

## Summary

This tool supports creating the physical model of ER (Entity Relationship) for the IDE. You will find the tool bar on the left side, and Outline view on the right side of editing window. It also supports DDL creation, table description creation, reverse engineering, and so forth.

Indirect compatibilities are provided by reverse features on DDLs and DBs created by the model, though direct compatibilities are missing.

## Description

ER Diagram Editor provides following features to create ER Diagram.

### Toolbar

Select, marquee, Table and Reference icons are provided.

- Select: Enables selecting and translating entities in the editing window.
- Marquee: Enables selecting multiple entities in editing window.
- Table: Denotes entities. After created in editing window, Logical/Physical Mode display is supported.
- Reference: Creates a relationship between entities.

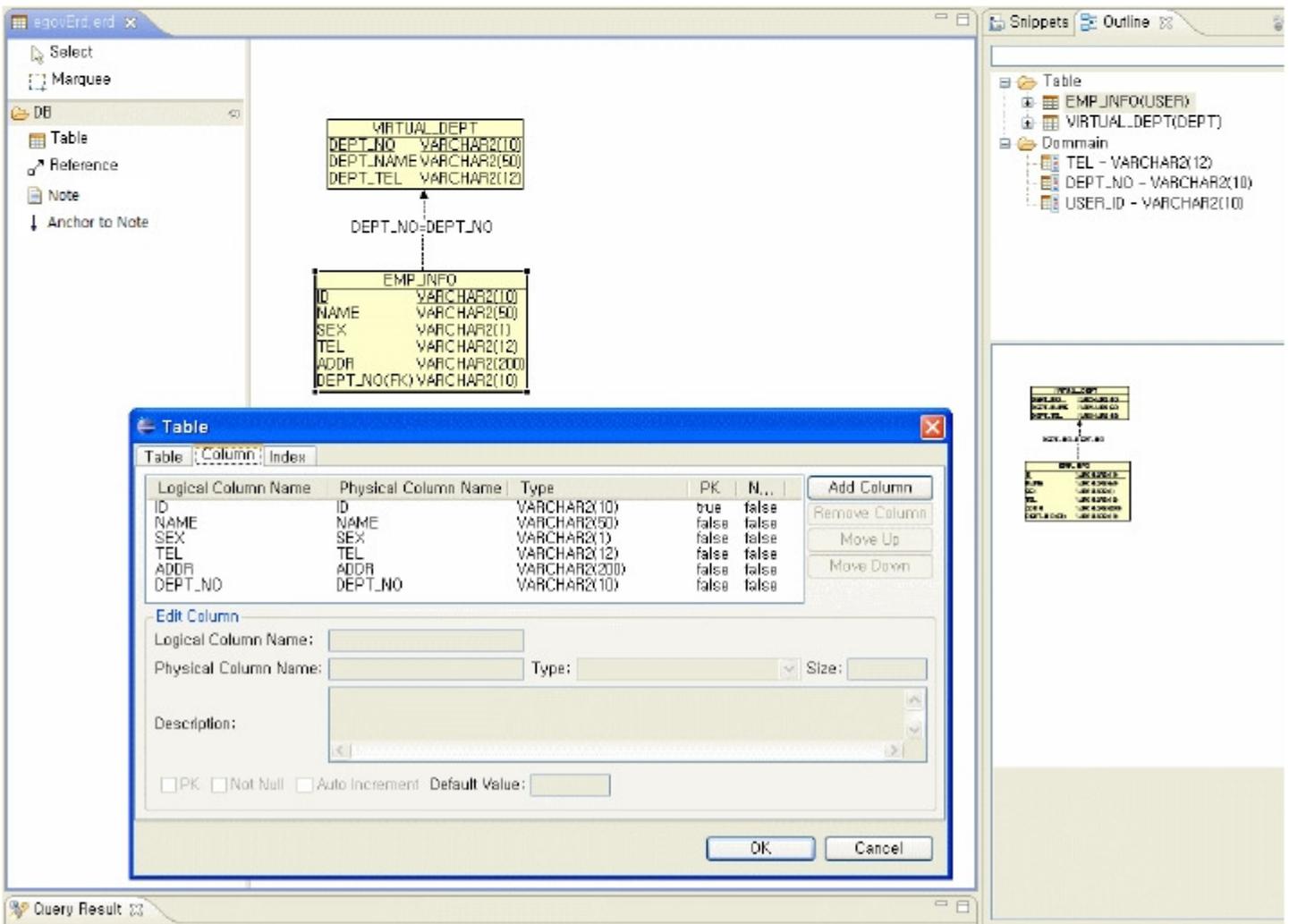
### Editing Window

This is a work space to describe the Entity's definition and relationships between entities using features provided by toolbar.

