## Granting and Revoking Privileges in Oracle Database 11g

## 1. SQL Statements for Granting and Revoking Privileges

SQL statements can be issued to perform granting and revoking privileges through any of the Oracle client tools, such as SQL\*Plus, SQL Developer, or APEX.

1) Granting Privileges on Tables

You can grant users various privileges to tables. These privileges can be any combination of select, insert, update, delete, and others.

The syntax for granting privileges on a table is:

GRANT PRIVILEGES ON OBJECT TO USER;

For example, if you want to grant select, insert, update, and delete privileges on a table called SUPPLIERS to a user name SMITHJ, you would execute the following statement:

GRANT SELECT, INSERT, UPDATE, DELETE ON SUPPLIERS TO SMITHJ;

2) Revoking Privileges on Tables

Once you have granted privileges, you may need to revoke some or all of these privileges. To do this, you can execute a revoke command. You can revoke any combination of select, insert, update, delete, and others.

The syntax for revoking privileges on a table is:

REVOKE PRIVILEGES ON OBJECT FROM USER;

For example, if you want to revoke delete privileges on the table SUPPLIERS from the user SMITHJ, you would execute the following statement:

REVOKE DELETE ON SUPPLIERS FROM SMITHJ;

3) Granting and Revoking Privileges on Other Database Objects

When dealing with other database objects, such as views, functions, and procedures, similar SQL statements can be issued.

## 2. Performing Grant and Revoke through GUI

1) Oracle SQL Developer

Open the connection and expand the *Tables* node. Click to highlight the table you would like to grant/revoke privileges.

Click *Grants* tab on top of the right panel to list grants information. Then, just below the tab, click Actions  $\rightarrow$  Privileges  $\rightarrow$  Grant (or Revoke) to open Grant (or Revoke) dialog box, where you can specify the privileges as well as the user you would like to grant to (or revoke from).

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	DELETE JPWANG2 NO JPWANG CUSTOMER				
	UPDATE JPWANG2 NO JPWANG CUSTOMER				
	SELECT JPWANG3 NO VPWANG CUSTOMER				
E E DEMO_ORDERS	UPDATE JPWANG3 NO JPWANG CUSTOMER				
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You may need to click the *Refresh* button, below the tab, to refresh the grants list.

## 2) Application Express (APEX)

Log in to the APEX workspace that is associated to the Oracle schema objects you would like to grant/revoke privileges. Click SQL Workshop  $\rightarrow$  Object Browser  $\rightarrow$  Browse  $\rightarrow$  Tables. Click to highlight the table you would like to grant/revoke privileges.

Click *Grants* tab on top of the right panel to list grants information. Then, just below the tab, click *Grant* (or *Revoke*) button to open Grant (or Revoke) panel, where you can specify the privileges as well as the grantee you would like to grant to (or revoke from).

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DEMO_ORDER_ITEMS	DELETE	JPWANG2	NO	JPWANG	CUSTOMER		
DEMO_PAGE_HIERARCHY	LIPDATE	JPWANG2	NO	JPWANG	CLISTOMER		
DEMO_PRODUCT_INFO	DELETE	1714/41/02		IDA/ANO	OUOTOMER		
DEMO_STATES	DELETE	JPVVANG3	NO	JPVVANG	CUSTOMER		
DEMO_USERS	UPDATE	JPWANG3	NO	JPWANG	CUSTOMER		
DEPARTMENT					1 - 5		
DEPT							