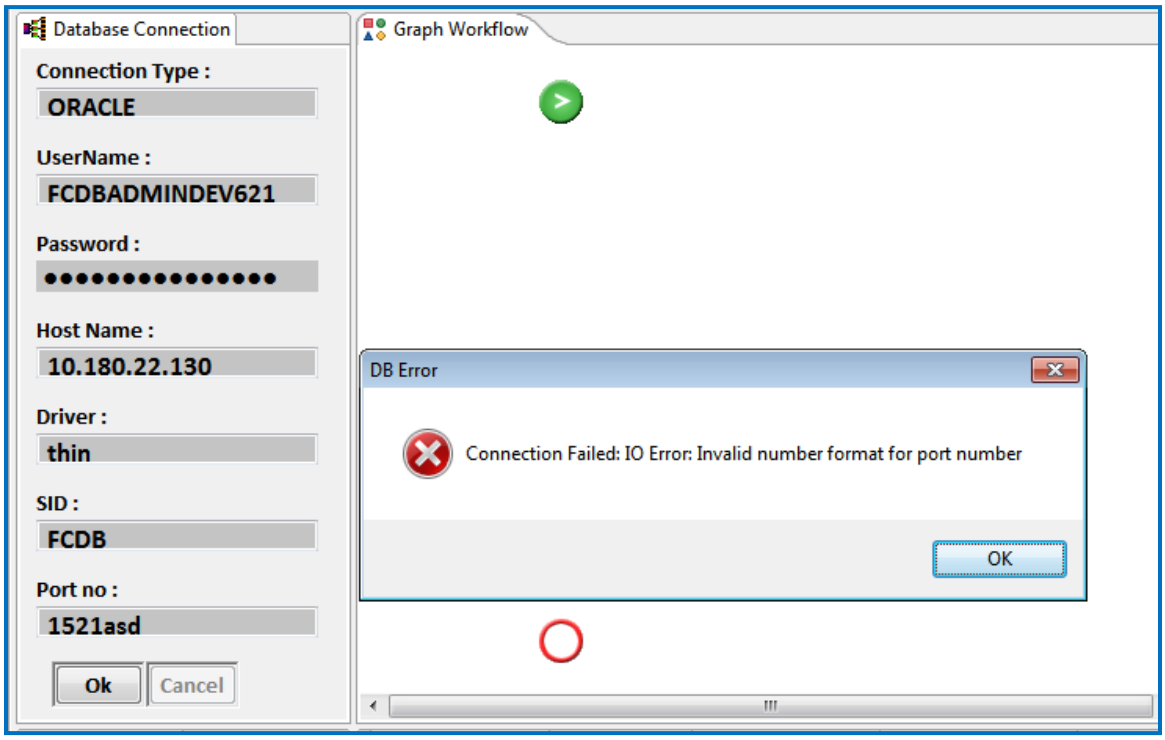


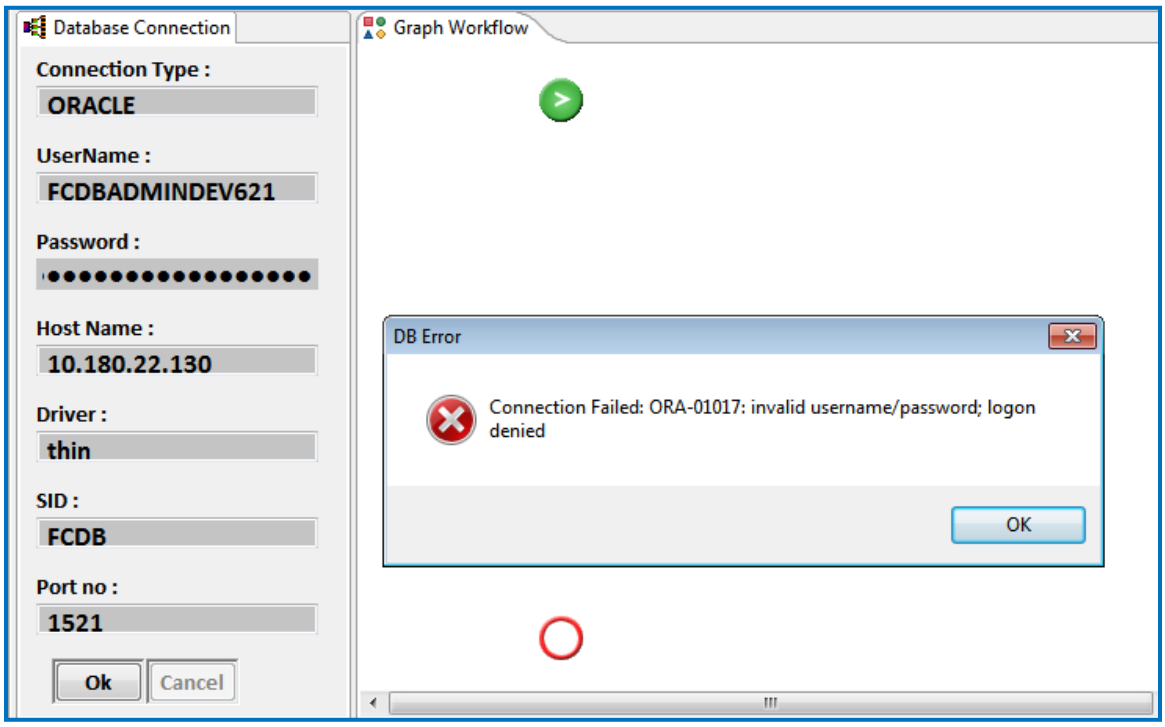
2. Enter the new connection properties values like username, password, hostname, SID name and click on Ok.
3. If the values provided are correct and connection to database is successful, a success pop up message is shown.



4. Click on Ok to establish the connection.
5. Click on Cancel button to cancel the edit connection operation.

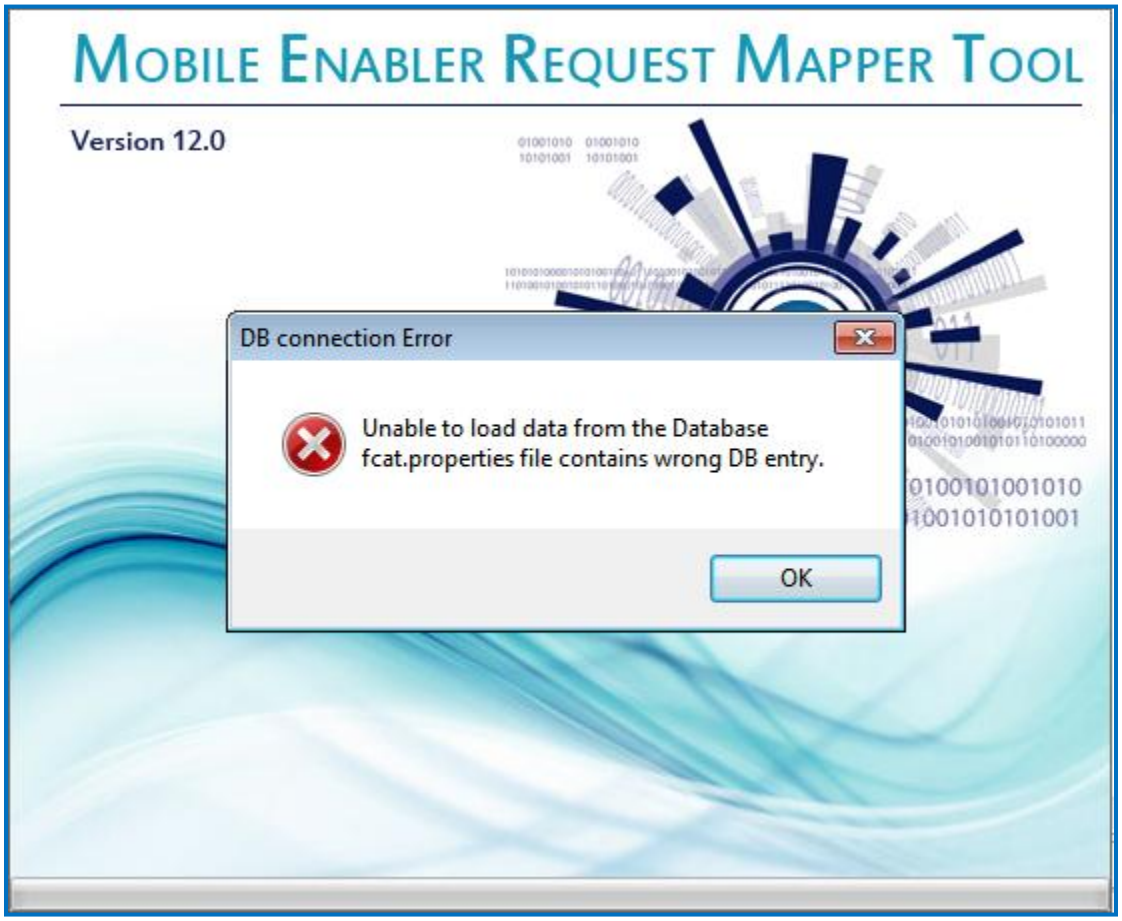
6. If there is an error while connecting to database an error dialogue is shown with the error message.

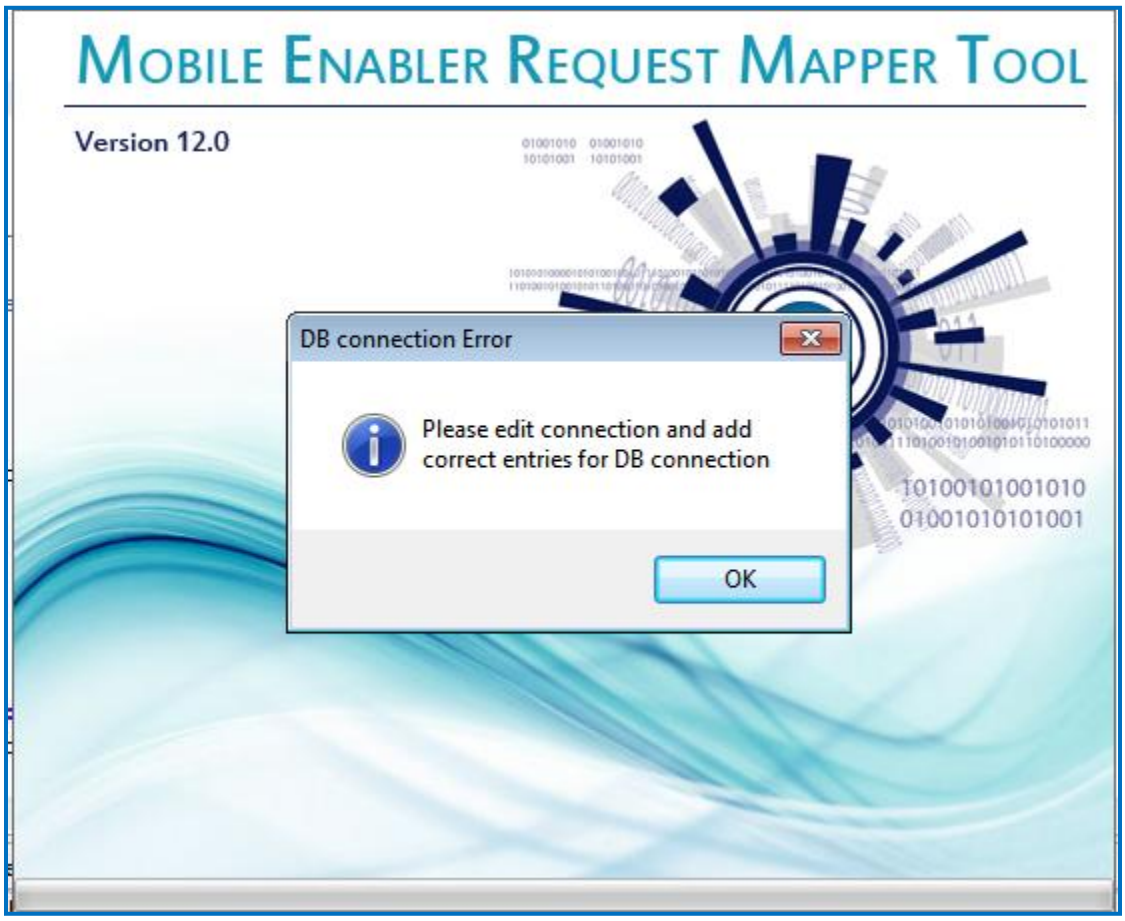



Database Connection
Connection Type :
ORACLE
UserName :
FCDBADMINDEV621
Password :
Host Name :
10.180.22.130
Driver :
thin
SID :
FCDB
Port no :
1521
Ok
Cancel
Graph Workflow
DB Error
Connection Failed: ORA-01017: invalid username/password; logon denied
OK

6.2. Database Connection error during start up

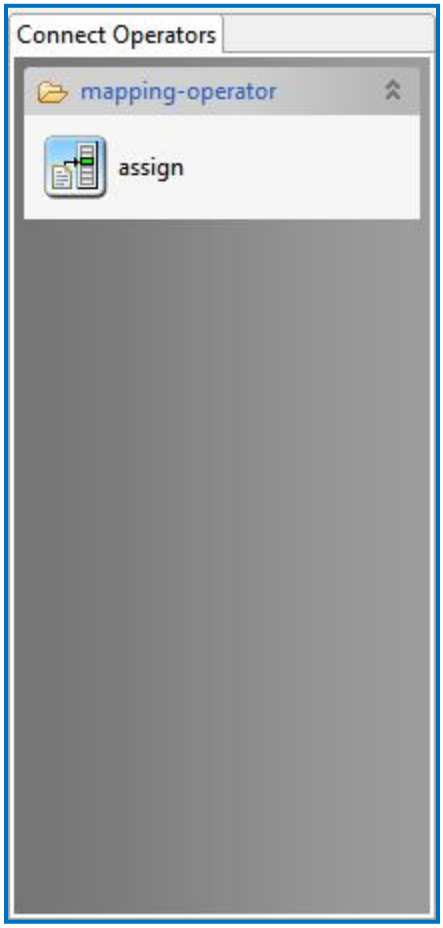
If there is an connection error while the tool loads up appropriate error message are shown informing about the wrong properties present in the property file.