### Outline

The Outline View provides an overview of the whole entities and a fast approach to desired entities.

- Table: Lists defined entities in the editing window, highlights selected table in the editing window. Double click to display table property window.
- Domain: Pre-defines common fields within the fields to be used when defining table.
- Table Overview: Provides an overview of the entity layout.



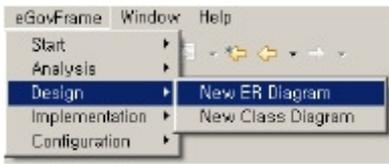
\* ER Diagram Editor supports not only basic ER Diagram creation but also following additional features.

- Reverse engineering: Import tables from other databases such as Oracle, PostgreSQL, hsqldb, and etc
- DDL Creation: Create DDL scripts that fit Oracle, PostgreSQL, MySQL, hsqldb and etc.
- Table Description Export: Export Description of Table Entity to HTML.

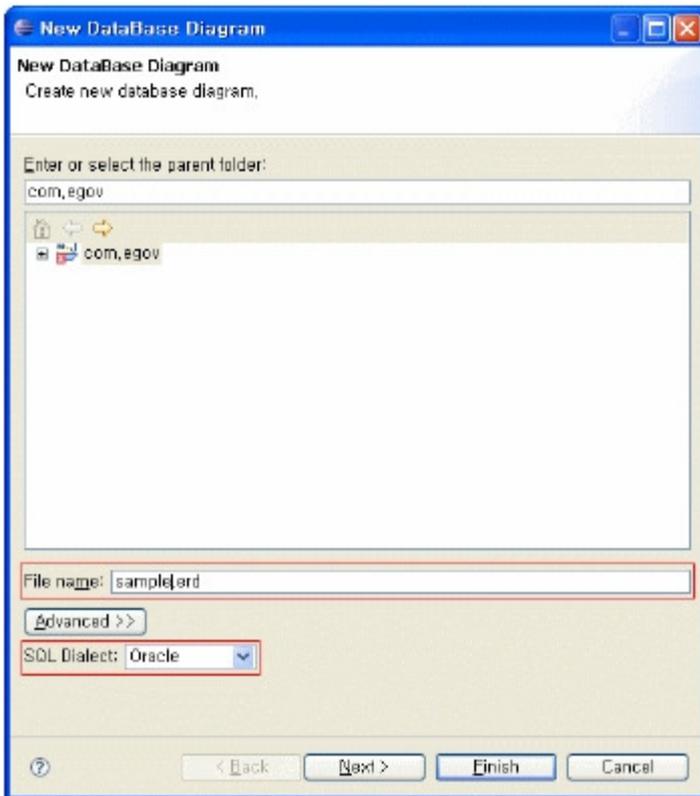
## ER Diagram Editing

### ERD file creation

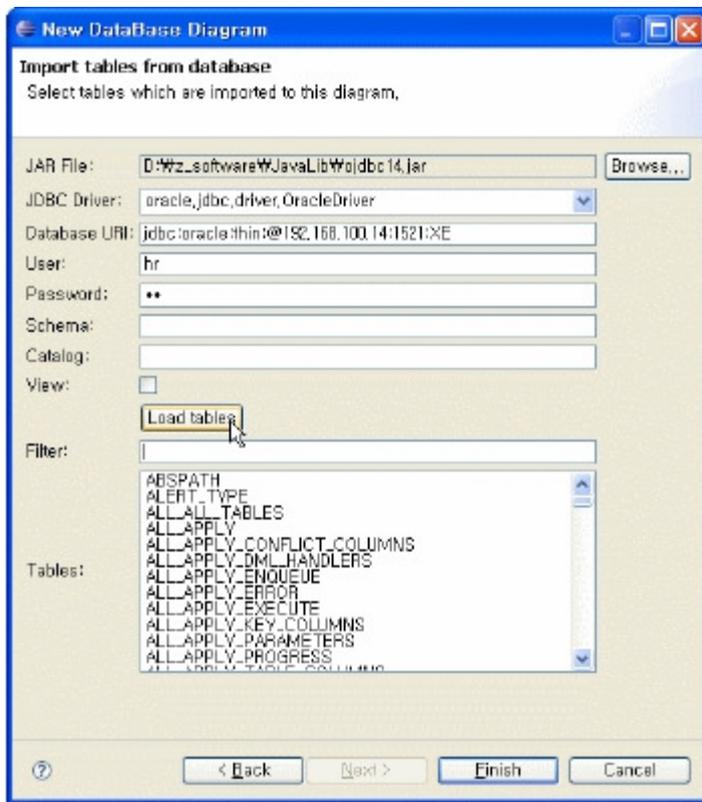
- Select eGovFrame > Design > New ER Diagram to create a diagram.



