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- 1) Check if your instance is running using "ps -ef | grep pmon"  
Instance is not running (idle)

```
[oracle@node1 ~]$ ps -ef | grep pmon
oracle      2781      2619  0 09:41 pts/1      00:00:00 grep --color=auto pmon
```

- 2) Startup your database

```
[oracle@node1 ~]$ sqlplus / as sysdba

SQL*Plus: Release 19.0.0.0.0 - Production on Sun Mar 17 09:42:15 2024
Version 19.3.0.0.0

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Connected to an idle instance.

SQL> startup
ORACLE instance started.

Total System Global Area 1073737800 bytes
Fixed Size                  8904776 bytes
Variable Size              276824064 bytes
Database Buffers           780140544 bytes
Redo Buffers                7868416 bytes
Database mounted.
Database opened.
```

After startup the instance is running

```
^[[A[oracle@node1 ~]$ ps -ef | grep pmon
oracle      2813        1  0 09:42 ?          00:00:00 ora_pmon_ITI
oracle      3141      2619  0 09:43 pts/1      00:00:00 grep --color=auto pmon
[oracle@node1 ~]$
```

- 3) show data files names, their tablespaces, their size, their status using view "dba\_data\_files".

```
SQL> select file_name,tablespace_name,bytes,status from dba_data_files
2 ;

FILE_NAME
-----
TABLESPACE_NAME          BYTES STATUS
-----
/oradata/ITI/system01.dbf
SYSTEM                   859832320 AVAILABLE

/oradata/ITI/sysaux01.dbf
SYSaux                   576716800 AVAILABLE

/oradata/ITI/undotbs01.dbf
UNDOTBS1                 524288000 AVAILABLE

FILE_NAME
-----
TABLESPACE_NAME          BYTES STATUS
-----
/oradata/ITI/users01.dbf
USERS                   14417920 AVAILABLE
```

4) create an OS user with name iti and make him login to the database using "sqlplus / as sysdba"

```
[root@node1 ~]# useradd iti
[root@node1 ~]# passwd iti
Changing password for user iti.
New password:
BAD PASSWORD: The password is a palindrome
Retype new password:
passwd: all authentication tokens updated successfully.

[iti@node1 ~]$ cat .bash_profile
# .bash_profile

# Get the aliases and functions
if [ -f ~/.bashrc ]; then
    . ~/.bashrc
fi
export ORACLE_HOME=/u01/app/oracle/product/19c/db_home
export ORACLE_SID=ITI
export PATH=$ORACLE_HOME/bin:$PATH
# User specific environment and startup programs

[iti@node1 ~]$ sqlplus / as sysdba

SQL*Plus: Release 19.0.0.0.0 - Production on Sun Mar 17 10:42:26 2024
Version 19.3.0.0.0

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Connected to:
Oracle Database 19c Standard Edition 2 Release 19.0.0.0.0 - Production
Version 19.3.0.0.0

SQL>
```

5) show user to check with user your are connected to the database.

```
SQL> SHOW USER;
USER is "SYS"
SQL>
```

6) create tablespace with name "ITI\_DATA" with two data files with initial size 50 MB each.

```
SQL> ed
Wrote file afiedt.buf

 1 CREATE TABLESPACE ITI_DATA
 2 DATAFILE '/oradata/ITI/file1' SIZE 50M,
 3* '/oradata/ITI/file2' SIZE 50M
 4 ;

Tablespace created.
```

```
ITI_DATA
/oradata/ITI/file1
```

```
ITI_DATA
/oradata/ITI/file2
```

7) create user 'MYUSER' and make 'ITI\_DATA' tablespace his default tablespace with unlimited quota on it.

```
SQL> ed
Wrote file afiedt.buf

  1  CREATE user MYUSER identified by 1
  2  default tablespace ITI_DATA
  3* quota unlimited on ITI_DATA
SQL> /

User created.
```

8) try to connect with the new created user.

```
Enter user-name: MYUSER
Enter password:
ERROR:
ORA-01045: user MYUSER lacks CREATE SESSION privilege; logon denied
```

9) give the new user connect, resource privileges.

```
SQL> grant create session to myuser
2 ;

Grant succeeded.
```