MOBILE ENABLER REQUEST MAPPER TOOL
Version 12.0
DB connection Error
Please edit connection and add correct entries for DB connection
OK
10100101001010
01001010101001

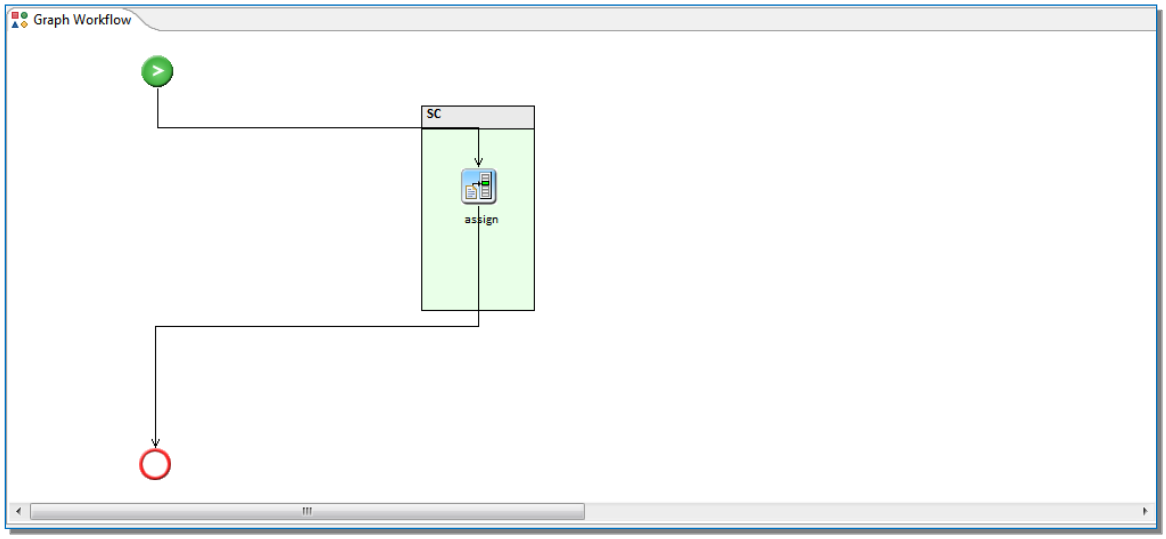
7. FLEXCUBE Mapping-Operator

This pane displays the assign operator available in Oracle FLEXCUBE Request Fields Mapper. User can drag the assign from operator palate window and drop it under a particular chain in Graph workflow window to use it.


Connect Operators
mapping-operator
assign

8. Graph Window

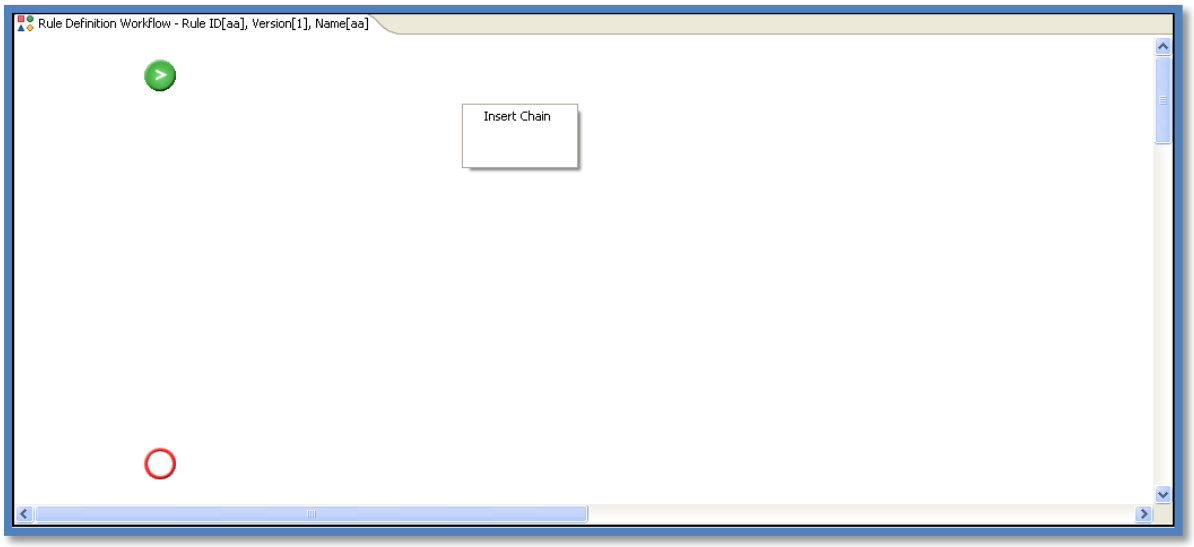
This window displays the map definition view. This is graphical representation of a mapping structure. It shows the connection between operators and how chains are interlinked and how they are called one after another. The execution starts from first operator of Start chain. Start indicator is displayed at the start, and end indicator is displayed at the end. User can move chains/operators in the graph to organize it properly.


Graph Workflow
SC
assign

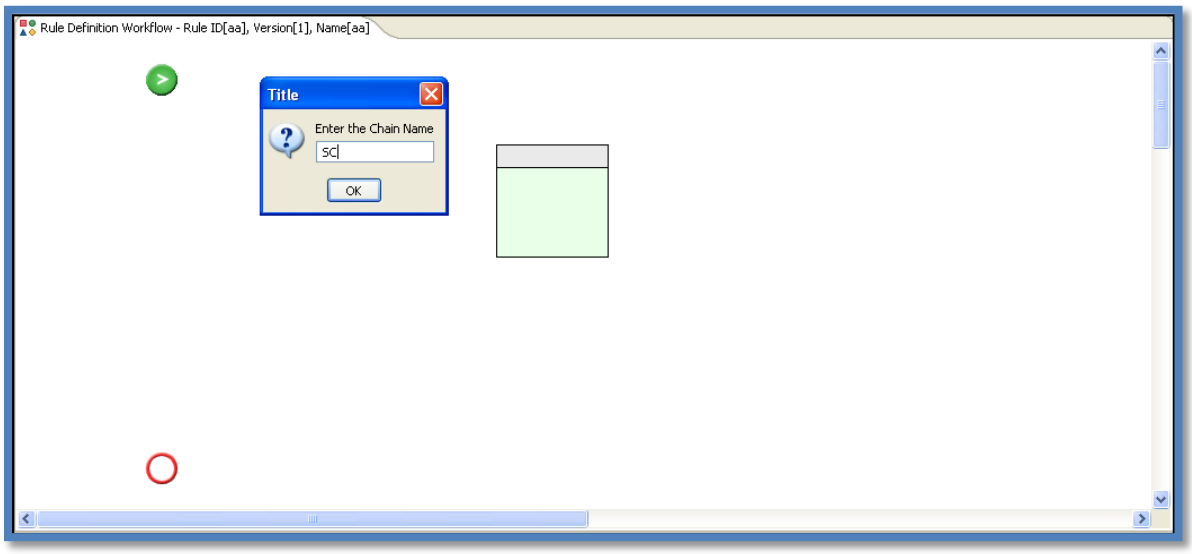
8.1. Insert Chain

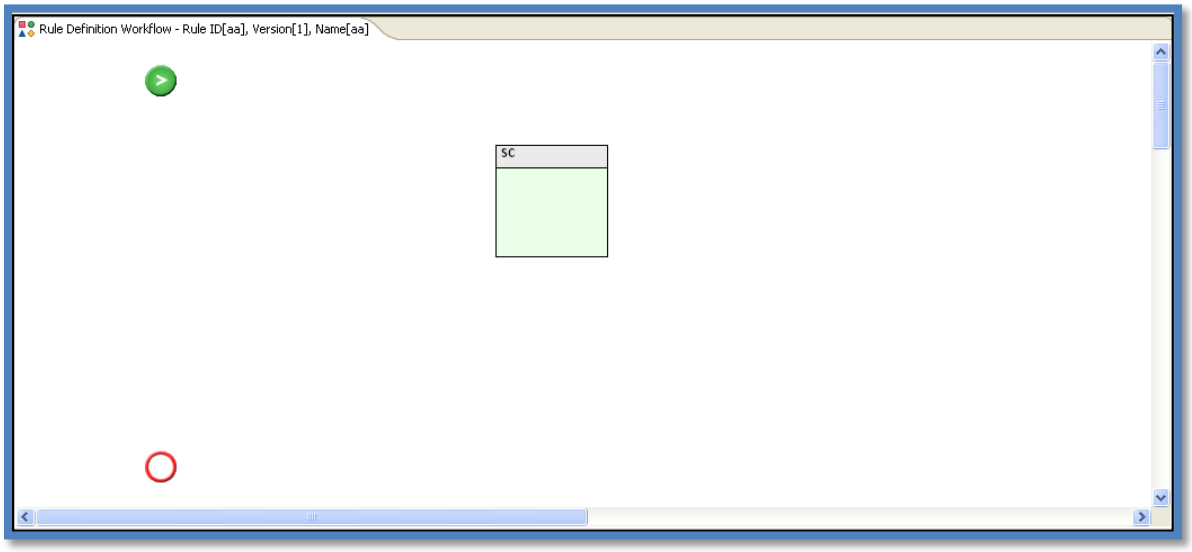
To insert chain on Graph Window

1. Right click on Graph Window and select Insert Chain



2. Enter the chain Name and click on OK button

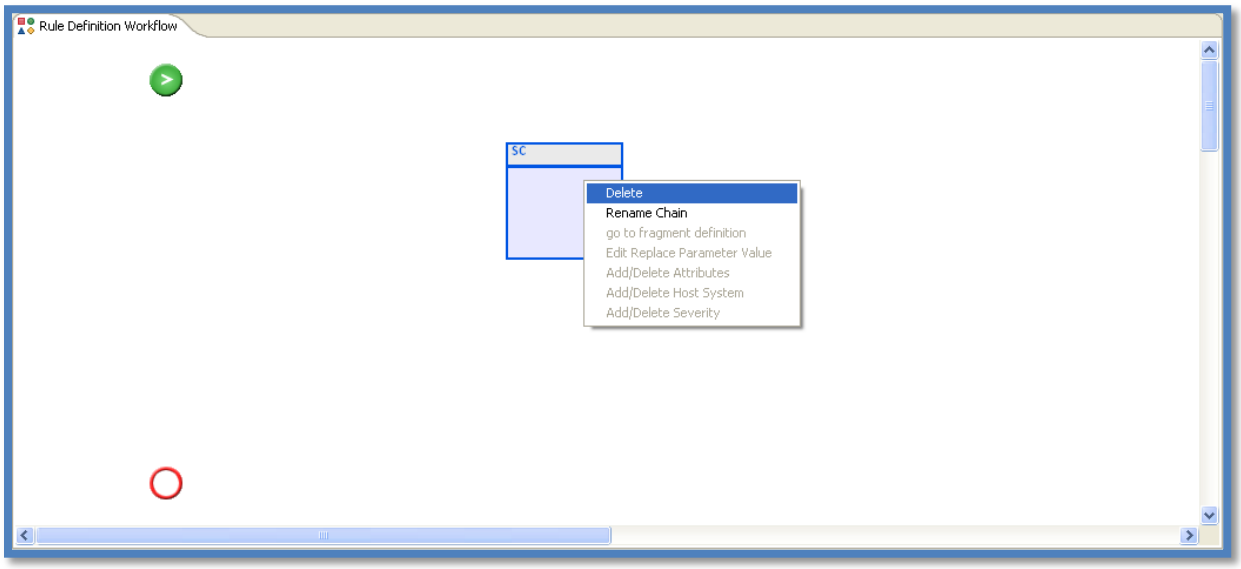

Rule Definition Workflow - Rule ID[aa], Version[1], Name[aa]
Title
Enter the Chain Name
SC
OK


Rule Definition Workflow - Rule ID[aa], Version[1], Name[aa]
SC

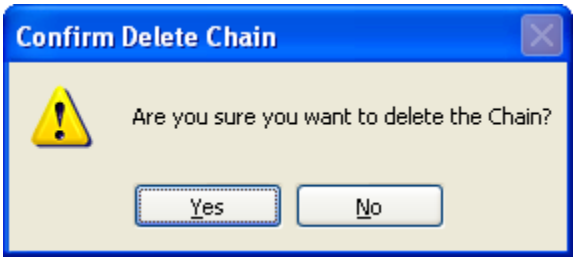
8.2. Delete chain

To delete the chain

1. Right click on chain and select "Delete" menu.



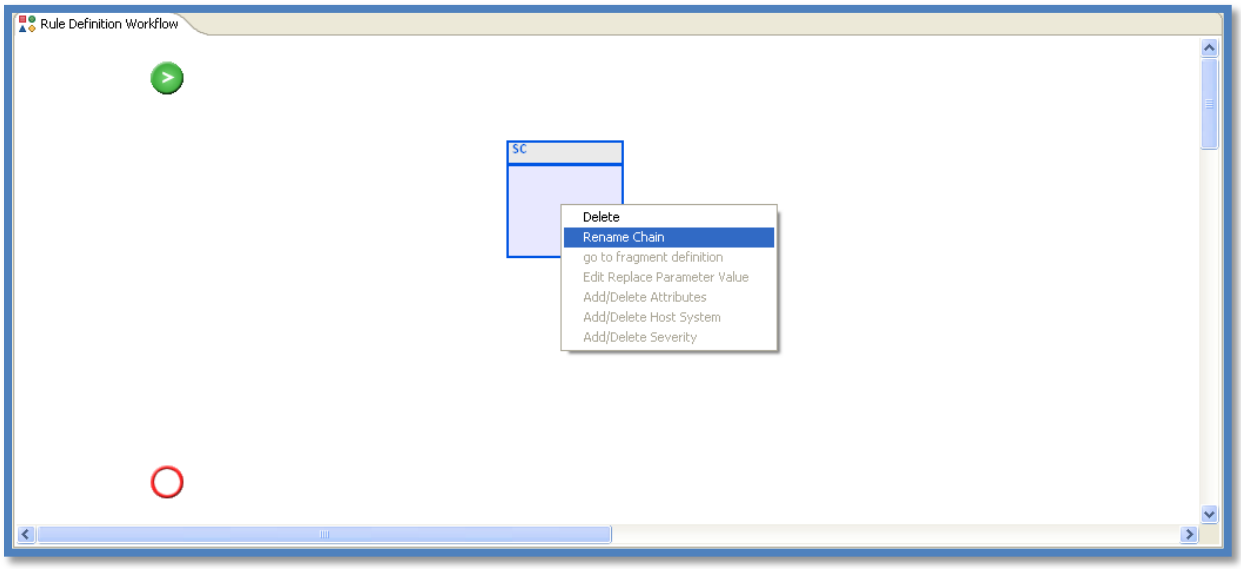
2. Click Yes button on confirm dialog box