- Enter the file name.



- Select a Database Vendor. (Refer to the previous figure.)
- Import tables from the existing DB. [Optional]

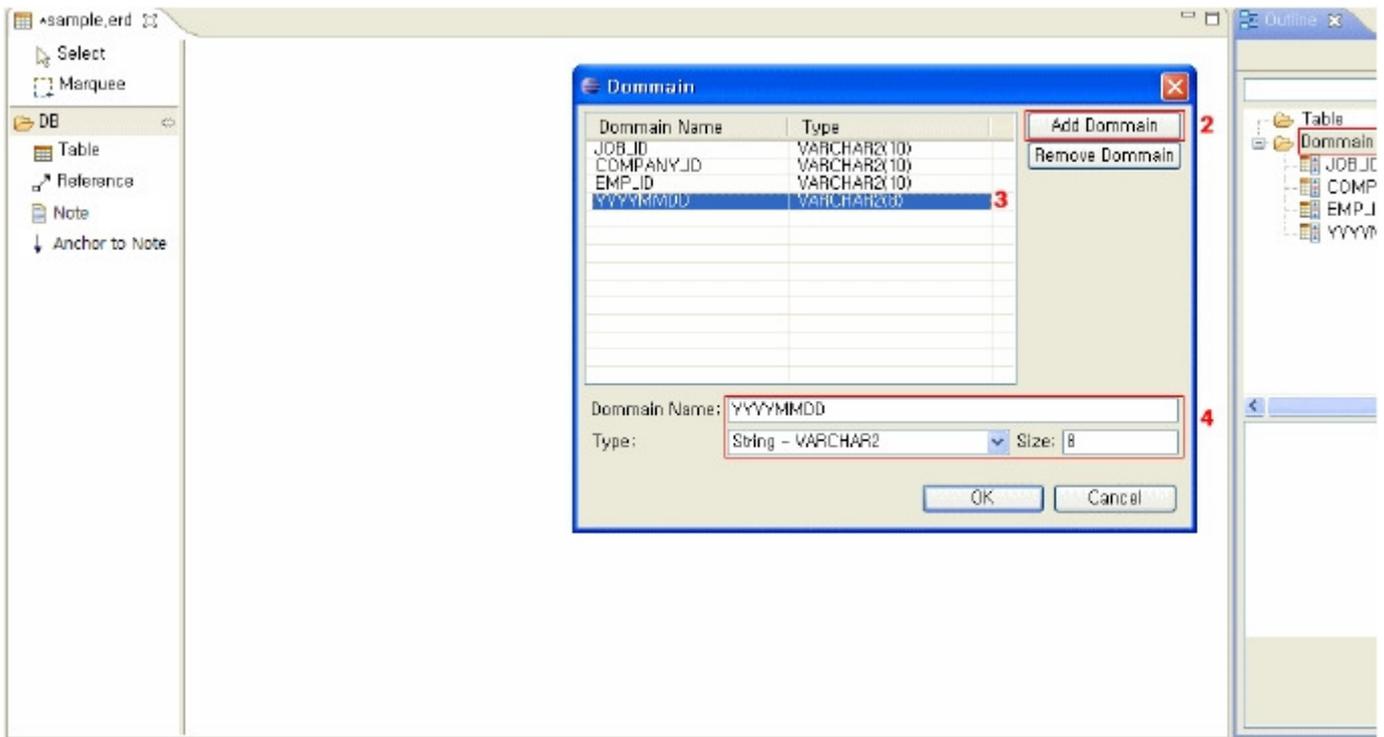


- Editing window of sample.erd



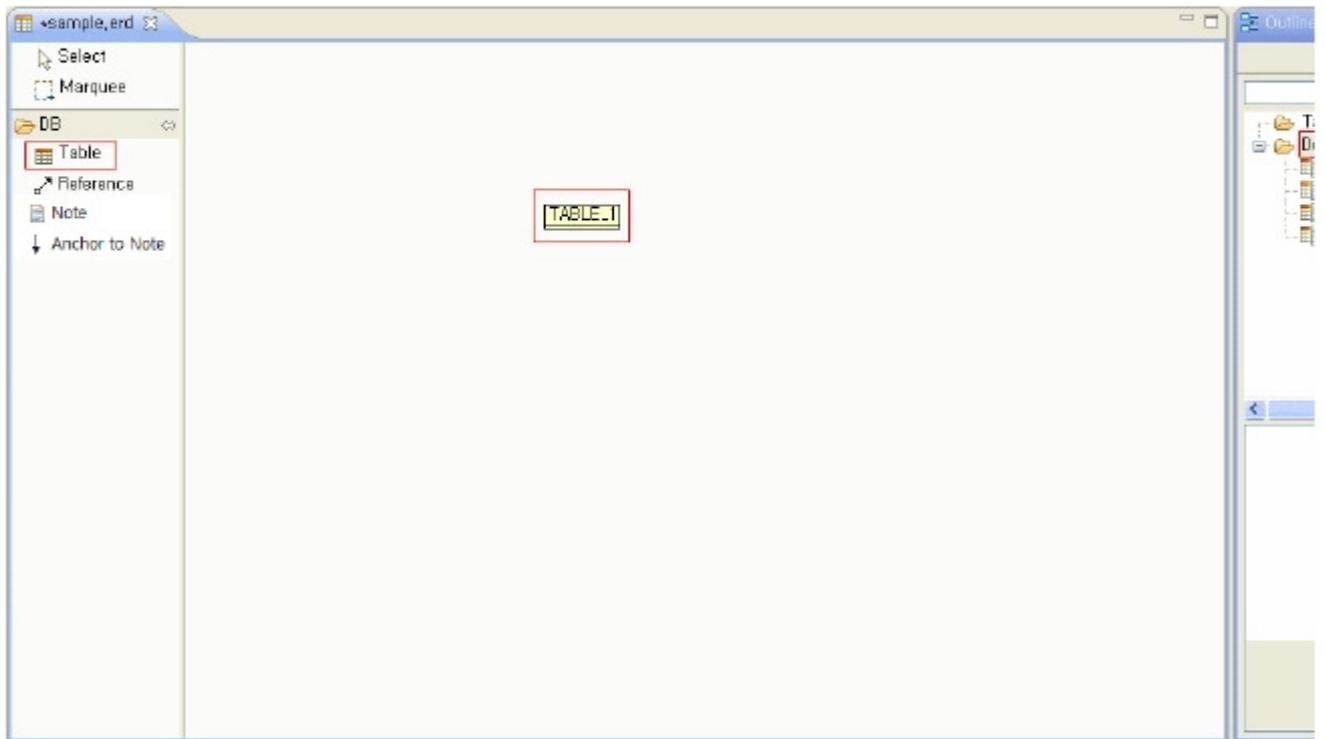
## Domain Registration

1. Double click domain folder icon to open Domain window.
2. Click [Add Dommain] button
3. Select added domain.
4. Modify domain content
5. Click [OK] button, new domain will appear in domain folder.

