

INstall SCHEMAS

Tuning



**Oracle 19c Tuning**

Note:

* Execute xhost + command as root.
* Login as oracle user using the su – oracle command.

# Start Database

To start up a database from the command line, use SQL\*Plus to connect to Oracle with administrator privileges and then issue the STARTUP command.

* 1. Open terminal from the desktop and switch to oracle user:

su - oracle

* 1. Enter sqlplus / as sysdba
  2. Start the database using the command startup. Enter startup
  3. Enter following commands to open the current PDB

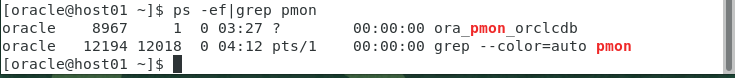
Alter pluggable database all open;

* 1. Exit SQL\*Plus command-line. Enter EXIT.
  2. Start the listener service by typing the following command:

lsnrctl START

1. Verify that the instance is started by checking whether the PMON background process is running.

$ ps –ef|grep pmon



1. Change to the $HOME directory.
2. Connect to the orcl database instance as the SYS user with SYSDBA privilege.

[oracle@host01 ~]$ . oraenv ORACLE\_SID = [orcl] ? **orcl**

The Oracle base remains unchanged with value /u01/app/oracle [oracle@host01 ~]$ **sqlplus**

SQL\*Plus: Release 19.0.0.0.0 - Production on Fri Dec 11 06:30:36 2020

Version 19.3.0.0.0

Copyright (c) 1982, 2019, Oracle. All rights reserved. Enter user-name: /as sysdba

Connected to:

Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 - Production

Version 19.3.0.0.0 SQL>

1. Check the current state of PDBs.

SQL> SHOW PDBS

CON\_ID CON\_NAME

OPEN MODE RESTRICTED

1. PDB$SEED
2. ORCLPDB

READ ONLY NO

READ WRITE NO

* 1. If the PDBs are not open, open them. If it is open, you can skip this step. Note**: Do not run this command if your PDB is already opened.**

SQL> **ALTER PLUGGABLE DATABASE ORCLPDB OPEN;**

Pluggable database altered.

* 1. Save the state so that PDB1 is opened every time the CDB is opened. Exit SQL\*Plus.

SQL> **ALTER PLUGGABLE DATABASE orclpdb SAVE STATE;**

Pluggable database altered.

SQL> **exit**

1. Check whether the listener is started and if not, start the listener.

[oracle@host01 ~]$ **lsnrctl status**

[oracle@host01 ~]$ **lsnrctl start**

1. Verify that you can connect to the orclpdb PDB by using the service name. Exit SQL\*Plus.

**Note: If you get an error then proceed to the next step.**

[oracle@host01 ~]$ **. oraenv**

ORACLE\_SID = [orcl] ?

The Oracle base remains unchanged with value /u01/app/oracle [oracle@host01 ~]$

[oracle@host01 ~]$ **sqlplus system/fenago@orclpdb**

…

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…

Connected to:

Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 - Production

Version 19.3.0.0.0

SQL>

SQL> **exit;**

1. If you are unable to connect to orclpdb using the service name then add these lines to tnsnames.ora, else skip these steps.
   1. Navigate to $ORACLE\_HOME/network/admin and open tnsnames.ora :

[oracle@host01 /]$ cd $ORACLE\_HOME [oracle@host01 dbhome\_1]$ cd network/admin/

[oracle@host01 dbhome\_1]$ vi tnsnames.ora

* 1. Add these lines to tnsnames.ora, if not already present:

orcl = (DESCRIPTION =

(ADDRESS = (PROTOCOL = TCP)(HOST = UPDATE\_HERE)(PORT

= 1521))

(CONNECT\_DATA = (SERVER = DEDICATED)

(SERVICE\_NAME = orcl)

)

)

orclpdb = (DESCRIPTION =

(ADDRESS = (PROTOCOL = TCP)(HOST = UPDATE\_HERE)(PORT

= 1521))

(CONNECT\_DATA = (SERVER = DEDICATED)

(SERVICE\_NAME = orclpdb)

)

)

* 1. Save the file and quit the vi editor (:wq).

1. Verify that the HR (sample schemas) user was created and there is data in the database.

[oracle@host01 /]$ **. oraenv**

ORACLE\_SID = [orcl] ? **orcl**

The Oracle base remains unchanged with value /u01/app/oracle [oracle@host01 /]$ **sqlplus**

SQL\*Plus: Release 19.0.0.0.0 - Production on Thu Dec 12 06:43:10 2019

Version 19.3.0.0.0

Copyright (c) 1982, 2018, Oracle. All rights reserved.

Enter user-name: **/as sysdba**

Connected to:

Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 - Production

Version 19.3.0.0.0

## SQL> conn sys/fenago@orclpdb as sysdba

Connected.

## SQL> ALTER USER hr IDENTIFIED BY hr account unlock;

User altered.

Note: If you encounter an error “ORA-01918: user 'HR' does not

exist” then follow these steps to install HR schema.

## SQL> conn sys/fenago@orclpdb

Connected.

