

Oracle Database Reverse Engineering

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This tutorial is aimed to show the steps of visualizing an <u>Oracle database</u> by forming an <u>>ERD</u> (entity relationship diagram) in <u>Visual Paradigm</u>. Visual Paradigm supports the reverse engineering of database tables, stored procedures and triggers. Users can reverse database from small to huge scale, by constructing multiple ERD base on different contexts.

This tutorial will walk through the reversal of database tables. Since the steps for reversing stored procedures and trigger are more or less the same, readers are expected to master all the required techniques in reverse engineering of Oracle database by going through this tutorial.

Topics

- 1. Open Database to Data Model dialog box
- 2. Configure JDBC connection
- 3. Select database schema to be reversed
- 4. Construct context-based ERDs with the reversed entities
- 1. To reverse database, select **Tools** > **Database** > **Reverse Database...** from the main menu.
- 2. The **Database to Data Model** dialog box appear. Un-check **Reverse Stored Procedure** and **Reverse Trigger**, since we only want to reverse tables this time. Click **Next**.

🔊 Databas	e to Data Model	×
Visual Pa Select La	radigm Database Reverse nguage	° ` `
Language :	Java	•]
Result :	Popup entities tree (can drag entities to diagram on demand)	•]
Reverse	Table	
Include	synonyms	
Reverse	Stored Procedure	
Reverse	Trigger	
Group s	tored procedures and triggers in one shape	
Place rever	sed entities to model: <root></root>	

3. Select Oracle 9i/10g as Driver.

Database Co	Infiguration	1
Driver :	HSQLDB (In-process)	-
Driver file :	MySQL (Connector/J Driver) MySQL5 (Connector/J Driver)	^ 🛃
Connection UR	L: Orade9i/10g	
Datab	orade8i (THIN JDBC Driver) kg* asso Grade (DataDirect SequeLink Driver) Subase Adapting Secure Enterprise (TDS Driver)	
) jdbc:h	soloSybase Adaptive Server Enterprise (jConnect Driver)	
Jser :	Sybase (DataDirect Driver)	*

- 4. At the end of the **Driver file** field, click ... to specify the Oracle JDBC driver file.
- 5. Select the Oracle JDBC driver file. Note that the JDBC driver file can be found at **\$** {oracle_server_dir}\jdbc\lib, or downloaded from <u>http://www.oracle.com/technology/software/</u> tech/java/sqlj_jdbc/index.html.
- 6. Fill in the information of the database to reverse, and click **Test Connection** to verify the connection. Click **Next**.

•	Hostname :	127.0.0.1		: 152
1	Database name :	XE		
•	dbc:orade:thin:@	127.0.0.1:1521:XE		

- 7. Select specific schema(s) to be reversed by first selecting **Selected Schema**.
- 8. Select schema *John* and click **Next**.
- 9. The tables are listed. Click **Check All** to reverse all the tables of the schema.

ter Table (wildcard = *)	Addresses	
ter rable (motorid =)	Converter	
	Computer Catenories	
	Computer Computer Part	
	Computer_Computer_Part	
	Computer_Loans	
	Computer_Part	
	Computer_Payments	
	Computers_Sold	
	> Customer	
	Finance_Companies	
	>> Manufacturers	
	Parts_Sold	
	< Payment Status	

10. Click **Finish** to start the reverse process.

11. A blank, new ERD is created in background, and the reversed entities are listed in the **Reversed Entities** dialog box. Select all the entities, and drag them to the ERD.



12. ERD is formed with the entities.

Finance_Co	mpanies		Compute	r_Loans		
finance_company_id	number(10)		💡 loan_id	number(10)		
name	varchar2(255)	CO I	sold_id	number(10)		
details	number(10)	N-1-04	🐂 finance_company	_id number(10)		
registrationNumber	varchar2(64)	CO V			_,	
		(Computer			
			f computer_id	number(10)		
Computer_Ca	tegories		registration_date	timestamp	R	
∬ category_id nu	mber(10)		🚺 title	varchar2(255)	R	
category_code va	rchar2(8)	04	price	number(8, 2)	R	
description va	rchar2(1024)		description	varchar2(1024)	R	
remark va	rchar2(255)		remark	varchar2(255)	R	
			category_id	number(10)		
			model	varchar2(64)	R	
Manufact	turers				-	
💡 manufacturer_ld	number(10)					
short_name	varchar2(50)	N-104	Compu	iter_Part		
full_name	varchar2(255)	0 ' ~ T	∬ part_ld	number(10)	~~~	
contact	varchar2(20)	0	name	varchar2(255)	R)	
6			price	number(8, 2)	N	
			description	varchar2(1024)	10	
			remark	varchar2(255)	R	
			manufacturer_ld	number(10)		
			model	varchar2(64)	R	
		<u> </u>			_	

Related Links

- What is Entity Relationship Diagram (ERD)?
- Evaluate Visual Paradigm for FREE

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Visual Paradigm home page (https://www.visual-paradigm.com/)

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