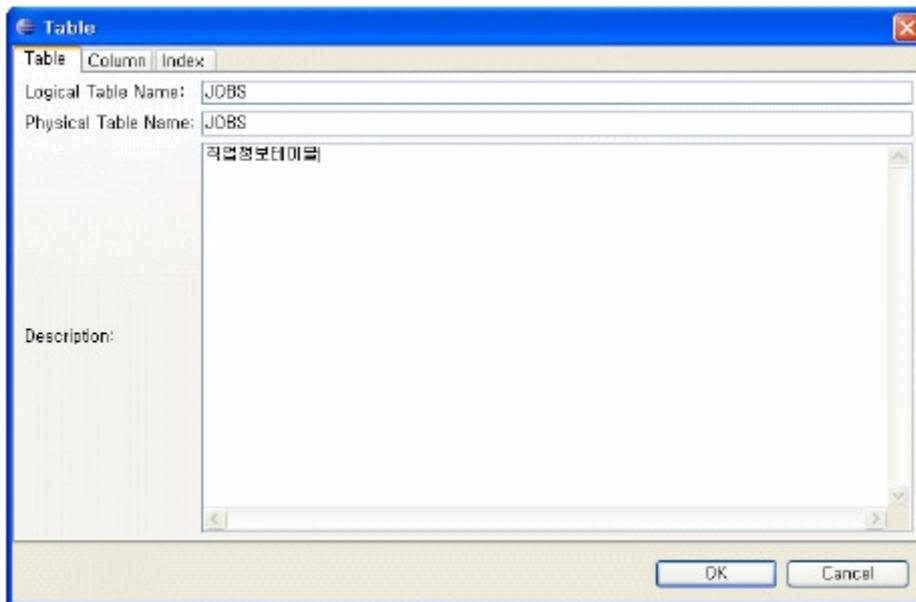


## ER Creation

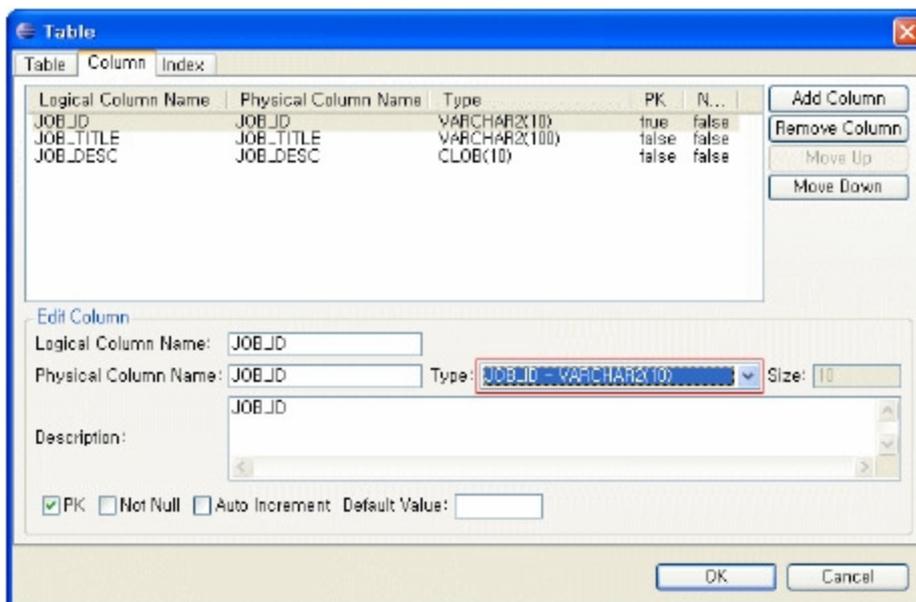
- Select the Table icon from the tool bar, then click the editing window.



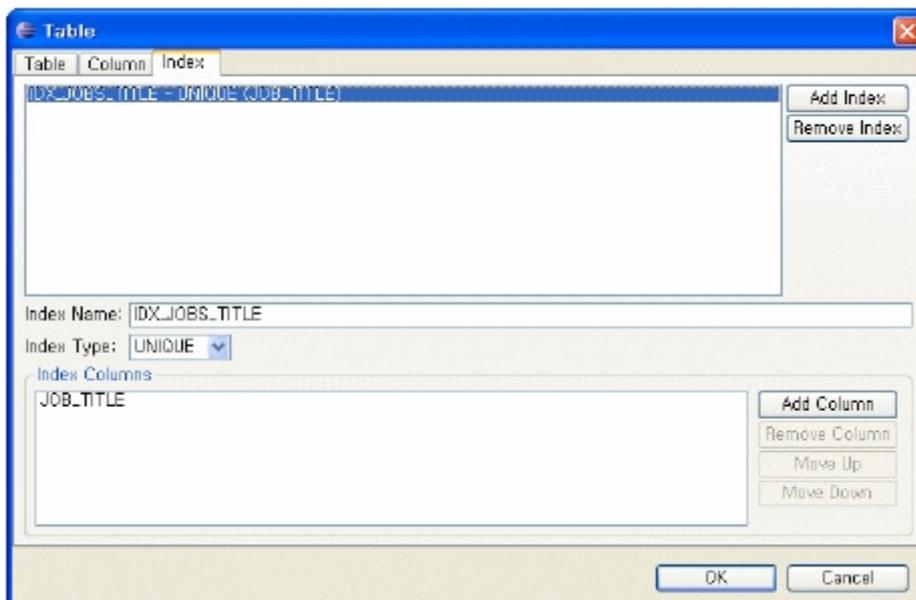
- Double click on created table image to open Table define dialog.