## SQL> @?/demo/schema/human\_resources/hr\_main.sql

specify password for HR as parameter 1: Enter value for 1:

SP2-0137: DEFINE requires a value following equal sign

specify default tablespeace for HR as parameter 2: Enter value for 2: **users**

specify temporary tablespace for HR as parameter 3:

Enter value for 3: **temp**

specify log path as parameter 4:

Enter value for 4: **$ORACLE\_HOME/demo/schema/log**

PL/SQL procedure successfully completed. Enter value for pass: **cloud\_4U**

SQL> **Select count(\*) from employees;**

COUNT(\*)

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This completes the network and schema configuration.

1. Create a labs directory, copy the lab files (in the labs directory) from Desktop folder **oracle19c-labs/backup-recovery**.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| [oracle@host01 /]$ cd /home/oracle/  [oracle@host01 ~]$ ln -s /headless/Desktop/oracle/oracle19c-labs/tuning/labs /home/oracle/  [oracle@host01 ~]$ ls –ltr /home/oracle/  [root@host01 ~]$ chmod –R 777 /home/oracle/labs **(Run as root)** | | | | |
|  |  |  |  |  |
|  |  |  |  |  |

Install full GitHub sample schemas into each PDB

1. Download sample schemas from this location: <https://github.com/oracle/db-sample-schemas/releases/tag/v19.2>
2. Copy the downloaded file to **$ORACLE\_HOME/demo/schema/** and unzip.
3. Execute **cd $ORACLE\_HOME/demo/schema/**

su - oracle

wget https://github.com/oracle/db-sample-schemas/archive/refs/tags/v19.2.zip  
unzip v19.2.zip   
ls -ltr  
cd db-sample-schemas-19.2/  
 ls -ltr  
yes | cp -rf \* $ORACLE\_HOME/demo/schema/  
cd $ORACLE\_HOME/demo/schema

## Execute perl -p -i.bak -e 's# SUB CWD #'$(pwd)'#g' \*.sql \*/\*.sql

**\*/\*.dat**

## sqlplus / as sysdba

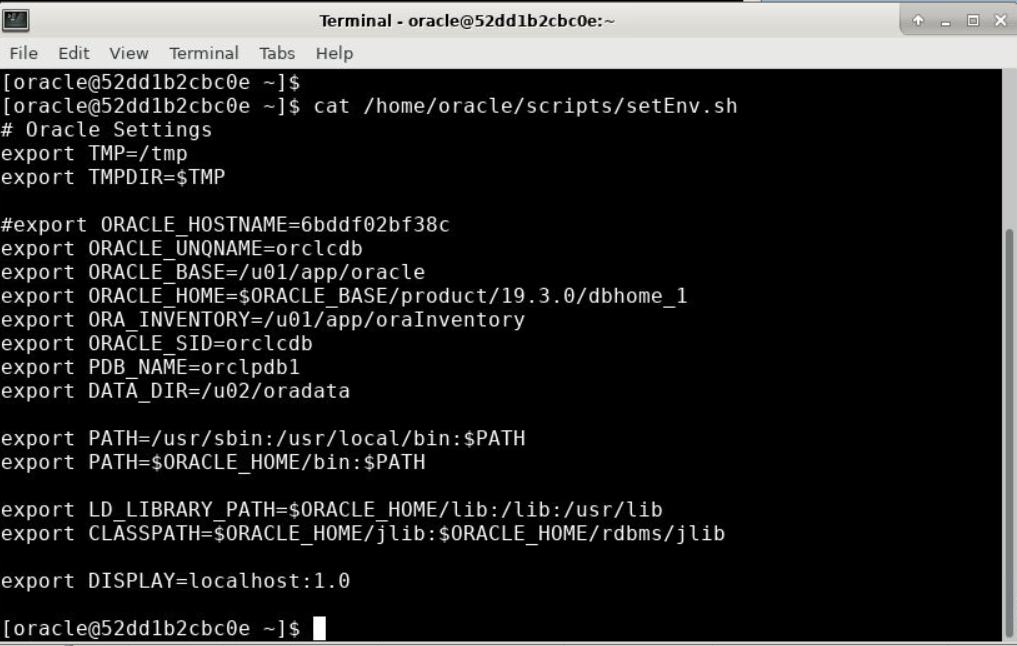
## Execute SQL> @?/demo/schema/mksample fenago fenago hr oe fenago fenago sh fenago users temp /home/oracle/setup/schema1/ localhost:1521/orclpdb

## Execute SQL> @?/demo/schema/sales\_history/sh\_main.sql sh users temp fenago $ORACLE\_HOME/demo/schema/sales\_history/ $ORACLE\_HOME/demo/schema/log/ v3 localhost:1521/orclpdb

**This completes the setup**

**Oracle User Environment**

Following script is being called in /home/oracle/.bashrc. Update variables as needed.



**Start Database After Reboot**

Edit /etc/oratab and set orcl as **Y** and running following commands:

$ su - oracle

$ lsnrctl status

$ lsnrctl start

$ dbstart $ORACLE\_HOME