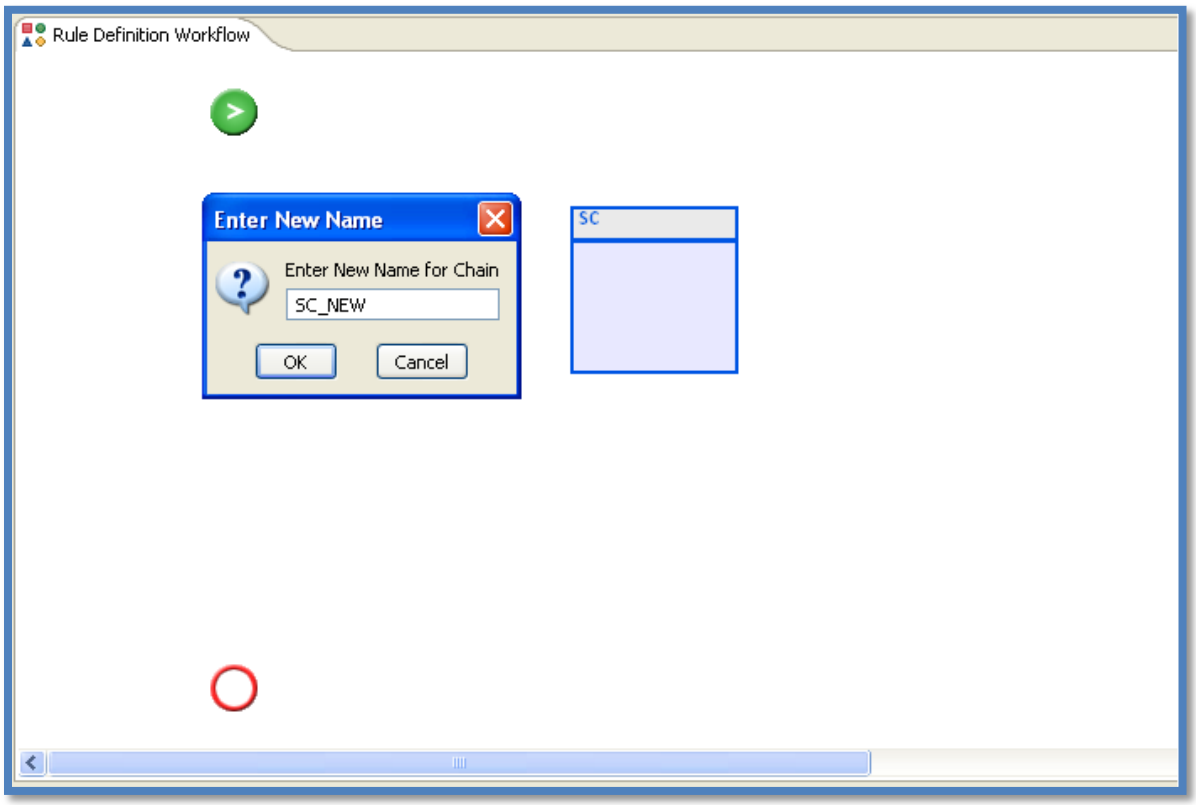
8.3. Rename Chain Name

To rename the chain name

1. Right click on chain and select "Rename Chain" menu



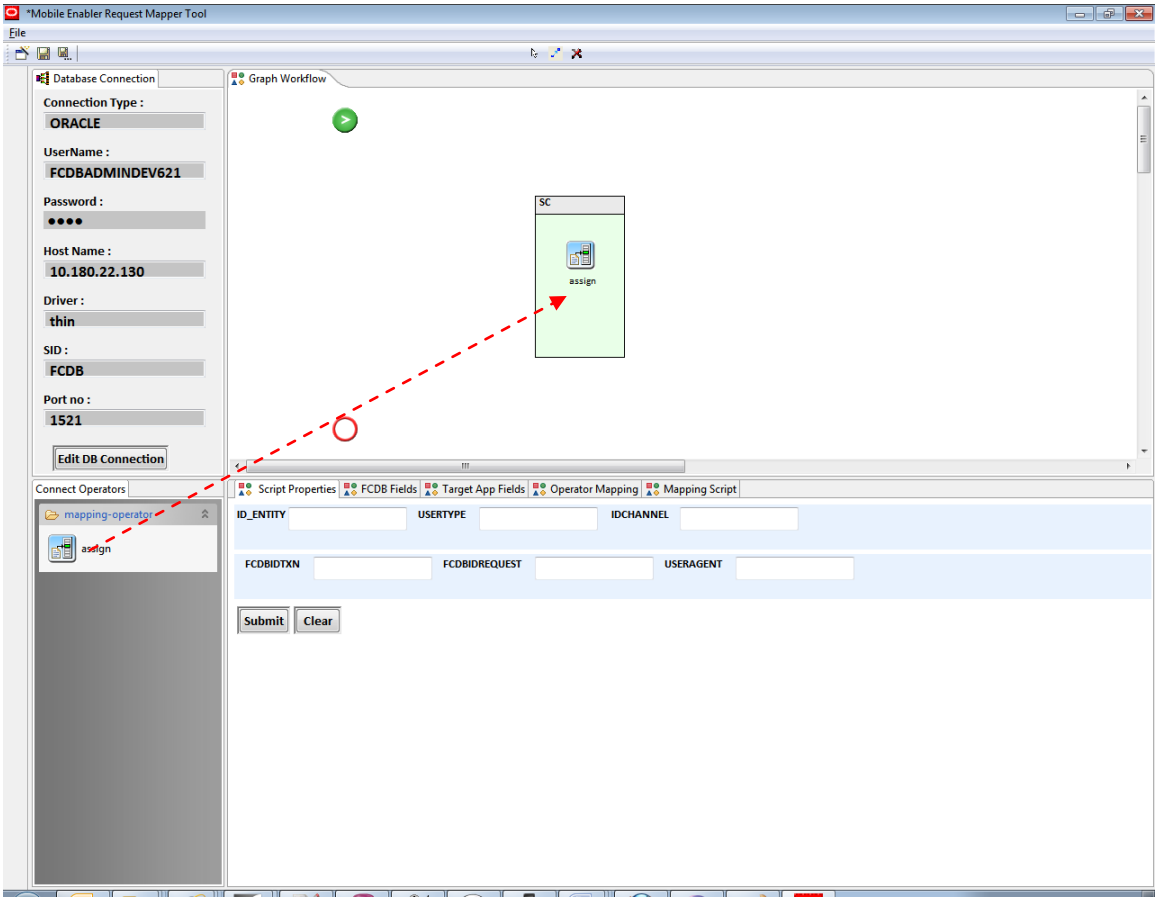
2. Enter the new name of the chain and click on OK button


Rule Definition Workflow
Enter New Name
Enter New Name for Chain
SC_NEW
OK
Cancel
SC

8.4. Add operator under a chain

To add the operator inside a chain

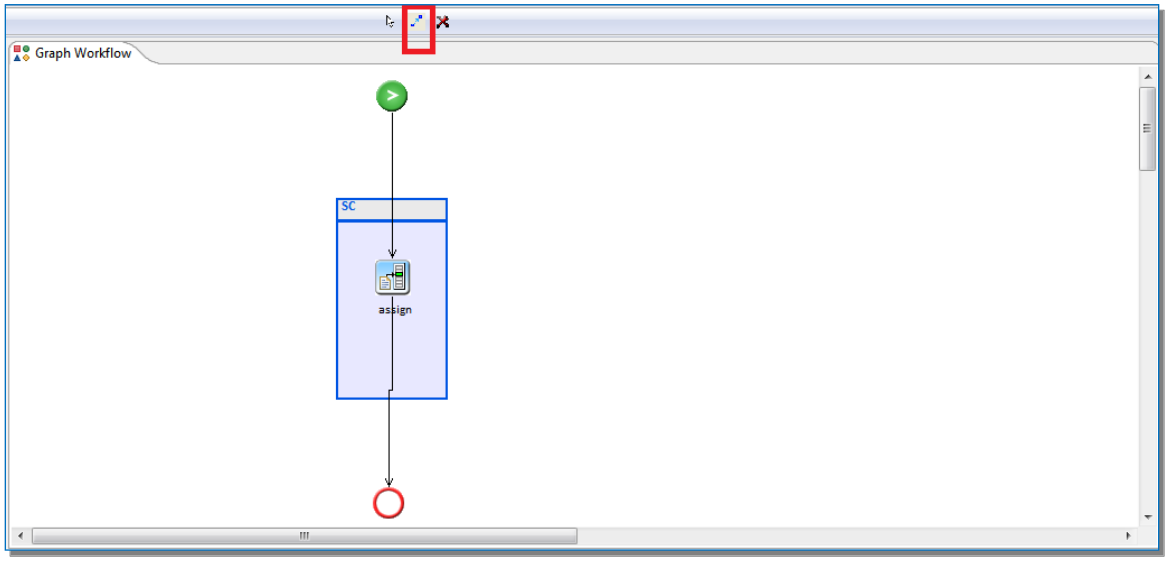
1. Select the operator from specific category in FLEXCUBE Connect Operators Window and drag the selected operator
2. Drop the operator inside the chain.



8.5. Link two operators

To link one operator to other operator

1. Click on "Connector…" button on menu bar
2. Click on first operator
3. Click on second operator, after clicking on second operator the first operator will be linked to second operator
4. Press Esc key or press "selection" button on menu bar to reset the mouse icon to normal mode.



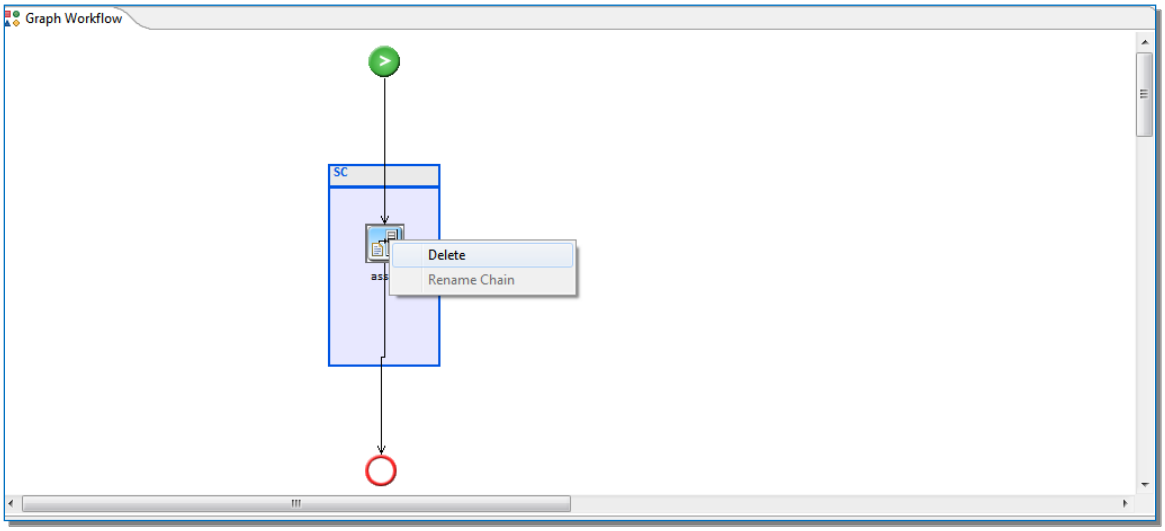
In the same way start button can be linked with first operator of any chain which states that the Execution will start from that chain and operator.

Also last operator of any chain can be linked to the end button  which states that Normal Execution will end at this operator.

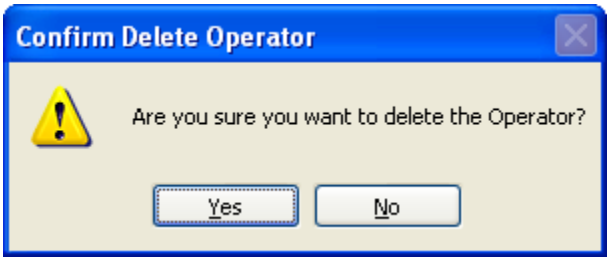
8.6. Delete Operator

To delete the operator

1. Right click on operator and select "Delete" menu or press delete key or press menu button.



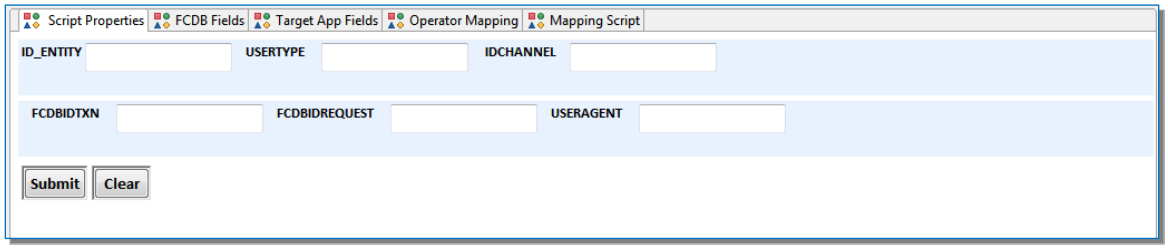
2. Click Yes button on confirm dialog box



9. Oracle FLEXCUBE Fields Mapper Properties Window

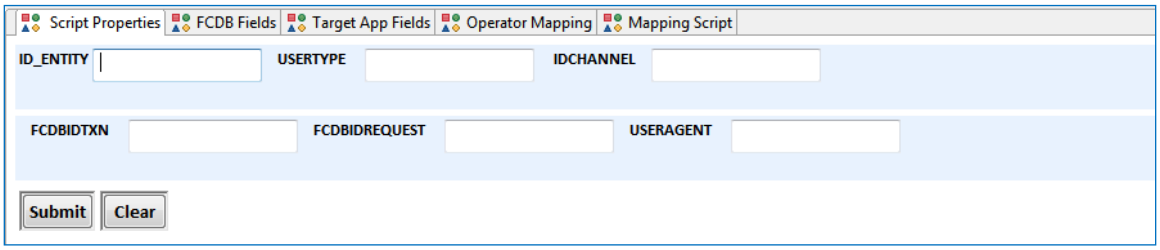
This window is collection of several parameters required in script generation. This frame contains tabbed panes. Following are the properties that are displayed in Script Properties Window.

