**System Privileges**

* Create session
* Create table
* Create view
* Create procedure
* Sysdba
* Sysoper

**Object Privileges** Privileges can be assigned to any of the following types of database objects:

* **Tables:** all, alter, debug, delete, flashback, insert, on commit refresh, query rewrite, references, select, update
* **Views:** debug, delete, insert, flashback, references, select, under, update
* **Sequence:** alter, select
* **Packages, Procedures, Functions:** debug, execute
* **Materialized Views:** delete, flashback, insert, select, update
* **Directories:** read, write
* **Libraries:** execute
* **User Defined Types:** debug, execute, under
* **Operators:** execute
* **Indextypes:** execute

**Full List Of Oracle Grants**

| **System Privilege Name** | **Operations Authorized** |
| --- | --- |
| **Advisor Framework Privileges:** All of the advisor framework privileges are part of the DBA role. | |
| ADVISOR | Access the advisor framework through PL/SQL packages such as DBMS\_ADVISOR and DBMS\_SQLTUNE. |
| ADMINISTER SQL TUNING SET | Create, drop, select (read), load (write), and delete a SQL tuning set owned by the grantee through the DBMS\_SQLTUNEpackage |
| ADMINISTER ANY SQL TUNING SET | Create, drop, select (read), load (write), and delete a SQL tuning set owned by any user through the DBMS\_SQLTUNEpackage |
| CREATE ANY SQL PROFILE | Accept a SQL Profile recommended by the SQL Tuning Advisor, which is accessed through Enterprise Manager or by theDBMS\_SQLTUNE package. |
| DROP ANY SQL PROFILE | Drop an existing SQL Profile |
| ALTER ANY SQL PROFILE | Alter the attributes of an existing SQL Profile |
| **CLUSTERS:** | |
| CREATE CLUSTER | Create clusters in the grantee's schema |
| CREATE ANY CLUSTER | Create a cluster in any schema. Behaves similarly to CREATE ANY TABLE. |
| ALTER ANY CLUSTER | Alter clusters in any schema |
| DROP ANY CLUSTER | Drop clusters in any schema |
| **CONTEXTS:** | |
| CREATE ANY CONTEXT | Create any context namespace |
| DROP ANY CONTEXT | Drop any context namespace |
| **DATABASE:** | |
| ALTER DATABASE | Alter the database |
| ALTER SYSTEM | Issue ALTER SYSTEM statements |
| AUDIT SYSTEM | Issue AUDIT statements |
| **DATABASE LINKS:** | |
| CREATE DATABASE LINK | Create private database links in the grantee's schema |
| CREATE PUBLIC DATABASE LINK | Create public database links |
| DROP PUBLIC DATABASE LINK | Drop public database links |
| **DEBUGGING:** | |
| DEBUG CONNECT SESSION | Connect the current session to a debugger. |
| DEBUG ANY PROCEDURE | Debug all PL/SQL and Java code in any database object. Display information on all SQL statements executed by the application.  **Note:** Granting this privilege is equivalent to granting the DEBUG object privilege on all applicable objects in the database. |
| **DIMENSIONS:** | |
| CREATE DIMENSION | Create dimensions in the grantee's schema |
| CREATE ANY DIMENSION | Create dimensions in any schema |
| ALTER ANY DIMENSION | Alter dimensions in any schema |
| DROP ANY DIMENSION | Drop dimensions in any schema |
| **DIRECTORIES** | |
| CREATE ANY DIRECTORY | Create directory database objects |
| DROP ANY DIRECTORY | Drop directory database objects |
| **INDEXTYPES:** | |
| CREATE INDEXTYPE | Create an indextype in the grantee's schema |
| CREATE ANY INDEXTYPE | Create an indextype in any schema |
| ALTER ANY INDEXTYPE | Modify indextypes in any schema |
| DROP ANY INDEXTYPE | Drop an indextype in any schema |
| EXECUTE ANY INDEXTYPE | Reference an indextype in any schema |
| **INDEXES:** | |
| CREATE ANY INDEX | Create in any schema a domain index or an index on any table in any schema |
| ALTER ANY INDEX | Alter indexes in any schema |
| DROP ANY INDEX | Drop indexes in any schema |
