

31) Topic: Database Auditing:-

- Monitoring user actions is known as Auditing.
- It is highly resource consuming activity.
- Recommended to have least Auditing.
- Output of Auditing is available as two files,
i.e. Audit Trail File.

- 1) ops level and
- 2) Database level.

→ To find out where the auditing is taking place,
SQL> show parameters audit

→ There are 4 types of Auditing supported by Oracle 11g.

- 1) Statement Auditing
 - 2) Object Auditing
 - 3) Fine Grained Auditing
 - 4) Privilege Auditing
- } very minor difference b/w all these.

1) Statement Auditing:-

→ A Statement is ^{not} Audited, -

Ex: Create table statement by user (by user)
SQL Table Related Stmt. (only DDL stmt)

Ex-
SQL> audit table by byshaid;

SQL> audit insert table by byshaid whenever not
Successful;

SQL) audit insert table by userid by session;
SQL) audit insert table by userid by access;
(for auditing each and every stmt).

② Privilege Auditing:-

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→ To disable Audit Stmt.

SQL) noaudit table by userid;

→ Privilege Auditing is done for system level privilege

Ex Audit Create any table

noaudit Create any table

③ Object Auditing:-

Ex SQL) audit insert on hr.employee whenever not successful

SQL) audit insert on hr.employee by userid whenever not successful

SQL) audit insert table whenever successful

SQL) noaudit insert table whenever successful

SQL) audit insert table by userid whenever successful

SQL) no audit insert table by userid whenever successful

SQL) audit insert into hr.salary by userid

whenever successful

SQL) noaudit insert into hr.salary by userid

whenever successful

④ fine grained Auditing:-

→ Based on Select Stmt auditing.

⇒ To Delete Record or data (audit).

SQL) delete from sys.aud\$ where timestamp#

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< sysdate-90;

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(90 days all the data can be deleted according to organization or office strategy.)

SQL) dba_stmt_audit_options

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(Statement level auditing view.)

SQL) dba_priv_audit_options

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(Privilege level auditing view.)

SQL) dba_obj_audit_options

↓
(Object level view)

SQL) dba_audit_trail

↓
(Result of auditing view)

Ex:- SQL) select username, timestamp, action_name
from dba_audit_trail where username
= 'WYSUID';