- Script Properties
- FCDB Fields
- Target App Fields
- Operator Mapping
- Mapping Script


Script Properties
FCDB Fields
Target App Fields
Operator Mapping
Mapping Script
ID_ENTITY
USERTYPE
IDCHANNEL
FCDBIDTXN
FCDBIDREQUEST
USERAGENT
Submit
Clear

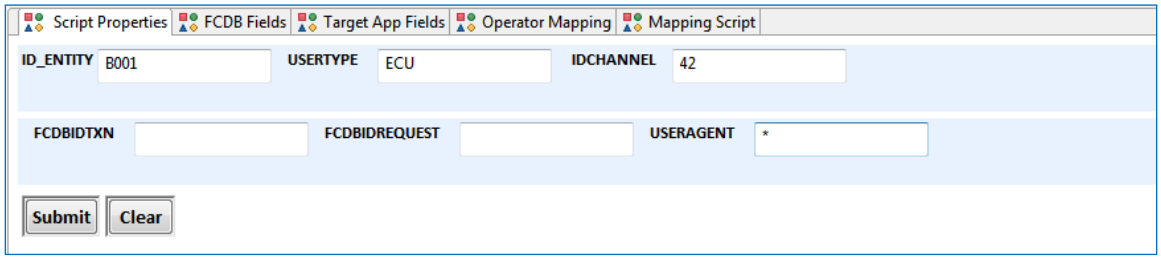
9.1. Script Properties Tab

Script properties tab contains the ID_ENTITY, USERTYPE, IDCHANNEL and FCDBIDTXN, FCDBIDREQUEST, USERAGENT text boxes. ID_ENTITY, USERTYPE, IDCHANNEL and FCDBIDTXN, FCDBIDREQUEST, USERAGENT uniquely identify the appropriate field in MOBILEENABLERFIELDMAP and MOBILEENABLERDEFAULTFIELDMAP table in FCDB schema.



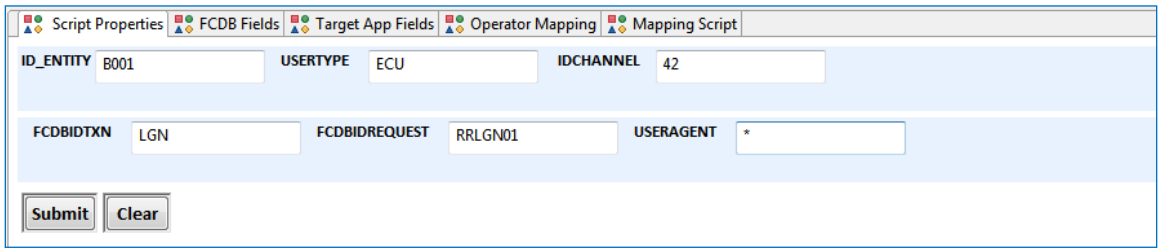
9.1.1. Property Entry for MOBILEENABLERDEFAULTFIELDMAP table

For script generation of MOBILEENABLERDEFAULTFIELDMAP table, keep the FCDBIDTXN and FCDBIDREQUEST text boxes as blank. MOBILEENABLERDEFAULTFIELDMAP table does not contain FCDBIDTXN and FCDBIDREQUEST columns. Hence when these fields are kept blank, the tool generates scripts for MOBILEENABLERDEFAULTFIELDMAP table.



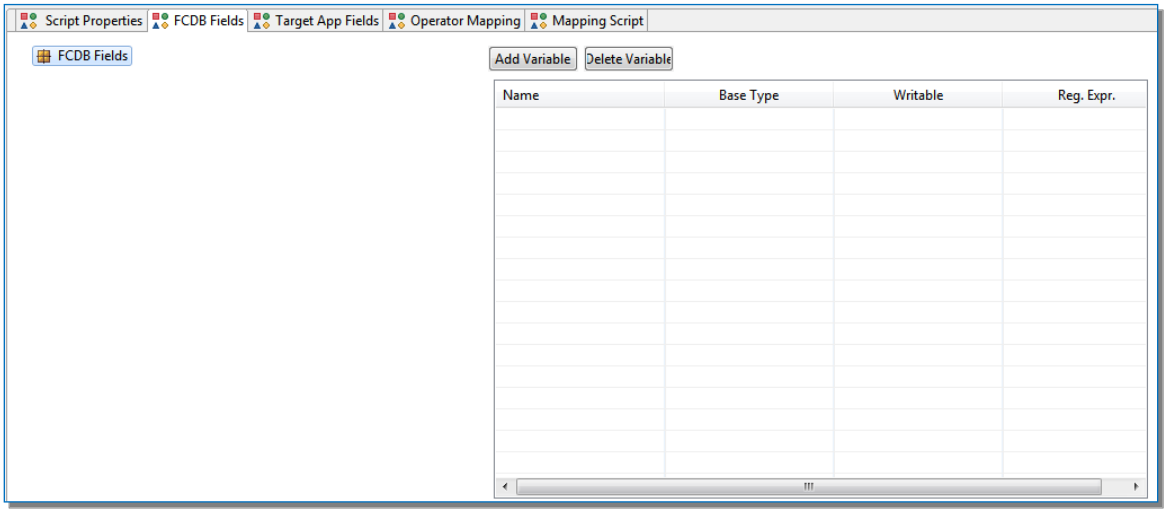
9.1.2. Property Entry for MOBILEENABLERFIELDMAP table

For script generation of MOBILEENABLERFIELDMAP table, correct entries into all the text boxes in Script Properties tab are required. The tool generates insert, update and delete script for MOBILEENABLERFIELDMAP table if there are entries in all the text boxes.



9.2. FCDB Fields Tab

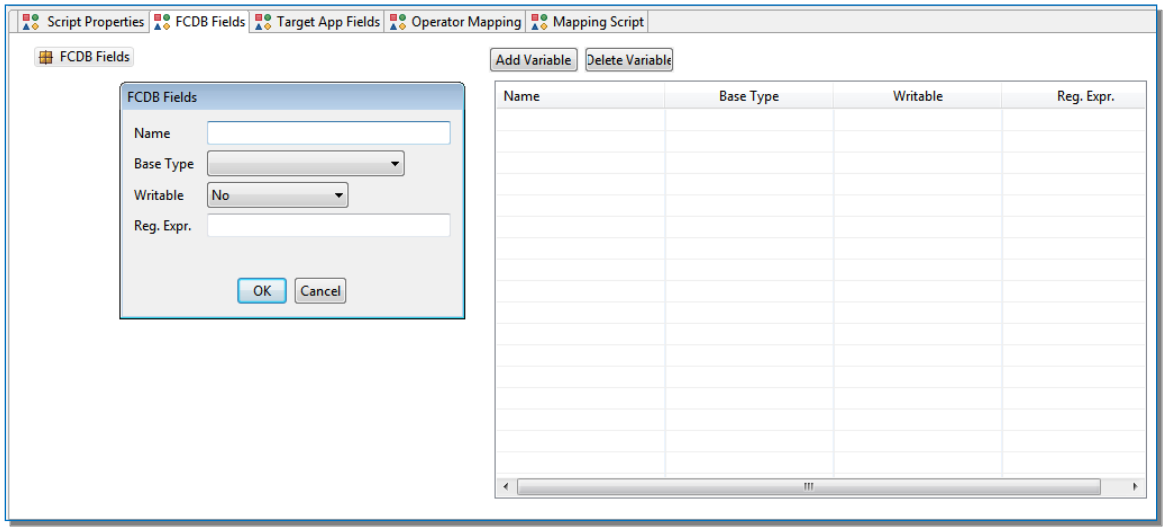
FCDB fields i.e. source application fields are defined in this tab. FCDB Fields tab page contains two buttons to add or delete the variables and a tree structure to display all the variables and a table to set the properties of the variable.

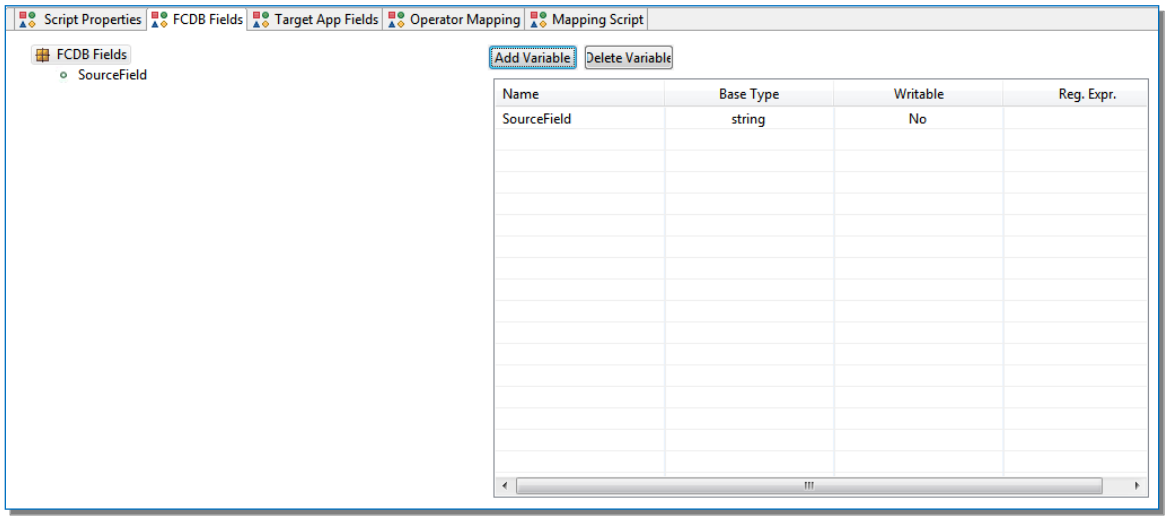


9.2.1. Add FCDB Field

To Add the FCDB Field

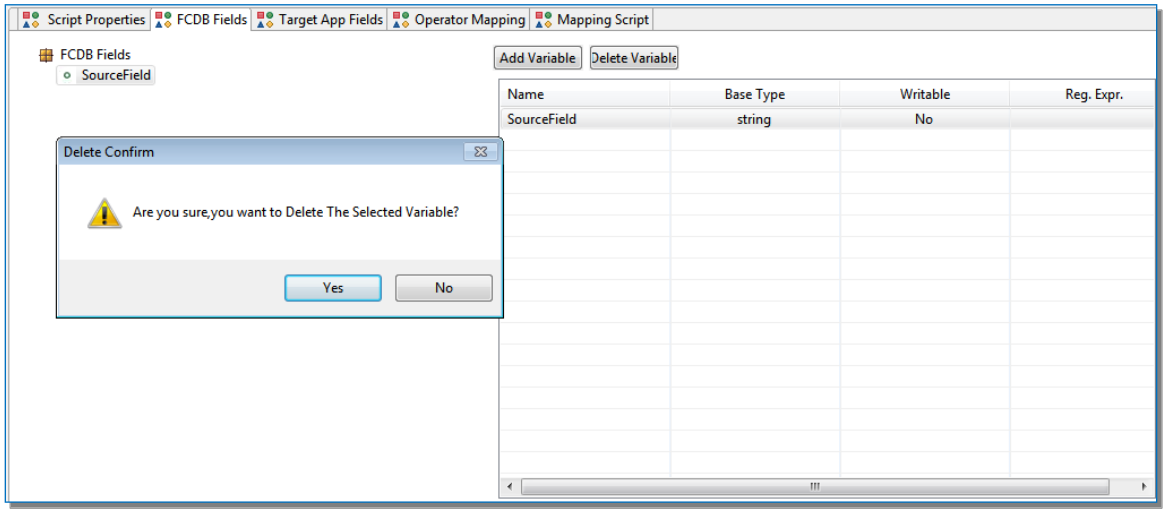
1. Click on Add Variable Button
2. Enter the name of the input variable
3. Choose Base type
4. Click on OK button





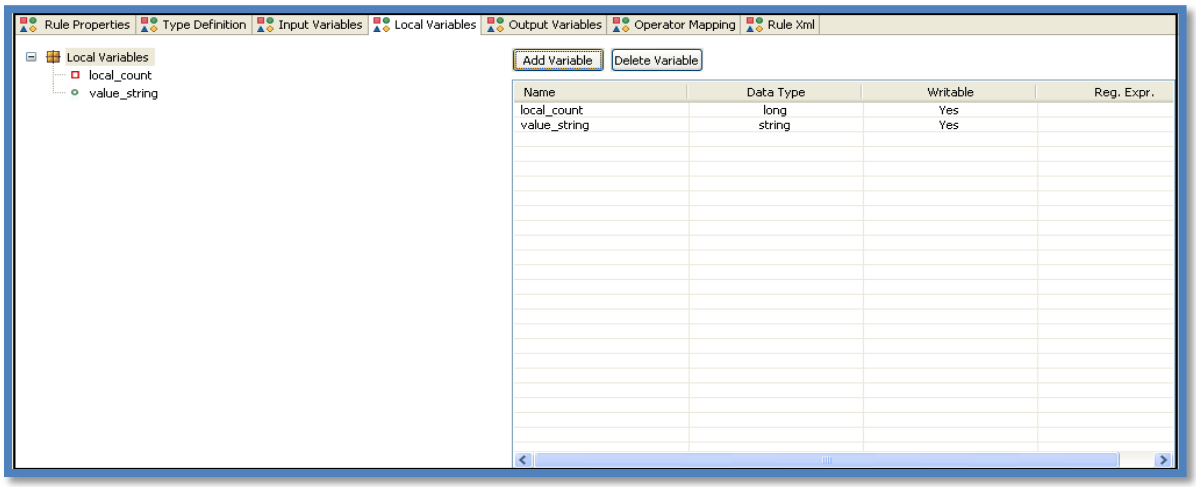
9.2.2. Delete Variable

To delete the variable element, select the variable name from right hand table and click on Delete button and click on Yes button on confirm dialog box.


Script Properties
FCDB Fields
Target App Fields
Operator Mapping
Mapping Script
FCDB Fields
SourceField
Add Variable
Delete Variable
Name
Base Type
Writable
Reg. Expr.
SourceField
string
No
Delete Confirm
Are you sure,you want to Delete The Selected Variable?
Yes
No

9.3. Target App Fields Tab

Target App fields are declared to use as the fields present in the target application.. Target App page is same as FCDB Fields page.



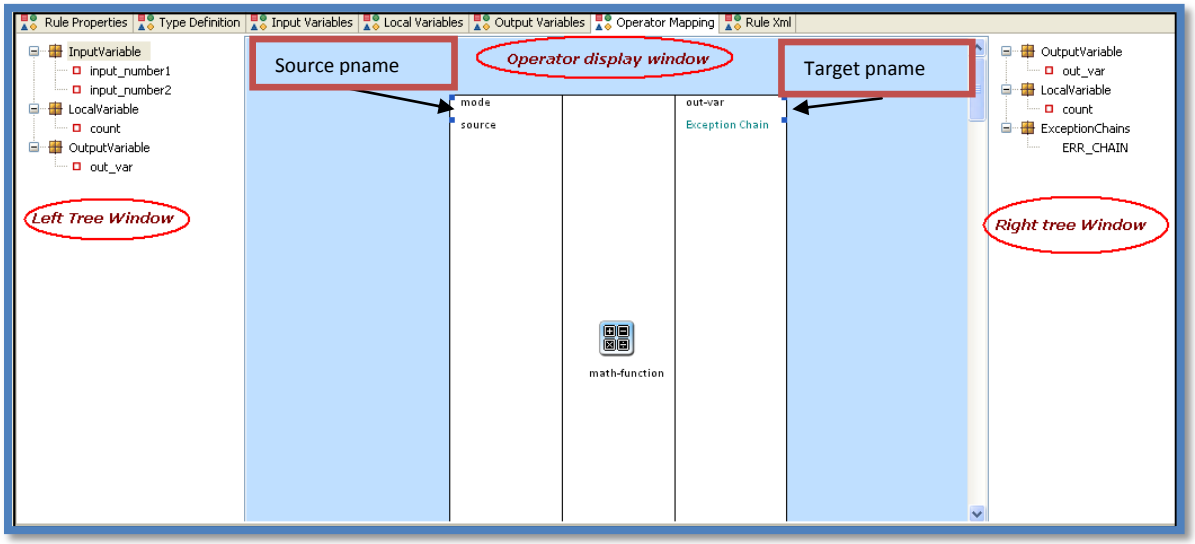
Add/Delete/Modify Local Variables is supported in the same way as in Input Variables Tab.

