# Oracle Database Auditing

**Oracle database auditing** allows you to monitor certain database actions happening inside the database. Auditing also helps in looking at the actions performed against a particular table, schema or certain specific rows.

You can check database auditing is enabled via **SHOW PARAMETER** command

```
Show parameter audit;
```

```
NAME                               TYPE          VALUE
---------------------------------- ------------- ----------------------------
audit_file_dest                    string        /u01/app/oracle/admin/orcl/adu
                                                 mp
audit_sys_operations               boolean       TRUE
audit_syslog_level                 string
audit_trail                        string        DB
unified_audit_common_systemlog     string
unified_audit_sga_queue_size       integer       1048576
unified_audit_systemlog            string
```

The **AUDIT_TRAIL** parameter defines database auditing status. It can take any of the following values

- **none** - Database auditing is disabled
- **os** - Enabled, audit logs are stored at OS level, not inside the database
- **db** - Enabled, audit records are stored inside database (SYS.AUD$ table)
- **db,extended** - Same as db but populates SQL_BIND & SQL_TEXT too
- **xml** - Enabled, audit records are stored at OS level in XML format
- **xml,extended** - Same as xml but populates SQL_BIND & SQL_TEXT too

*Default is DB if you create database via DBCA, else its NONE*

The **AUDIT_FILE_DEST** parameter defines the OS level location of the audit trail files. By default it is set to **adump** location.

The **AUDIT_SYS_OPERATIONS** parameter defines auditing is enabled or disabled for any user connecting to database as SYSDBA. This is enabled by default. All the SYS operations audit records goes to OS level into **AUDIT_FILE_DEST** location.

## Move AUD$ Table to Another Tablespace

By default the **SYS.AUD$ (stores db audit records)** and **SYS.FGA_LOG$ (stores fine grain audit records)** tables resides under SYSTEM tablespace

```
col owner for a10;
col segment_name for a10;
col tablespace_name for a15;
```

```
select owner, segment_name, segment_type, tablespace_name,
  bytes/1024/1024 as MB
from dba_segments
where segment_name in ('AUD$','FGA_LOG$');
```

```
OWNER        SEGMENT_NA SEGMENT_TYPE         TABLESPACE_NAME          MB
----------   ---------- -------------------- ---------------- -----------
SYS          AUD$       TABLE                SYSTEM                .0625
SYS          FGA_LOG$   TABLE                SYSTEM                .0625
```

The **DBMS_AUDIT_MGMT** package allows you to change the default tablespace. Below query moves **AUD$** & **FGA_LOG$** tables to **USERS** tablespace

```
BEGIN
DBMS_AUDIT_MGMT.SET_AUDIT_TRAIL_LOCATION(
audit_trail_type           => DBMS_AUDIT_MGMT.AUDIT_TRAIL_DB_STD,
audit_trail_location_value => 'USERS');
END;
/
```

If you want to only move **AUD$** table then replace audit_trail_type with

```
audit_trail_type           => DBMS_AUDIT_MGMT.AUDIT_TRAIL_AUD_STD
```

If you want to only move **FGA_LOG$** table then replace audit_trail_type with

```
audit_trail_type           => DBMS_AUDIT_MGMT.AUDIT_TRAIL_FGA_STD
```