- Enter a table name and description in the Table tab.
- Click the Add Column button to add field info in the Column tab. (Domain may be selected by Type)



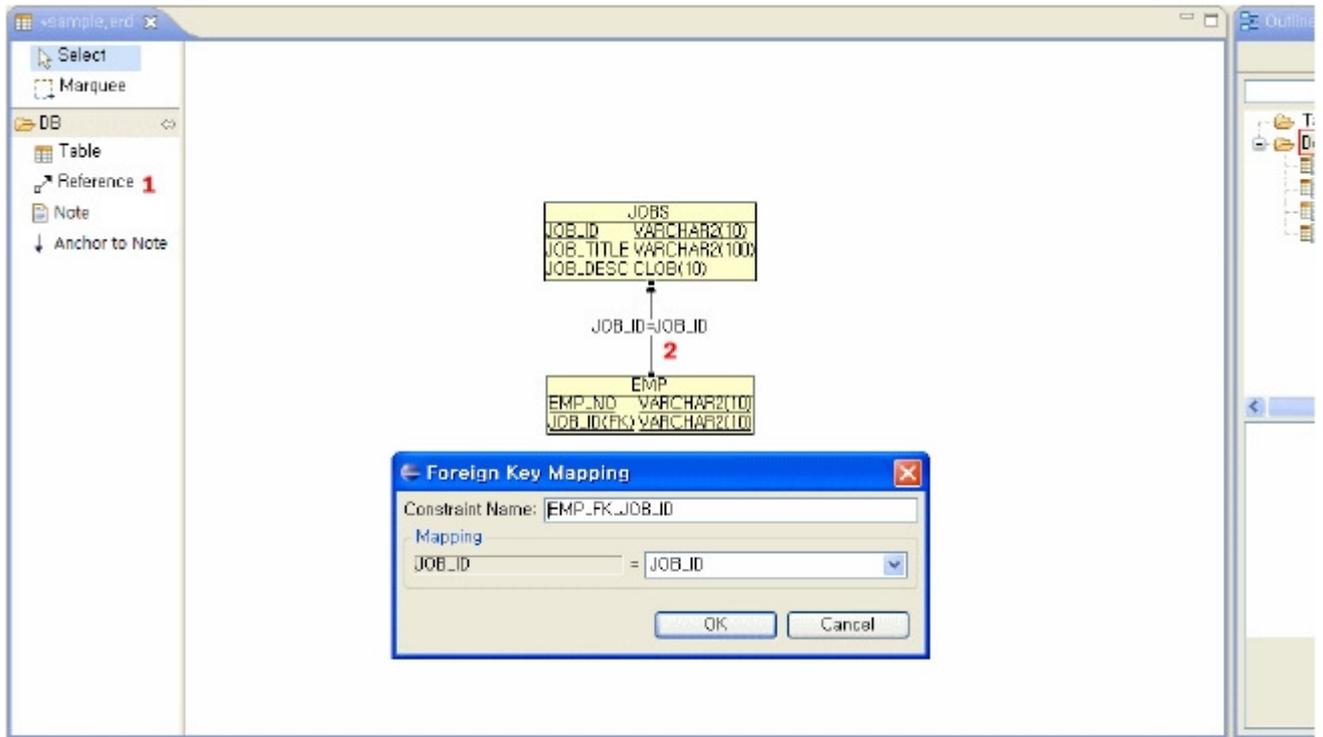
- Add index in the Index tab.



- Finish the Table definition.

JOBS	
JOB_ID	VARCHAR2(10)
JOB_TITLE	VARCHAR2(100)
JOB_DESC	CLOB(10)

- Select the Reference icon, and create a relationship from the EMP table to the JOBS table.