9.4. Operator Mapping Tab

Operator Mapping Tab used for linking the variables to the sources/targets of the selected operator, exception chain also can be mapped from this tab.

Operator mapping tab contains three windows

1. Left Tree window
2. Right Tree window
3. Operator display window



9.4.1. Left Tree window

Left tree window contains the tree of input variables, local variables and output variables; those variables can be mapped to the source parameter of selected operator

9.4.2. Right Tree window

Right tree window contains the tree of output variables, local variables and Exception Chains; those variables can be mapped to the target parameter of selected operator.

Exception chains tree contains the chains other then the selected chain. Any of these chains can be linked to the selected operator

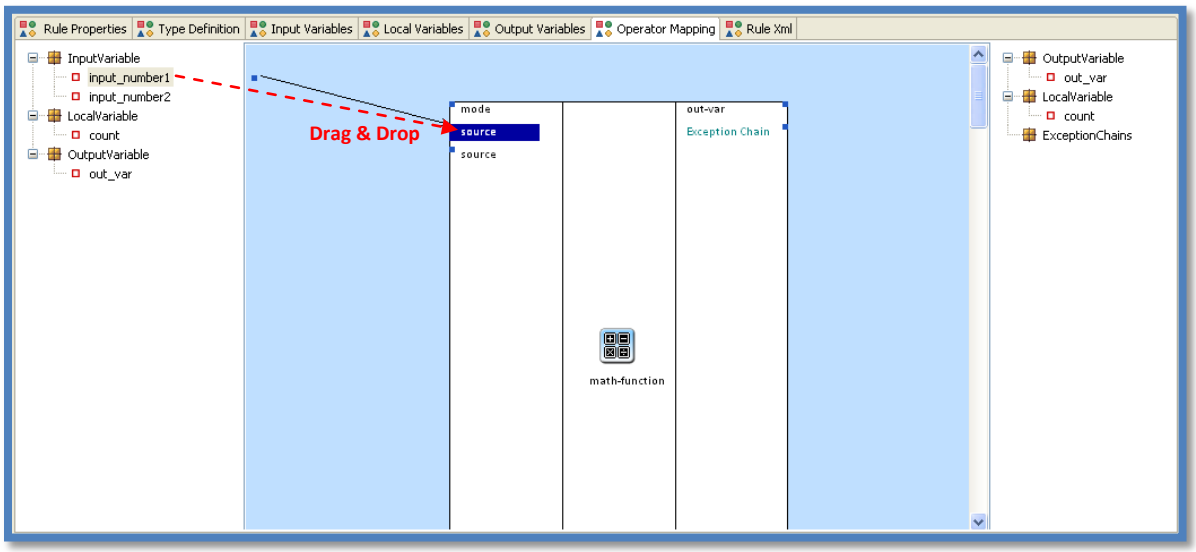
9.4.3. Operator Display Window

Operator Display Window display operator specific information about the selected operator from the Graph Window, Operator display window contains Source/Target parameter for selected operator and Exception Chain link at the Target side to link the Exception chain

9.4.4. Map the variable to Source

To map the variable to a particular Source

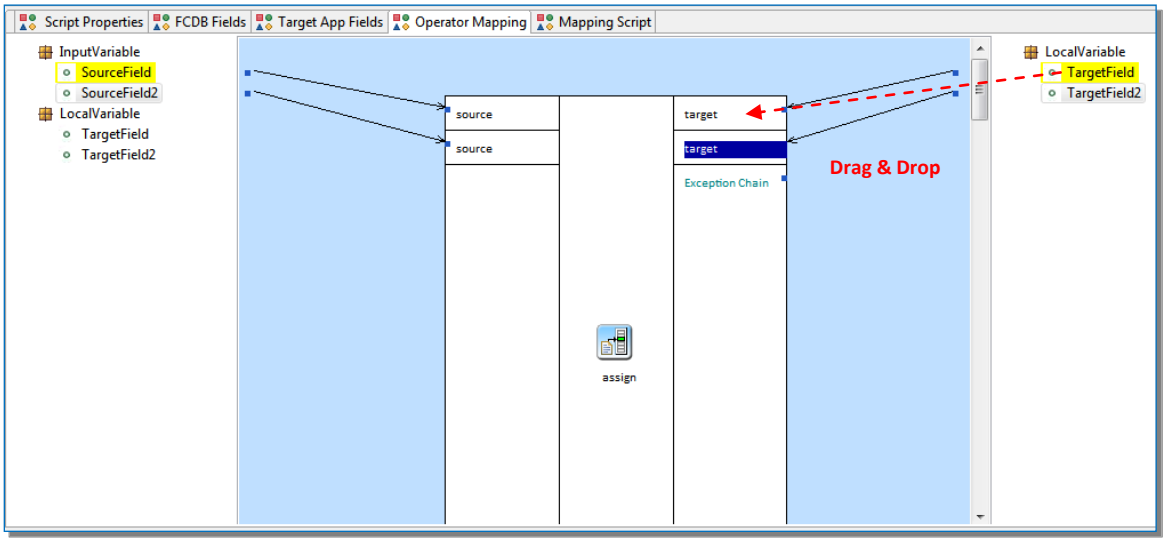
1. Select the Operator in Graph window
2. Drag the variable from Input tree window
3. Drop the variable on to the appropriate source.



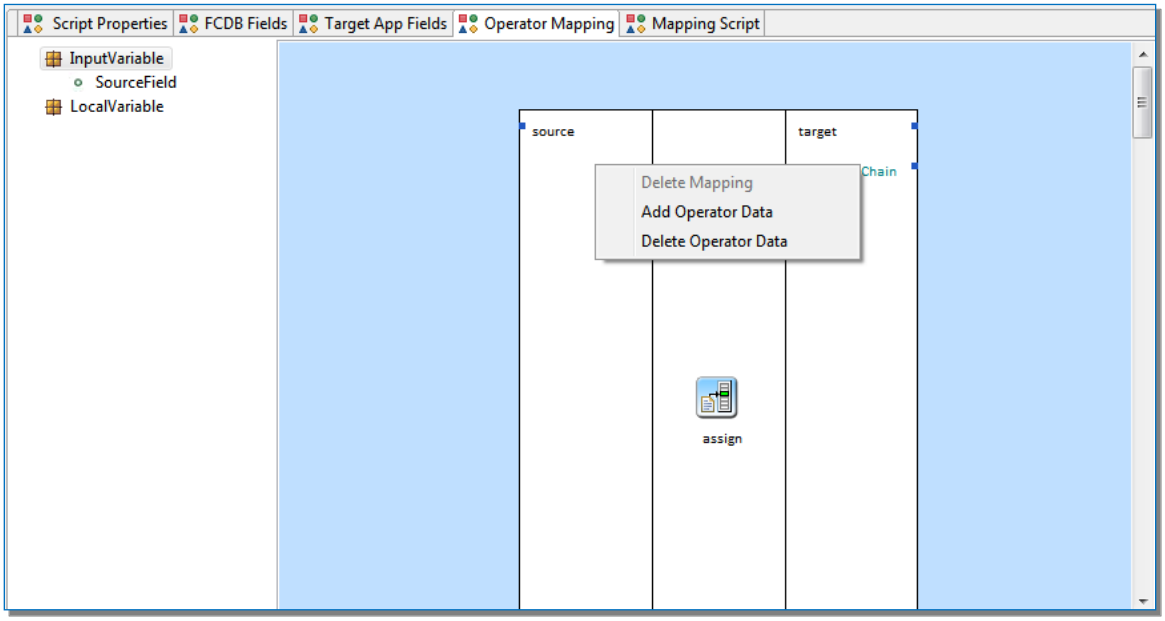
9.4.5. Map the variable to Target

To map the variable to a Operators Target

1. Select the Operator in Graph window
2. Drag the variable (Local and Output variables) from Output tree window
3. Drop the variable on to the appropriate target variable of the selected operator.



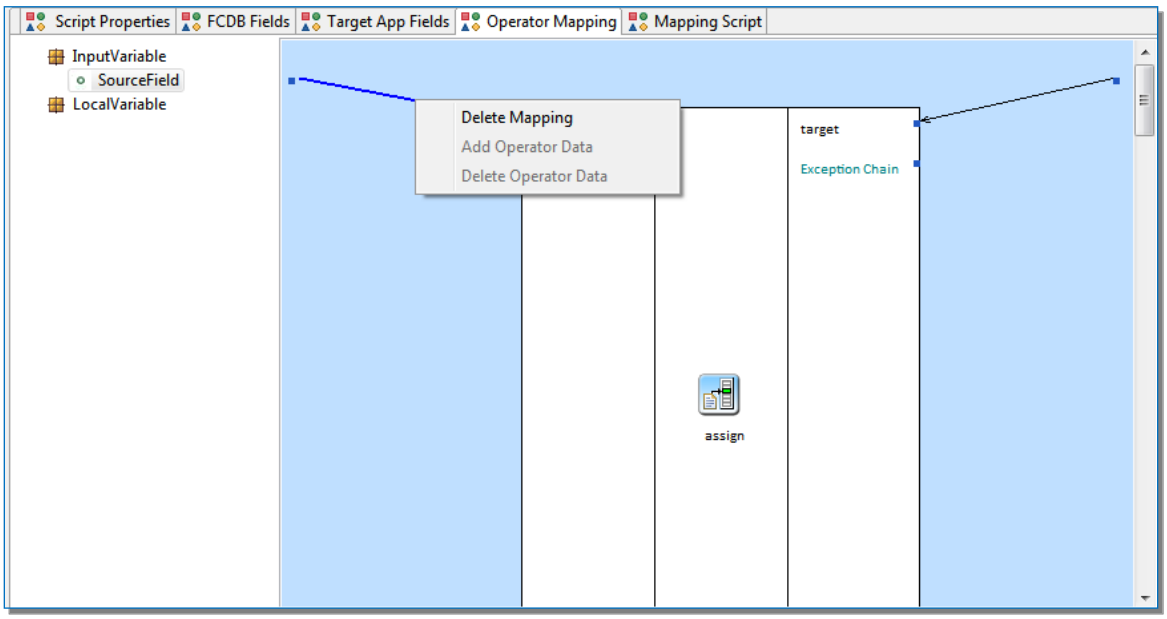
9.4.6. Popup Menu under Operator Display Window



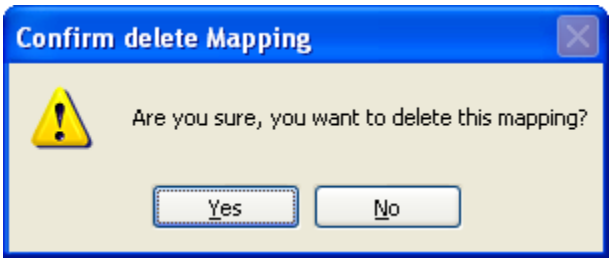
- **Delete Mapping**

To delete the existing mapping in Operator Mapping window,

1. Right click on the map link and select "Delete Mapping" menu or press delete key



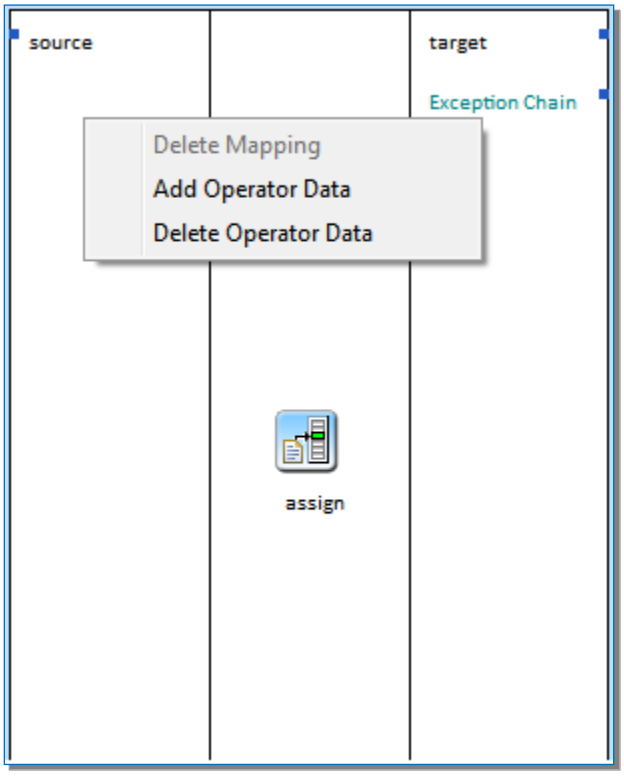
2. Click on yes on confirm dialog box.