10) repeat step (8).

```
[oracle@node1 ~]$ sqlplus

SQL*Plus: Release 19.0.0.0.0 - Production on Sun Mar 17 11:39:58 2024
Version 19.3.0.0.0

Copyright (c) 1982, 2019, Oracle. All rights reserved.

Enter user-name: MYUSER
Enter password:
Last Successful login time: Sun Mar 17 2024 11:39:37 +02:00

Connected to:
Oracle Database 19c Standard Edition 2 Release 19.0.0.0.0 - Production
Version 19.3.0.0.0

SQL> █
```

11) show the usernames, their passwords, their tablespace, and their account status using the views "dba\_users".

```
select username,password,default_tablespace,account_status from dba_users  
/  
/
```

12)

- create table t1 with two columns , column 1 number , column2 varchar2

```
SQL> ed  
Wrote file afiedt.buf  
  
1 create table t1  
2 ( num int,  
3   character varchar2(20)  
4* )  
SQL> /  
  
Table created.
```

- insert 3 rows in this table

```
SQL> ed  
Wrote file afiedt.buf  
  
1 insert into t1  
2* values(10,'menna')  
SQL> /  
  
1 row created.
```

```
SQL> ed  
Wrote file afiedt.buf  
  
1 insert into t1  
2* values(50,'salma')  
SQL> /  
  
1 row created.
```

```
SQL> ed
Wrote file afiedt.buf

  1  insert into t1
  2* values(100,'eman')
SQL> /

1 row created.
```

```
SQL> select * from t1
  2  ;
```

NUM	CHARACTER
10	menna
50	salma
100	eman

- find information related to this table, and in which tablespace it saved.

```
SQL> ed
Wrote file afiedt.buf

  1  SELECT owner, table_name, tablespace_name
  2  FROM dba_tables
  3* WHERE lower(table_name) = 't1'
SQL> /
```

OWNER	TABLE_NAME	TABLESPACE_NAME
SYS	T1	SYSTEM

13) - change parameter audit\_trail from none to DB.

```
SQL> ALTER SYSTEM SET audit_trail=none SCOPE=SPFILE;
```

```
System altered.
```

```
SQL> █
```

- restart the database to find the changes

```
SQL> shutdown immediate;  
Database closed.  
Database dismounted.  
ORACLE instance shut down.  
SQL>
```

```
SQL> shutdown immediate;  
Database closed.  
Database dismounted.  
ORACLE instance shut down.  
SQL> startup  
ORACLE instance started.
```

```
Total System Global Area 1073737800 bytes  
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Variable Size               276824064 bytes  
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Redo Buffers                 7868416 bytes  
Database mounted.  
Database opened.
```

```
SQL>SHOW PARAMETER audit_trail;
```

NAME	TYPE	VALUE
audit_trail	string	NONE

```
SQL>
```

- create pfile from the spfile and find the change you made on it.

```
SQL> create pfile from spfile  
2 ;  
  
File created.
```

```

[oracle@node1 dbs]$ cat initITI.ora
ITI.__data_transfer_cache_size=0
ITI.__db_cache_size=729808896
ITI.__inmemory_ext_roarea=0
ITI.__inmemory_ext_rwarea=0
ITI.__java_pool_size=0
ITI.__large_pool_size=4194304
ITI.__oracle_base='/u01/app/oracle'#ORACLE_BASE set from environment
ITI.__pga_aggregate_target=536870912
ITI.__sga_target=1073741824
ITI.__shared_io_pool_size=50331648
ITI.__shared_pool_size=272629760
ITI.__streams_pool_size=0
ITI.__unified_pga_pool_size=0
*.audit_file_dest='/u01/app/oracle/admin/ITI/adump'
*.audit_trail='NONE'

```

- edit the pfile and make the audit\_sys\_operations=true

```

[oracle@node1 dbs]$ cat initITI.ora
audit_sys_operations=true

```

- start the database using this pfile.

```

SQL> startup pfile=/u01/app/oracle/product/19c/db_home/dbs/initITI.ora
ORACLE instance started.

```

```

Total System Global Area 1073737800 bytes
Fixed Size                  8904776 bytes
Variable Size               276824064 bytes
Database Buffers            780140544 bytes
Redo Buffers                 7868416 bytes
Database mounted.
Database opened.

```

- create spfile from the pfile.

```

SQL> create spfile from pfile
2 ;

```

```

File created.

```