- Double click Reference line to edit relationship information.

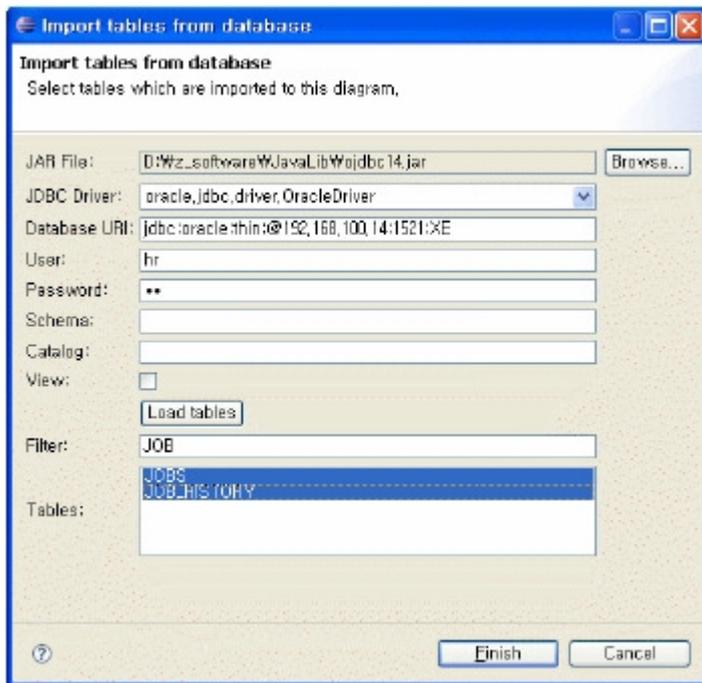
## Reverse engineering

Import table from Database such as Oracle, PostgreSQL, MySQL, hsqldb and etc.

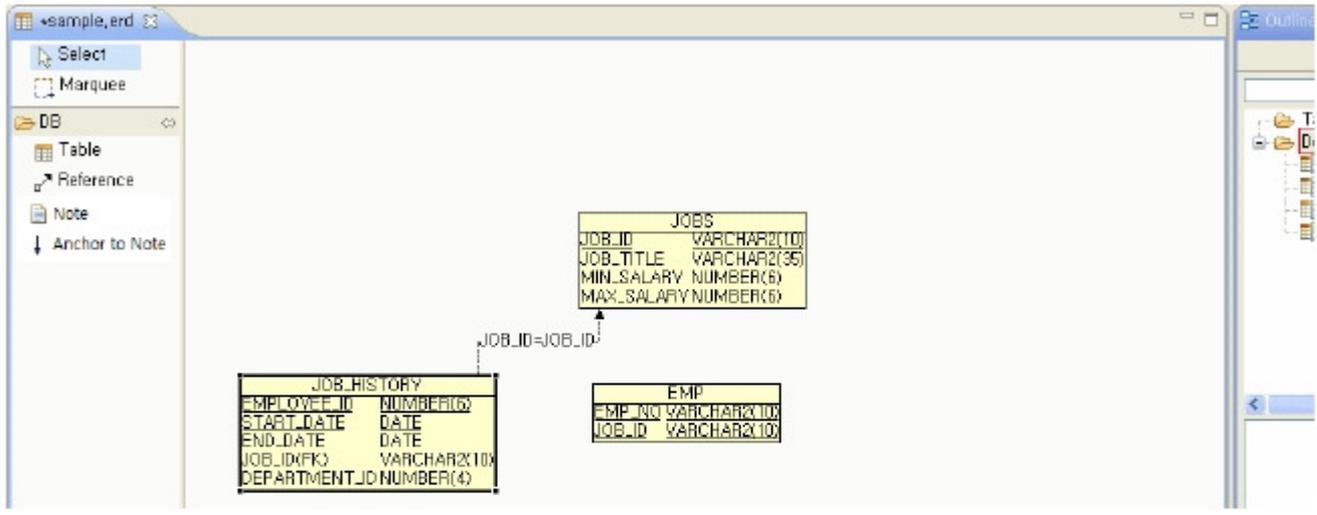
- Select Import from Database menu from editing window.



- Click [Browse] button in popup window, then select JDBC LIB.