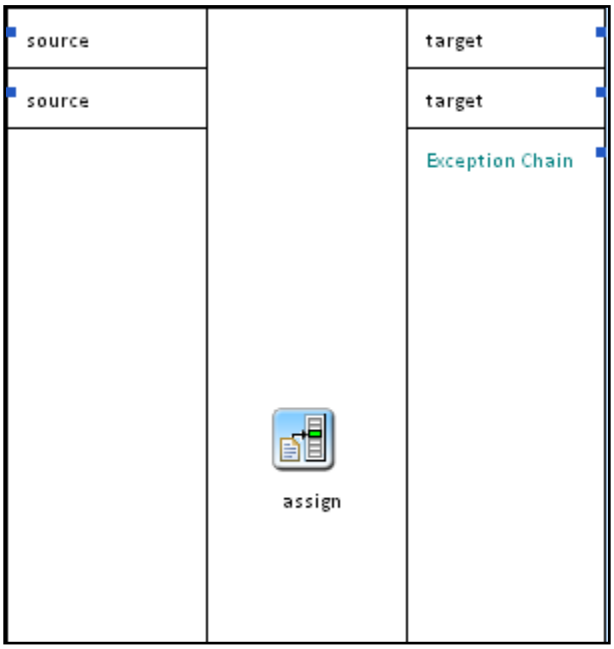
- **Add Operator Data**

Some operators have more than one operator data elements like assign operator. To add the operator data for these kinds of operators

1. Right click on operator properties window
2. Select the Add Operator Data menu



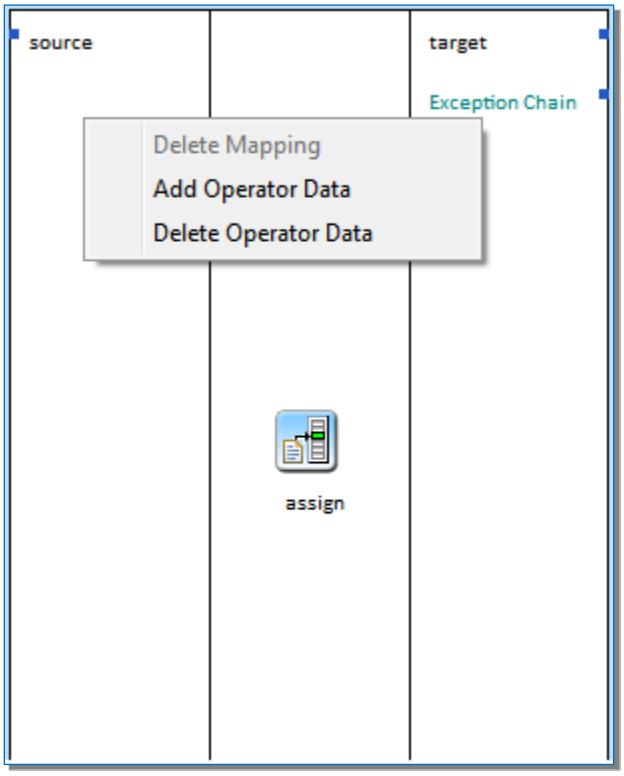
The operator data segment is added as shown below



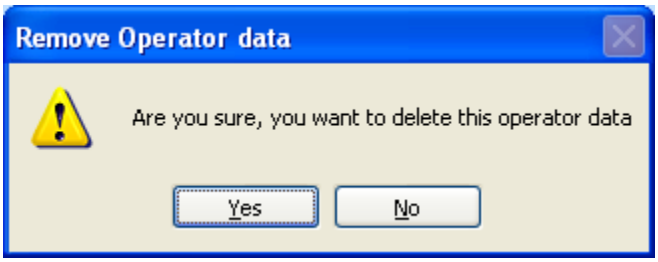
- **Delete Operator Data**

To delete the operator data

1. Right click in operator data portion which is to be deleted
2. Select Delete Operator Data

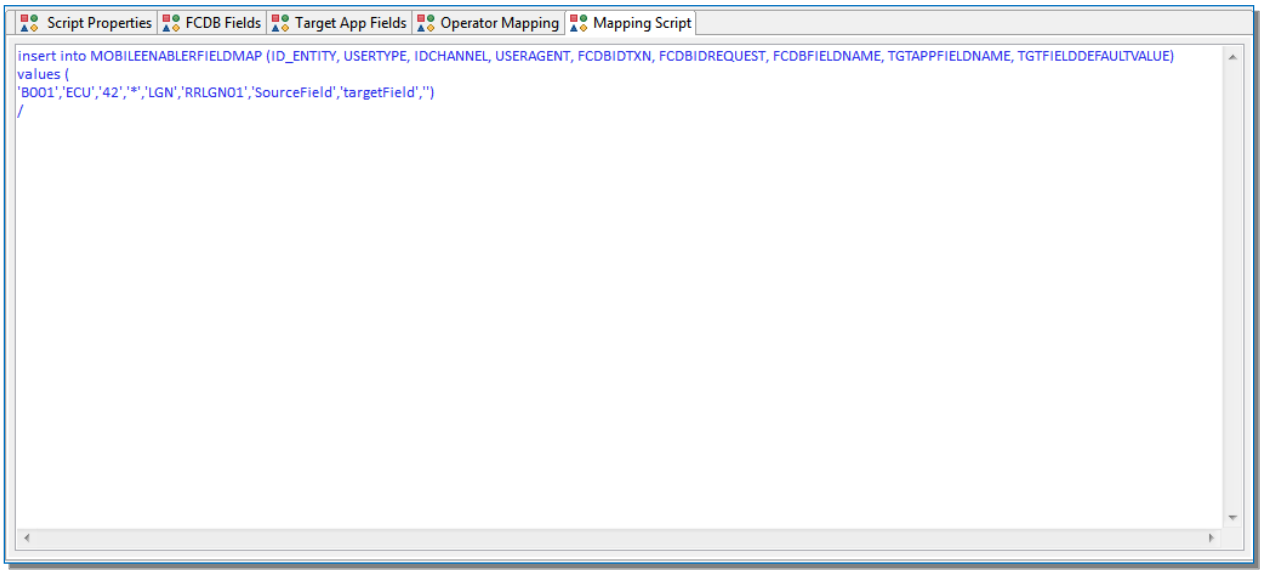


3. Click on yes to confirm dialog box



9.5. Mapping Script Tab

This tab shows the DML scripts for MOBILEENABLERFIELDMAP table. This tab shows the Insert, Update and Delete scripts based on the variables added, modified or deleted in the FCDB Fields Tab and Target App Fields Tab.



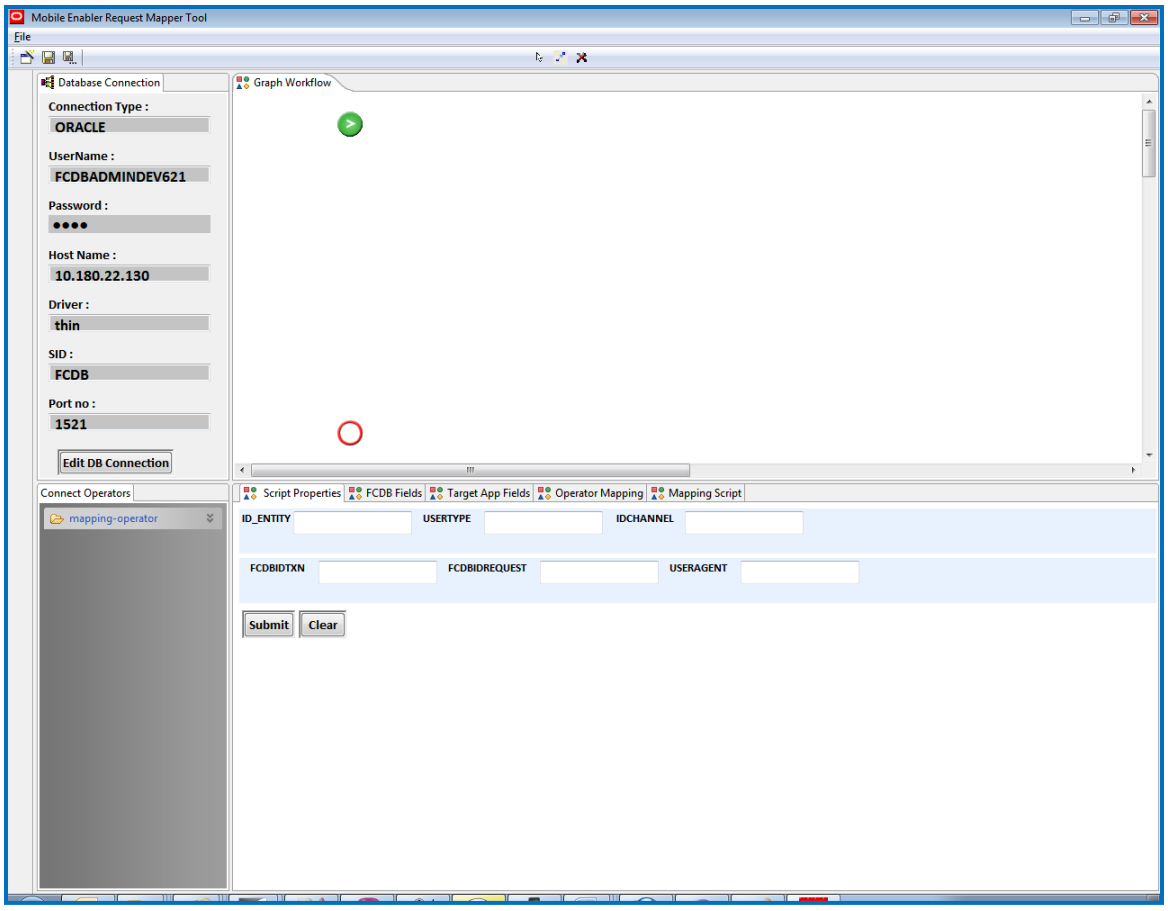
10. Step by Step Guide To Build a Simple Mapping Script

10.1. Problem Statement

This exercise will demonstrate a sample example on how to build new mapping script using Oracle FLEXCUBE Fields Mapper. Most of the important functionalities and operations are covered in this exercise.

10.2. Step by Step guide to build a Sample Fields Mapping Script

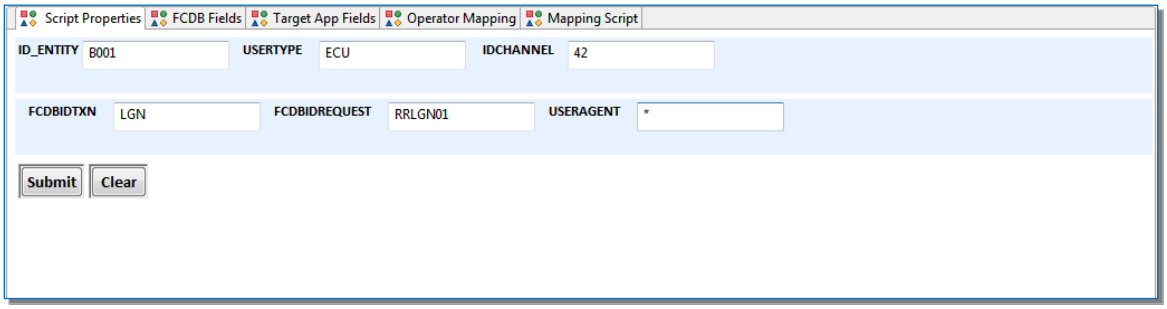
1. Open the FLEXCUBE Connect Fields Mapper
2. Click File --> New menu



New Scripts can be created for new transactions or existing Scripts can be opened in the tool for updating, adding or deleting.

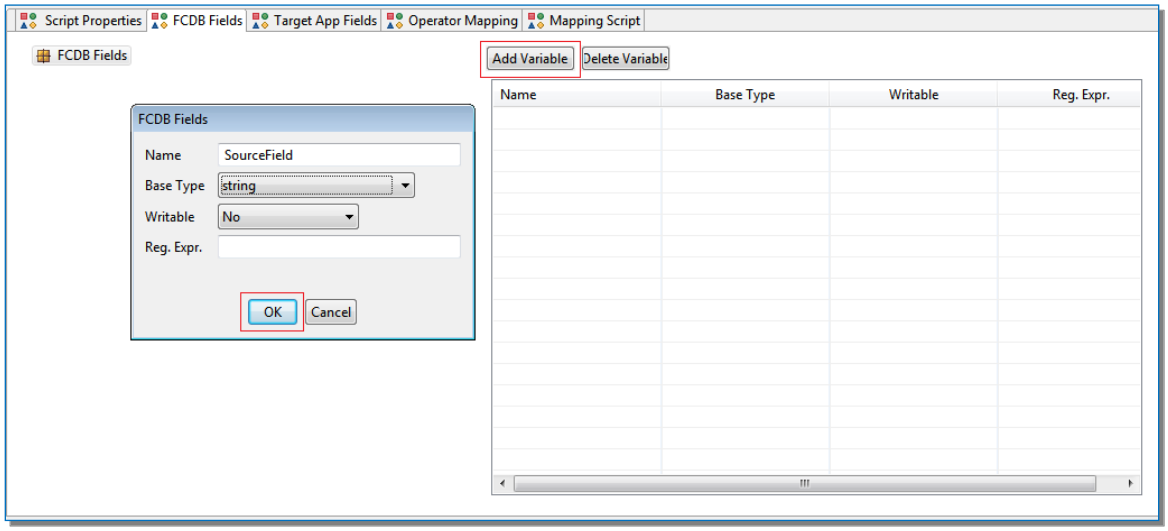
10.3. Creation of New Scripts

1. Enter the mandatory fields

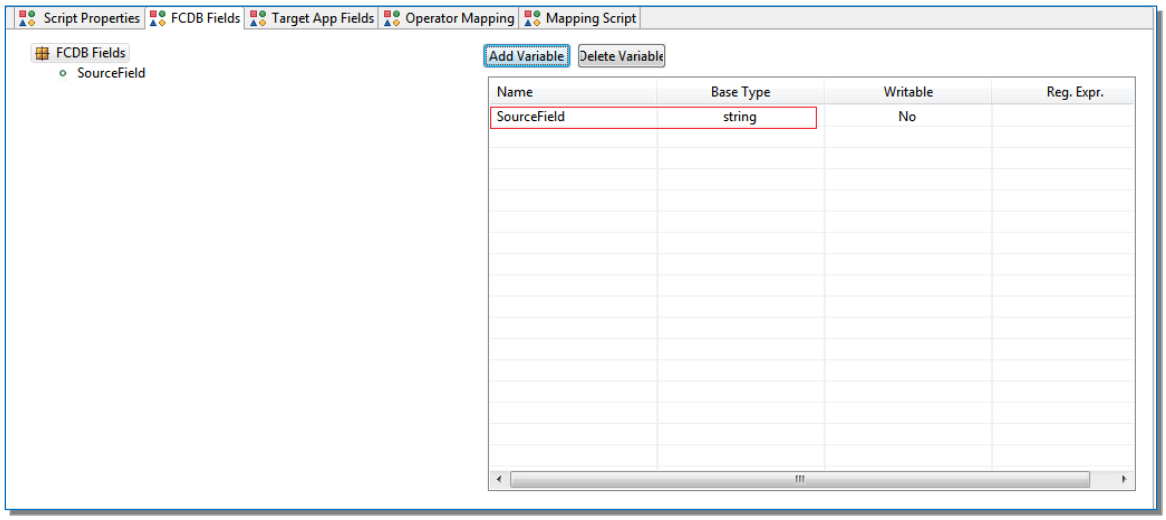


Don’t press the Submit button.