| **JOB SCHEDULER OBJECTS:** | The following privileges are needed to execute procedures in the DBMS\_SCHEDULER package. |
| CREATE JOB | Create jobs, schedules, or programs in the grantee's schema |
| CREATE ANY JOB | Create, alter, or drop jobs, schedules, or programs in any schema  **Note:** This extremely powerful privilege allows the grantee to execute code as any other user. It should be granted with caution. |
| EXECUTE ANY PROGRAM | Use any program in a job in the grantee's schema |
| EXECUTE ANY CLASS | Specify any job class in a job in the grantee's schema |
| MANAGE SCHEDULER | Create, alter, or drop any job class, window, or window group |
| **LIBRARIES:** | |
| CREATE LIBRARY | Create external procedure or function libraries in the grantee's schema |
| CREATE ANY LIBRARY | Create external procedure or function libraries in any schema |
| DROP ANY LIBRARY | Drop external procedure or function libraries in any schema |
| **MATERIALIZED VIEWS:** | |
| CREATE MATERIALIZED VIEW | Create a materialized view in the grantee's schema |
| CREATE ANY MATERIALIZED VIEW | Create materialized views in any schema |
| ALTER ANY MATERIALIZED VIEW | Alter materialized views in any schema |
| DROP ANY MATERIALIZED VIEW | Drop materialized views in any schema |
| QUERY REWRITE | This privilege has been deprecated. No specify privileges are needed for a user to enable rewrite for a materialized view that references tables or views in the user's own schema. |
| GLOBAL QUERY REWRITE | Enable rewrite using a materialized view when that materialized view references tables or views in any schema |
| ON COMMIT REFRESH | Create a refresh-on-commit materialized view on any table in the database  Alter a refresh-on-demand materialized on any table in the database to refresh-on-commit |
| FLASHBACK ANY TABLE | Issue a SQL Flashback Query on any table, view, or materialized view in any schema. This privilege is not needed to execute the DBMS\_FLASHBACK procedures. |
| **OPERATORS:** | |
| CREATE OPERATOR | Create an operator and its bindings in the grantee's schema |
| CREATE ANY OPERATOR | Create an operator and its bindings in any schema |
| ALTER ANY OPERATOR | Modify an operator in any schema |
| DROP ANY OPERATOR | Drop an operator in any schema |
| EXECUTE ANY OPERATOR | Reference an operator in any schema |
| **OUTLINES:** | |
| CREATE ANY OUTLINE | Create public outlines that can be used in any schema that uses outlines |
| ALTER ANY OUTLINE | Modify outlines |
| DROP ANY OUTLINE | Drop outlines |
| **PROCEDURES:** | |
| CREATE PROCEDURE | Create stored procedures, functions, and packages in the grantee's schema |
| CREATE ANY PROCEDURE | Create stored procedures, functions, and packages in any schema |
| ALTER ANY PROCEDURE | Alter stored procedures, functions, or packages in any schema |
| DROP ANY PROCEDURE | Drop stored procedures, functions, or packages in any schema |
| EXECUTE ANY PROCEDURE | Execute procedures or functions, either standalone or packaged  Reference public package variables in any schema |
| **PROFILES:** | |
| CREATE PROFILE | Create profiles |
| ALTER PROFILE | Alter profiles |
| DROP PROFILE | Drop profiles |
| **ROLES:** | |
| CREATE ROLE | Create roles |
| ALTER ANY ROLE | Alter any role in the database |
| DROP ANY ROLE | Drop roles |
| GRANT ANY ROLE | Grant any role in the database |
| **ROLLBACK SEGMENTS:** | |
| CREATE ROLLBACK SEGMENT | Create rollback segments |
| ALTER ROLLBACK SEGMENT | Alter rollback segments |
| DROP ROLLBACK SEGMENT | Drop rollback segments |
| **SEQUENCES:** | |
| CREATE SEQUENCE | Create sequences in the grantee's schema |
| CREATE ANY SEQUENCE | Create sequences in any schema |
| ALTER ANY SEQUENCE | Alter any sequence in the database |
| DROP ANY SEQUENCE | Drop sequences in any schema |
| SELECT ANY SEQUENCE | Reference sequences in any schema |
