

Cloning and/or Renaming an Oracle Database

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Cloning and/or Renaming Database

This document outlines the steps necessary to clone or rename an existing database to a new database. The procedures in this document will rename the SEMS database on semsdbt01 to SEMSB01. Before beginning, setup the Oracle environment for the new database. Create the new \$HOME/dbname file and all associated directories related to the new database. The following directories are needed:

- All directories referenced in the new \$HOME/dbname file.
- Location of the database datafiles (/opt/oracle/oradata/semsb01).

□ \$ORA_INSTANCE/adump, bdump, cdump, udump, create, pfile, dbdump See the document '*Oracle Database StandarSSSI -Olympic Steel*' for additional information. You will need to connect to the database as a DBA for all the SQL*Plus steps outlined below.

1) Record the location of datafiles, logfiles and controlfiles of the SEMS database.

```
$. sems (sets the environment to the SEMS database) sql> select file_name from  
dba_data_files; sql> select member from v$logfile; sql> select name from  
v$controlfile;
```

2) Create a script for the creation of a new controlfile for the new database.

```
sql> alter database backup controlfile to trace; sql> connect / as sysdba sql>  
shutdown immediate sql> exit;
```

3) Edit and rename the trace file generated from step 2. Find the latest trace file in the \$ORA_INSTANCE/udump directory. \$ cd \$ORA_INSTANCE/udump \$ ls -alt *.trc | more

Edit this trace file to look like the following. Save as semsb01_controlfile.sql in /opt/oracle/admin/semsb01/create directory.

```
STARTUP NOMOUNT  
CREATE CONTROLFILE REUSE set DATABASE "SEMSB01" RESETLOGS NOARCHIVELOG  
MAXLOGFILES 16 MAXLOGMEMBERS 3      MAXDATAFILES 100  
MAXINSTANCES 8 MAXLOGHISTORY 292  
  
LOGFILE GROUP 1 '/opt/oracle/oradata/semsb01/redo01.log' SIZE  
50M, GROUP 2 '/opt/oracle/oradata/semsb01/redo02.log' SIZE  
50M, GROUP 3 '/opt/oracle/oradata/semsb01/redo03.log' SIZE  
50M  
DATAFILE '/opt/oracle/oradata/semsb01/system01.dbf',  
'/opt/oracle/oradata/semsb01/undotbs01.dbf',  
'/opt/oracle/oradata/semsb01/sysaux01.dbf',  
'/opt/oracle/oradata/semsb01/users01.dbf',  
'/opt/oracle/oradata/semsb01/example01.dbf',  
'/opt/oracle/oradata/semsb01/idx01.dbf'  
  
CHARACTER SET WE8ISO8859P1 ; ALTER DATABASE OPEN resetlogs; ALTER  
TABLESPACE TEMP ADD TEMPFILE '/opt/oracle/oradata/semsb01/temp01.dbf'  
  
SIZE 20971520 REUSE AUTOEXTEND ON NEXT 655360 MAXSIZE 32767M;
```

4) Copy all datafiles, logfile and controlfiles from step 1 to the new location identified by the semsb01_controlfile.sql above. You should have created the necessary directories prior to step 1.

5) Set your environment to point to the new database. \$.

semsb01

6) Create a new init.ora file for the new database by copying an existing init.ora file and edit as necessary. The new \$ORA_INSTANCE/pfile/initsemsb01.ora should be:

```
semsb01.__db_cache_size=432013312 semsb01.__java_pool_size=4194304
semsb01.__large_pool_size=4194304 semsb01.__shared_pool_size=92274688
semsb01.__streams_pool_size=0
*.background_dump_dest='/opt/oracle/admin/semsb01/bdump'
*.compatible='10.2.0.1.0'
*.control_files='/opt/oracle/oradata/semsb01/control01.ctl','/opt/oracle/oradata
a /semsb01/control02.ctl','/opt/oracle/oradata/semsb01/control03.ctl'
*.core_dump_dest='/opt/oracle/admin/semsb01/cdump' *.db_block_size=8192
*.db_domain='' *.db_file_multiblock_read_count=16 *.db_name='semsb01'
*.db_recovery_file_dest='/opt/oracle/flash_recovery_area'
*.db_recovery_file_dest_size=2147483648 *.dispatchers=(PROTOCOL=TCP)
(SERVICE=semsb01XDB)' *.job_queue_processes=10 *.open_cursors=300
*.pga_aggregate_target=201326592 *.processes=150
*.remote_login_passwordfile='EXCLUSIVE'
*.sga_target=536870912 *.undo_management='AUTO' *.undo_tablespace='UNDOTBS1'
*.user_dump_dest='/opt/oracle/admin/semsb01/udump'
*.utl_file_dir='/opt/oracle/admin/semsb01/create' semsdbt01:
```

7) Create a symbolic link for the init.ora file in \$ORACLE_HOME/dbs (substitute the full pathname of \$ORA_INSTANCE). \$ cd \$ORACLE_HOME/dbs \$ ln -s \$ORA_INSTANCE/pfile/initsemsb01.ora initsemsb01.ora

8) Create a new password file in \$ORACLE_HOME/dbs \$ cd \$ORACLE_HOME/dbs \$ orapwd file=orapwsemsb01 entries=4 password=yf22lightning

9) Create a new spfile in \$ORACLE_HOME/dbs \$ cd \$ORACLE_HOME/dbs \$ sqlplus "/ as sysdba"

```
sql> create spfile from pfile;
```

```
sql> exit;
```

10) Create a new controlfile and startup the new SEMSB01 database. \$ cd \$ORA_REBUILD \$ sqlplus "/ as sysdba"

```
sql> @semsb01_controlfile.sql
```

```
sql> exit;
```

11) Make any changes necessary for the new database in the \$TNS_ADMIN/tnsnames.ora file.

12) Add an entry in the /etc/oratab file for the new database. The new database (SEMSB01) is up and running. If renaming a database, you can now remove the old database (SEMS) by deleting all directories and files associated with SEMS. If cloning a database, startup the cloning database.