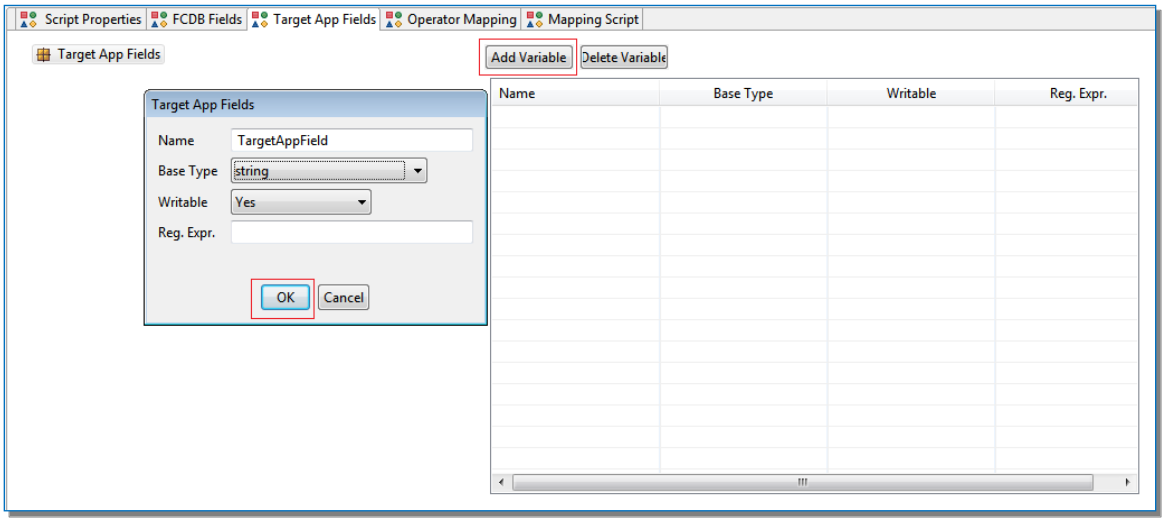
2. Got to FCDB Fields tab and click Add Variable.



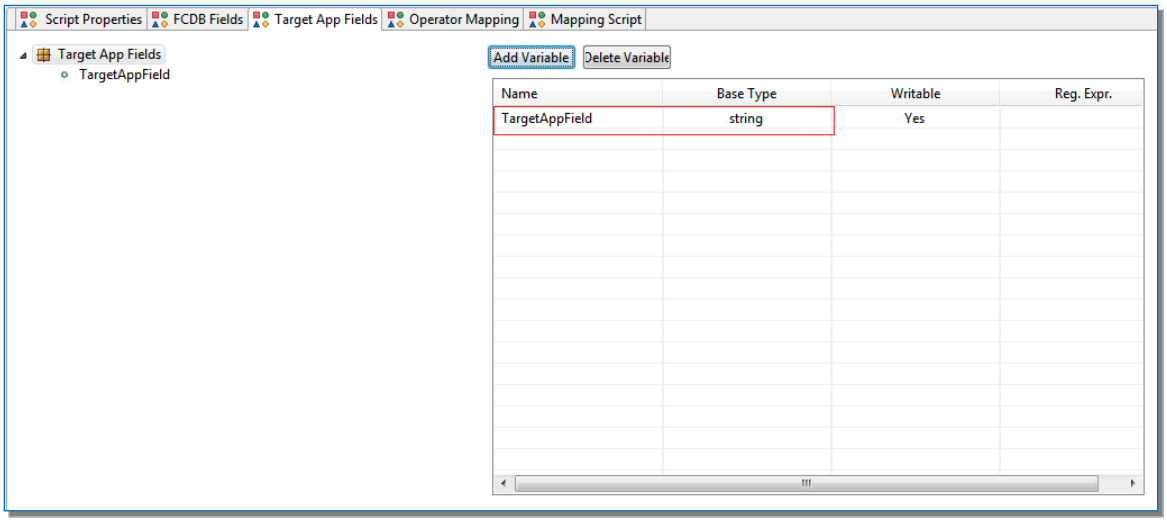
3. Enter the source FCDB field details and click OK. The field will be added as Source FCDB Field.



4. Got to Target App Fields tab and click on Add Variable.

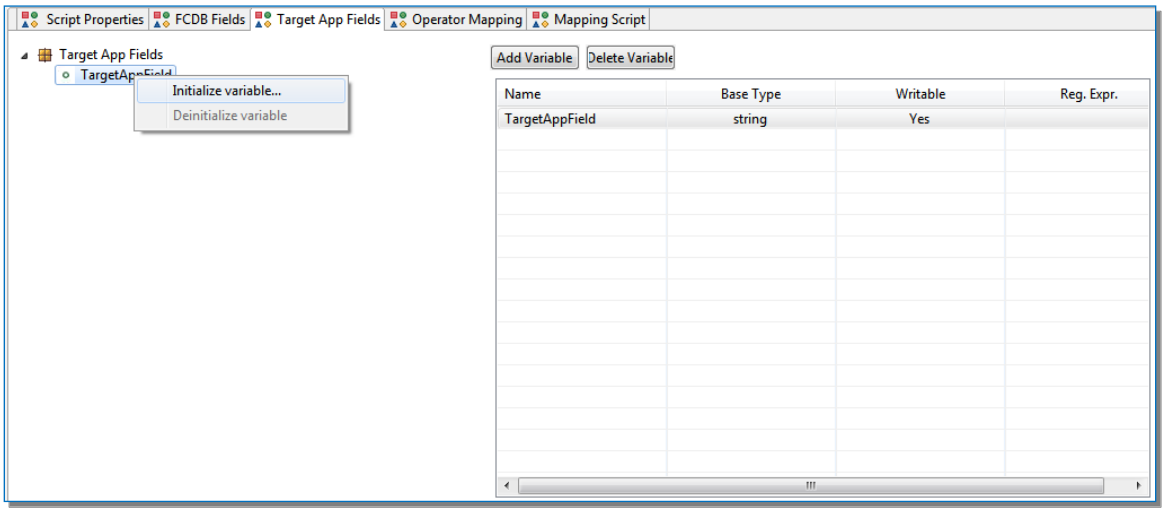


5. Enter the Target application field details and click OK. The field will be added as the Target application field.

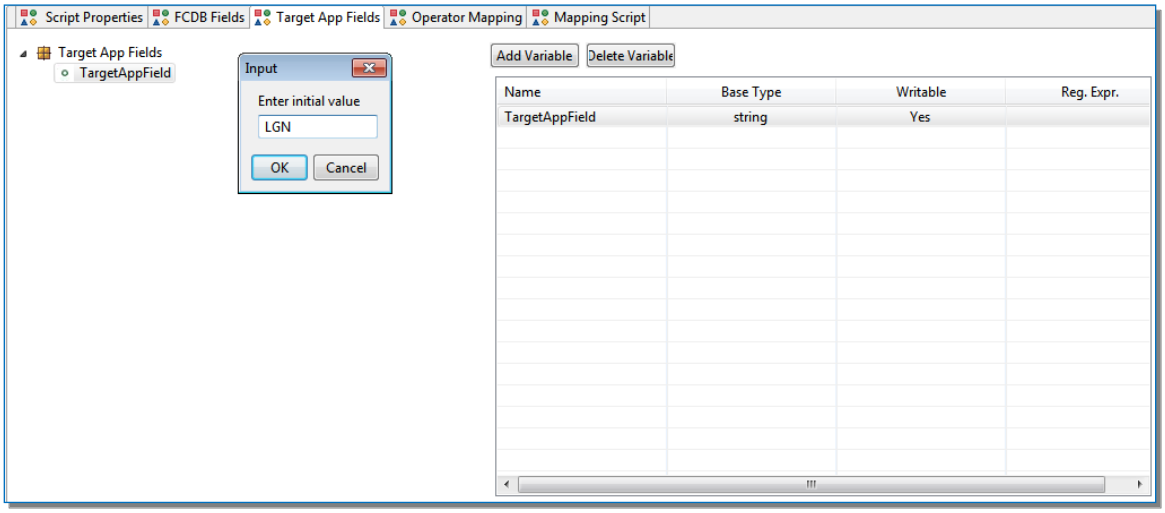


To assign a default value to the Target App Field follow the below steps:

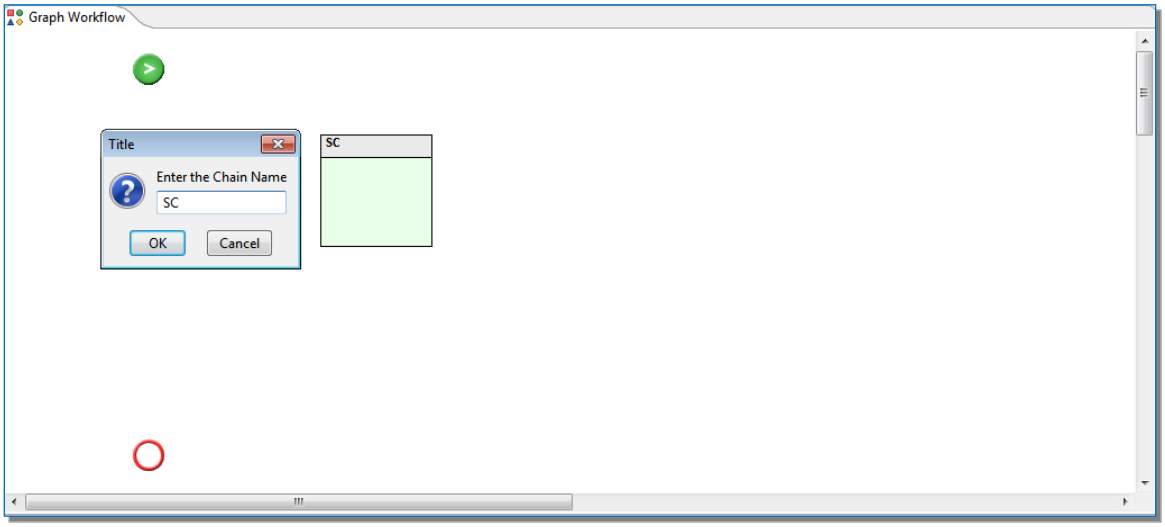
1. Right click on the field (TargetAppField) and select "initialize variable".



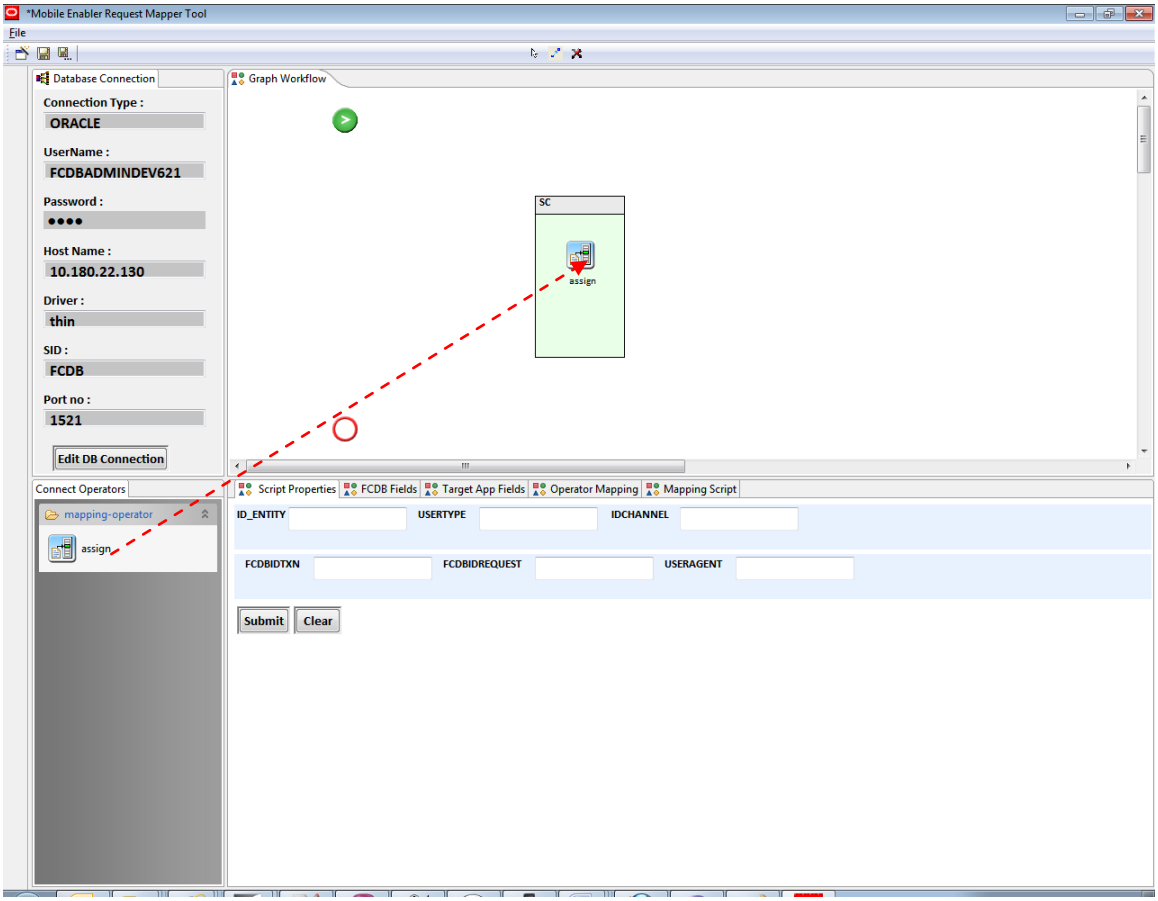
2. Enter the default value and click ok.