| **SESSIONS:** | |
| CREATE SESSION | Connect to the database |
| ALTER RESOURCE COST | Set costs for session resources |
| ALTER SESSION | Issue ALTER SESSION statements |
| RESTRICTED SESSION | Logon after the instance is started using the SQL\*Plus STARTUP RESTRICT statement |
| **SNAPSHOTS: See MATERIALIZED VIEWS** | |
| **SYNONYMS:** | |
| CREATE SYNONYM | Create synonyms in the grantee's schema |
| CREATE ANY SYNONYM | Create private synonyms in any schema |
| CREATE PUBLIC SYNONYM | Create public synonyms |
| DROP ANY SYNONYM | Drop private synonyms in any schema |
| DROP PUBLIC SYNONYM | Drop public synonyms |
| **TABLES:**  **Note:** For external tables, the only valid privileges are CREATE ANY TABLE, ALTER ANY TABLE, DROP ANY TABLE, and SELECT ANY TABLE. | |
| CREATE TABLE | Create tables in the grantee's schema |
| CREATE ANY TABLE | Create tables in any schema. The owner of the schema containing the table must have space quota on the tablespace to contain the table. |
| ALTER ANY TABLE | Alter any table or view in any schema |
| BACKUP ANY TABLE | Use the Export utility to incrementally export objects from the schema of other users |
| DELETE ANY TABLE | Delete rows from tables, table partitions, or views in any schema |
| DROP ANY TABLE | Drop or truncate tables or table partitions in any schema |
| INSERT ANY TABLE | Insert rows into tables and views in any schema |
| LOCK ANY TABLE | Lock tables and views in any schema |
| SELECT ANY TABLE | Query tables, views, or materialized views in any schema |
| FLASHBACK ANY TABLE | Issue a SQL Flashback Query on any table, view, or materialized view in any schema. This privilege is not needed to execute the DBMS\_FLASHBACK procedures. |
| UPDATE ANY TABLE | Update rows in tables and views in any schema |
| **TABLESPACES:** | |
| CREATE TABLESPACE | Create tablespaces |
| ALTER TABLESPACE | Alter tablespaces |
| DROP TABLESPACE | Drop tablespaces |
| MANAGE TABLESPACE | Take tablespaces offline and online and begin and end tablespace backups |
| UNLIMITED TABLESPACE | Use an unlimited amount of any tablespace. This privilege overrides any specific quotas assigned. If you revoke this privilege from a user, then the user's schema objects remain but further tablespace allocation is denied unless authorized by specific tablespace quotas. You cannot grant this system privilege to roles. |
| **TRIGGERS:** | |
| CREATE TRIGGER | Create a database trigger in the grantee's schema |
| CREATE ANY TRIGGER | Create database triggers in any schema |
| ALTER ANY TRIGGER | Enable, disable, or compile database triggers in any schema |
| DROP ANY TRIGGER | Drop database triggers in any schema |
| ADMINISTER DATABASE TRIGGER | Create a trigger on DATABASE. You must also have the CREATE TRIGGER or CREATE ANY TRIGGER system privilege. |
| **TYPES:** | |
| CREATE TYPE | Create object types and object type bodies in the grantee's schema |
| CREATE ANY TYPE | Create object types and object type bodies in any schema |
| ALTER ANY TYPE | Alter object types in any schema |
| DROP ANY TYPE | Drop object types and object type bodies in any schema |
| EXECUTE ANY TYPE | Use and reference object types and collection types in any schema, and invoke methods of an object type in any schema if you make the grant to a specific user. If you grant EXECUTE ANY TYPE to a role, then users holding the enabled role will not be able to invoke methods of an object type in any schema. |
| UNDER ANY TYPE | Create subtypes under any nonfinal object types. |
| **USERS:** | |
| CREATE USER | Create users. This privilege also allows the creator to:   * Assign quotas on any tablespace * Set default and temporary tablespaces * Assign a profile as part of a CREATE USER statement |