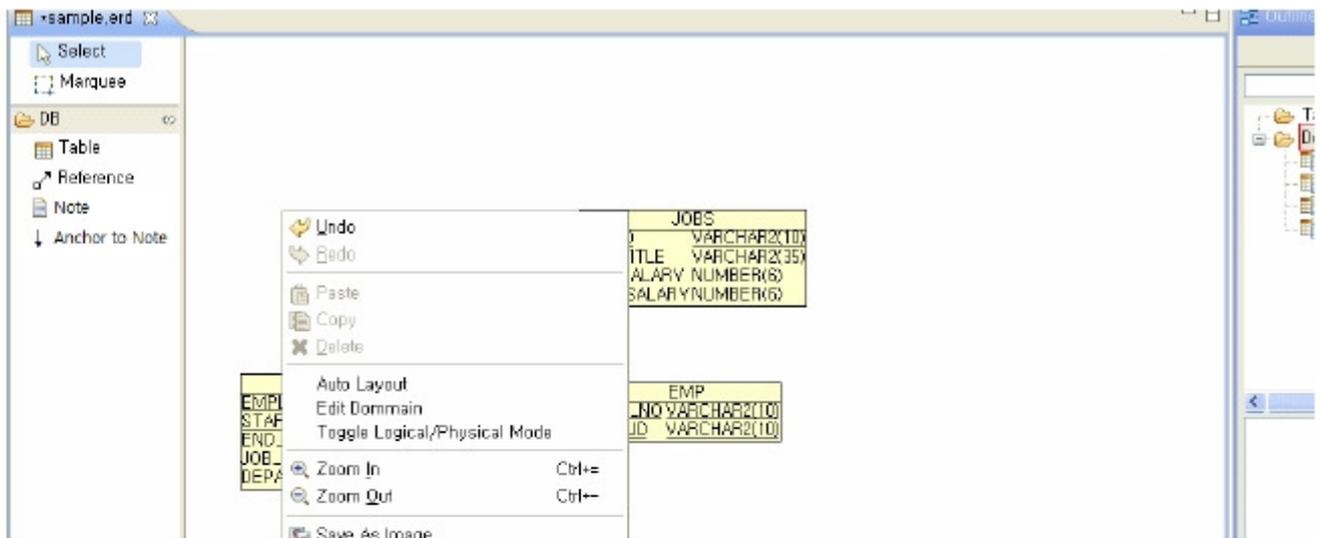
- Enter the Database Connection information.
- Click the Load tables button to retrieve a table list.
- Click the Finish button after selecting tables to import.



## DDL Creation and Scheme Creation

DDL creation using ERD

- Select the DDL menu in the editing window.



- Enter a file name for DDL



- Open a created DDL file by double clicking in the Package Explorer
- Selecting a Database
- Creating Scheme (Semi-colons must be omitted on selective execution)

## Table description creation

Export table description in HTML.

- Select HTML in the editing window menu.
- Select a folder to save the HTML file.
- Check the created file

## Environmental settings (Installation)

If the eGov IDE is installed, the editor is included. Should re-install required, download from the following URL.

- Download the net.java.amateras.db\_xxx.jar file, copy under ECLIPSE\_HOME/plugins. [ Download [[http://amateras.sourceforge.jp/cgi-bin/fswiki\\_en/wiki.cgi?page=AmaterasERD](http://amateras.sourceforge.jp/cgi-bin/fswiki_en/wiki.cgi?page=AmaterasERD)] ]

[bin/fswiki\\_en/wiki.cgi?page=AmaterasERD](http://amateras.sourceforge.jp/cgi-bin/fswiki_en/wiki.cgi?page=AmaterasERD) ]

- Note: AmaterasUML installation is required. [ [Download \[http://amateras.sourceforge.jp/cgi-bin/fswiki\\_en/wiki.cgi?page=AmaterasUML\]](http://amateras.sourceforge.jp/cgi-bin/fswiki_en/wiki.cgi?page=AmaterasUML) ]

## References (Optional)

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- [AmaterasERD \[http://amateras.sourceforge.jp/cgi-bin/fswiki\\_en/wiki.cgi?page=AmaterasERD\]](http://amateras.sourceforge.jp/cgi-bin/fswiki_en/wiki.cgi?page=AmaterasERD)