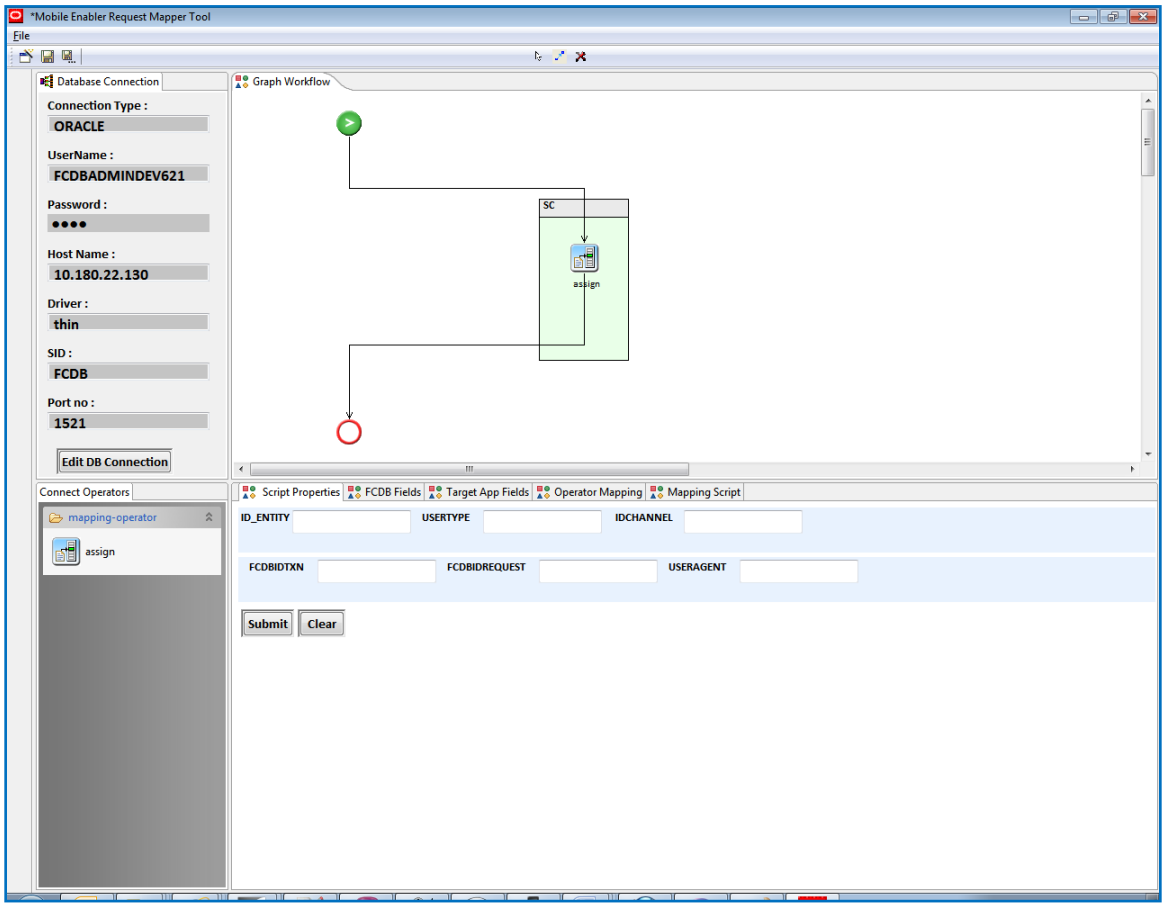
6. Insert a chain named “SC” in the Graph window



7. Drag “assign” operator from FLEXCUBE Connect Operators window and drop it on to “SC” chain



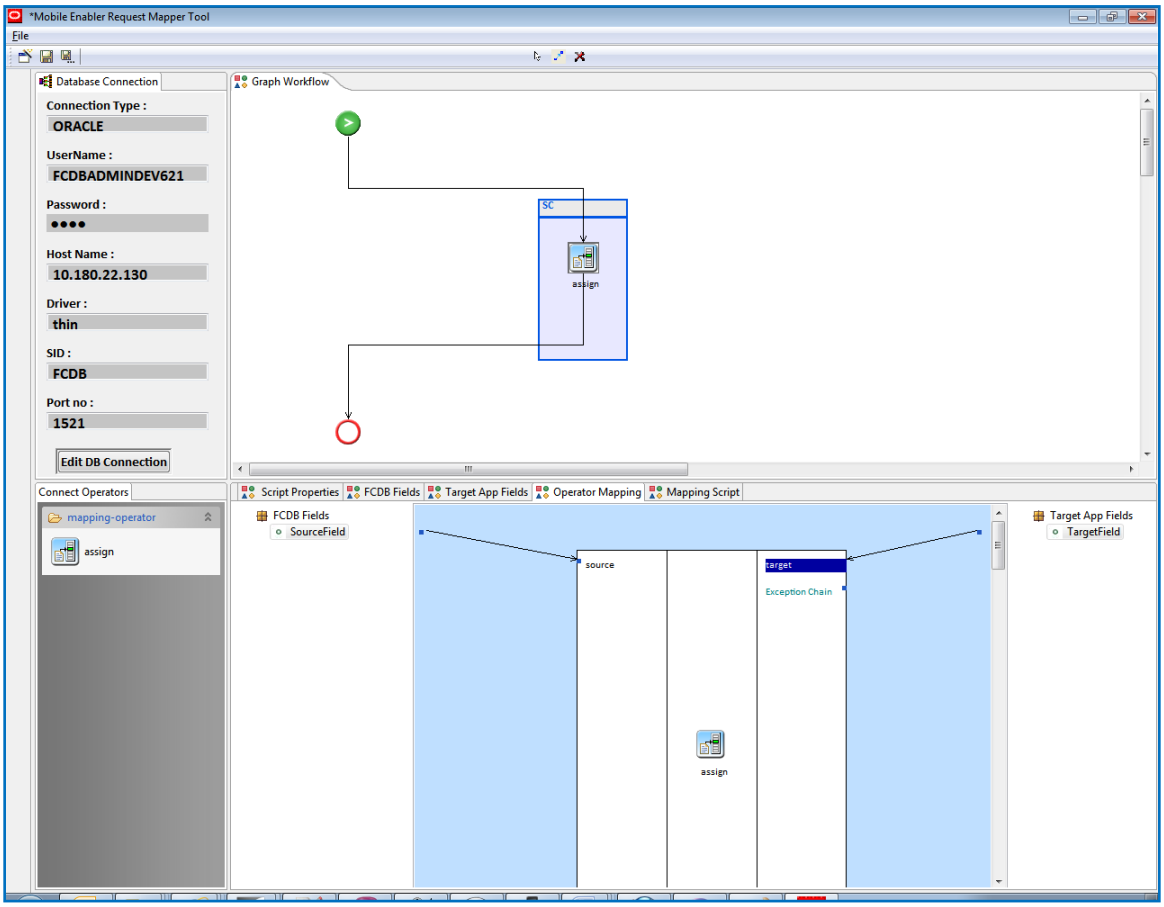
8. Connect assign operator with start button and end button using “connector…” button



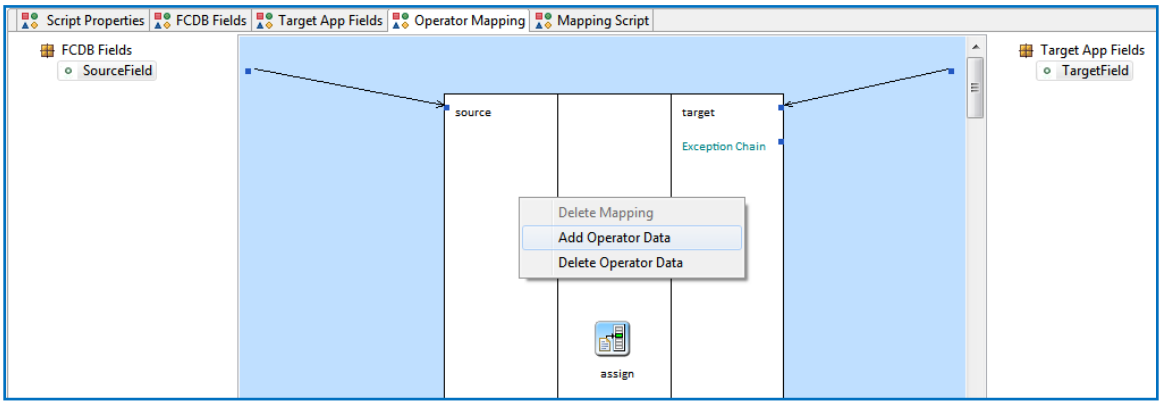
9. Select "Operator Mapping" Tab and click on "assign" operator from Graph Workflow window

10. To map the source field(FCDB Field) with the target field(Target App Field) Drag the source field (FCDB Field) and drop it on to source

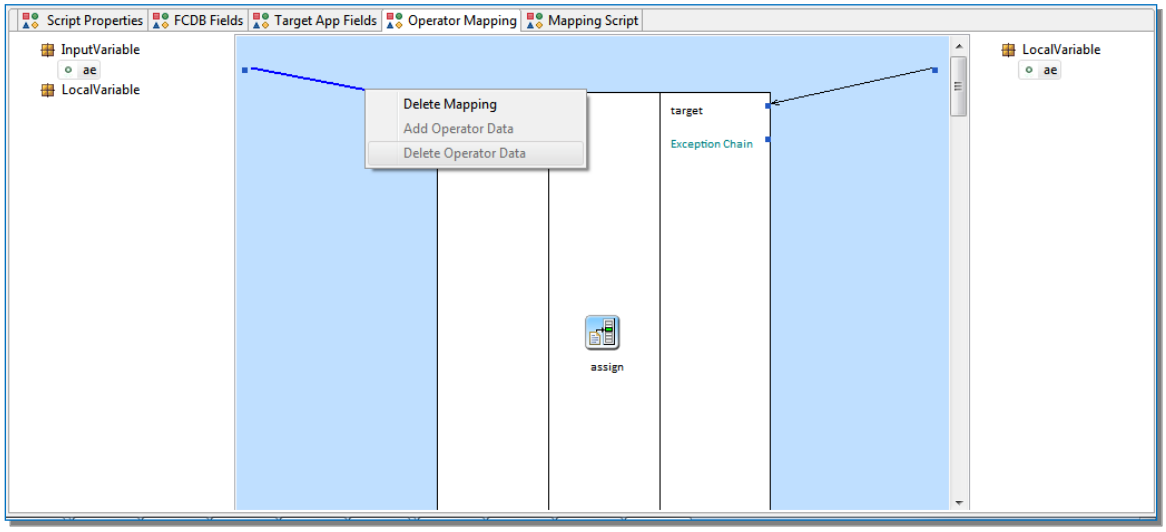
11. Similarly drag target field (Target App Field) and drop it on target.



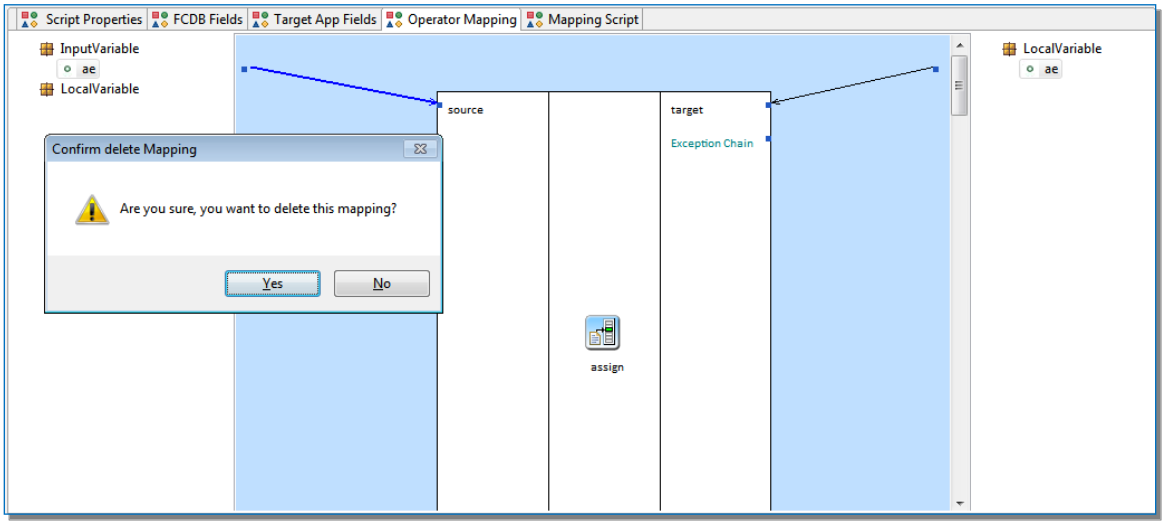
12. To map more fields right click on properties window and click on Add Operator Data.



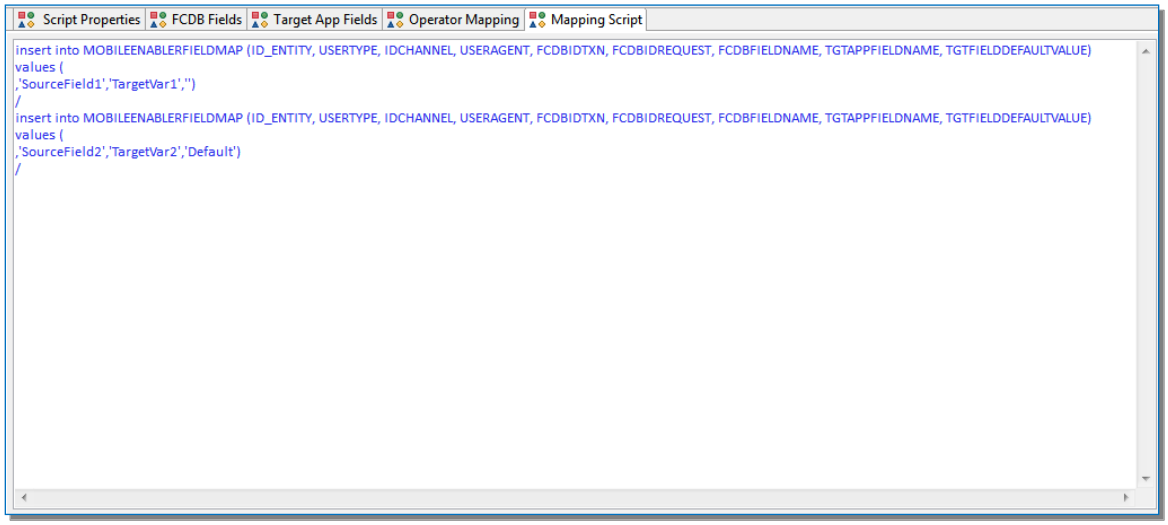
13. To delete a mapping right click on the map path and select Delete mapping.



14. Select yes to delete the mapping.



15. Click on the Mapping Script Tab to see the script.


Script Properties
FCDB Fields
Target App Fields
Operator Mapping
Mapping Script
insert into MOBILEENABLERFIELDMAP (ID_ENTITY, USERTYPE, IDCHANNEL, USERAGENT, FCDBIDTXN, FCDBIDREQUEST, FCDBFIELDNAME, TGTAPPFIELDNAME, TGTFIELDDEFAULTVALUE)
values (
,'SourceField1','TargetVar1','')
/
insert into MOBILEENABLERFIELDMAP (ID_ENTITY, USERTYPE, IDCHANNEL, USERAGENT, FCDBIDTXN, FCDBIDREQUEST, FCDBFIELDNAME, TGTAPPFIELDNAME, TGTFIELDDEFAULTVALUE)
values (
,'SourceField2','TargetVar2','Default')
/

Oracle FLEXCUBE Direct Banking

Mobile Banking rapid deployment framework User Manual

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