| ALTER USER | Alter any user. This privilege authorizes the grantee to:   * Change another user's password or authentication method * Assign quotas on any tablespace * Set default and temporary tablespaces * Assign a profile and default roles |
| DROP USER | Drop users |
| **VIEWS:** | |
| CREATE VIEW | Create views in the grantee's schema |
| CREATE ANY VIEW | Create views in any schema |
| DROP ANY VIEW | Drop views in any schema |
| UNDER ANY VIEW | Create subviews under any object views |
| FLASHBACK ANY TABLE | Issue a SQL Flashback Query on any table, view, or materialized view in any schema. This privilege is not needed to execute the DBMS\_FLASHBACK procedures. |
| **MISCELLANEOUS:** | |
| ANALYZE ANY | Analyze any table, cluster, or index in any schema |
| AUDIT ANY | Audit any object in any schema using AUDIT *schema\_objects* statements |
| COMMENT ANY TABLE | Comment on any table, view, or column in any schema |
| EXEMPT ACCESS POLICY | Bypass fine-grained access control  **Caution:** This is a very powerful system privilege, as it lets the grantee bypass application-driven security policies. Database administrators should use caution when granting this privilege. |
| FORCE ANY TRANSACTION | Force the commit or rollback of any in-doubt distributed transaction in the local database  Induce the failure of a distributed transaction |
| FORCE TRANSACTION | Force the commit or rollback of the grantee's in-doubt distributed transactions in the local database |
| GRANT ANY OBJECTPRIVILEGE | Grant any object privilege  Revoke any object privilege that was granted by the object owner or by some other user with the GRANT ANY OBJECTPRIVILEGE privilege |
| GRANT ANY PRIVILEGE | Grant any system privilege |
| RESUMABLE | Enable resumable space allocation |
| SELECT ANY DICTIONARY | Query any data dictionary object in the SYS schema. This privilege lets you selectively override the default FALSE setting of the O7\_DICTIONARY\_ACCESSIBILITY initialization parameter. |
| SYSDBA | Perform STARTUP and SHUTDOWN operations  ALTER DATABASE: open, mount, back up, or change character set  CREATE DATABASE  ARCHIVELOG and RECOVERY  CREATE SPFILE  Includes the RESTRICTED SESSION privilege |
| SYSOPER | Perform STARTUP and SHUTDOWN operations  ALTER DATABASE: open, mount, or back up  ARCHIVELOG and RECOVERY  CREATE SPFILE  Includes the RESTRICTED SESSION privilege |
| CONNECT, RESOURCE, and DBA | These roles are provided for compatibility with previous versions of Oracle Database. You can determine the privileges encompassed by these roles by querying the DBA\_SYS\_PRIVS data dictionary view.  **Note:** Oracle recommends that you design your own roles for database security rather than relying on these roles. These roles may not be created automatically by future versions of Oracle Database. |
| DELETE\_CATALOG\_ROLE EXECUTE\_CATALOG\_ROLE SELECT\_CATALOG\_ROLE | These roles are provided for accessing data dictionary views and packages. |
| EXP\_FULL\_DATABASE  IMP\_FULL\_DATABASE | These roles are provided for convenience in using the import and export utilities. |
| AQ\_USER\_ROLE AQ\_ADMINISTRATOR\_ROLE | You need these roles to use Oracle Advanced Queuing. |
| SNMPAGENT | This role is used by the Enterprise Manager Intelligent Agent. |
| RECOVERY\_CATALOG\_OWNER | You need this role to create a user who owns a recovery catalog. |

**Oracle Database Predefined Roles**

| **Predefined Role** | **Purpose** |
| --- | --- |
| HS\_ADMIN\_ROLE | A DBA using Oracle Database heterogeneous services needs this role to access appropriate tables in the data dictionary. |
| SCHEDULER\_ADMIN | This role allows the grantee to execute the procedures of the DBMS\_SCHEDULER package. It includes all of the job scheduler system privileges and is included in the DBA role. |