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| **Common DBA Database Tasks for Oracle DB Instances**  Jukebox |  |

**Changing the Global Name of a Database**:

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Renaming the global name is supported for Oracle version 11.2.0.3.v1 and later.

Amazon RDS method:-

exec rdsadmin.rdsadmin\_util.rename\_global\_name('new\_global\_name');

Oracle method:-

alter database rename new\_global\_name;

**Setting the Default Tablespace:-**

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Amazon RDS method:-

exec rdsadmin.rdsadmin\_util.alter\_default\_tablespace('users2');

Oracle method:-

alter database default tablespace users2;

**Setting the Default Temporary Tablespace:**

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You can use the following Amazon RDS method to set the default temporary tablespace.

Amazon RDS method:-

exec rdsadmin.rdsadmin\_util.alter\_default\_temp\_tablespace('temp2');

Oracle method:-

alter database default temporary tablespace temp2;

**Checkpointing the Database:**

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You can use the following Amazon RDS method to checkpoint the database.

Amazon RDS method:-

exec rdsadmin.rdsadmin\_util.checkpoint;

Oracle method:-

alter system checkpoint;

**Common DBA Log Tasks for Oracle DB Instances:-**

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Switching Online Log Files:

You can use the following Amazon RDS method to switch log files.

Amazon RDS method:-

exec rdsadmin.rdsadmin\_util.switch\_logfile;

Oracle method:-

alter system switch logfile;

**Adding, Dropping and Resizing Online Redo Logs:-**

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You can use the following Amazon RDS method to add redo logs:

exec rdsadmin.rdsadmin\_util.add\_logfile(size\_in\_bytes);

You can use the following Amazon RDS method to drop redo logs:

exec rdsadmin.rdsadmin\_util.drop\_logfile(group#);

If you are using version 11.2.0.3.v1 or later, you can specify the size modifier. For example, the following command adds a 100 Mb log file:

exec rdsadmin.rdsadmin\_util.add\_logfile('100M');

The following example shows how you can use the Amazon RDS procedures to resize your online redo logs from their default size to 512M.

# Start with four 128m logs.

SQL>select GROUP#, BYTES, STATUS from v$log;

GROUP# BYTES STATUS

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1 134217728 INACTIVE

2 134217728 CURRENT

3 134217728 INACTIVE

4 134217728 INACTIVE

4 rows selected.

# Add four new logs with that are each 512m.

SQL>exec rdsadmin.rdsadmin\_util.add\_logfile(536870912);

PL/SQL procedure successfully completed.

SQL>exec rdsadmin.rdsadmin\_util.add\_logfile(536870912);

PL/SQL procedure successfully completed.

SQL>exec rdsadmin.rdsadmin\_util.add\_logfile(536870912);

PL/SQL procedure successfully completed.

SQL>exec rdsadmin.rdsadmin\_util.add\_logfile(536870912);

PL/SQL procedure successfully completed.

# Now query v$log to show that there are 8 logs:

SQL>select GROUP#, BYTES, STATUS from v$log;

GROUP# BYTES STATUS

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1 134217728 INACTIVE

2 134217728 CURRENT

3 134217728 INACTIVE

4 134217728 INACTIVE

5 536870912 UNUSED

6 536870912 UNUSED

7 536870912 UNUSED

8 536870912 UNUSED

8 rows selected.

# Now, drop each INACTIVE log using the group#.

SQL>exec rdsadmin.rdsadmin\_util.drop\_logfile(1);

PL/SQL procedure successfully completed.

SQL>exec rdsadmin.rdsadmin\_util.drop\_logfile(3);

PL/SQL procedure successfully completed.

SQL>exec rdsadmin.rdsadmin\_util.drop\_logfile(4);

PL/SQL procedure successfully completed.

#

SQL>select GROUP#, BYTES, STATUS from v$log;

GROUP# BYTES STATUS

---------- ---------- ----------------

2 134217728 CURRENT

5 536870912 UNUSED

6 536870912 UNUSED

7 536870912 UNUSED

8 536870912 UNUSED

8 rows selected.

# Switch logs so that group 2 is no longer current:

SQL>exec rdsadmin.rdsadmin\_util.switch\_logfile;

PL/SQL procedure successfully completed.

#

SQL>select GROUP#, BYTES, STATUS from v$log;

GROUP# BYTES STATUS

---------- ---------- ----------------

2 134217728 ACTIVE

5 536870912 CURRENT

6 536870912 UNUSED

7 536870912 UNUSED

8 536870912 UNUSED

5 rows selected.

# Issue a checkpoint to clear log 2

SQL>exec rdsadmin.rdsadmin\_util.checkpoint;

PL/SQL procedure successfully completed.

#

SQL>select GROUP#, BYTES, STATUS from v$log;

GROUP# BYTES STATUS

---------- ---------- ----------------

2 134217728 INACTIVE

5 536870912 CURRENT

6 536870912 UNUSED

7 536870912 UNUSED

8 536870912 UNUSED

5 rows selected.

# Checkpointing clears log group 2 so that its status is now INACTIVE,

# allowing us to drop the final log group 2:

SQL>exec rdsadmin.rdsadmin\_util.drop\_logfile(2);

PL/SQL procedure successfully completed.

# Now, there are four 512m logs.

# Oracle using Oracle Managed Files (OMF) automatically removes the old logfiles from the file system.

SQL>select GROUP#, BYTES, STATUS from v$log;

GROUP# BYTES STATUS

---------- ---------- ----------------

5 536870912 CURRENT

6 536870912 UNUSED

7 536870912 UNUSED

8 536870912 UNUSED

4 rows selected.

**Setting Force Logging**

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You can use the following Amazon RDS method to put the database in force logging mode.

Amazon RDS method:-

exec rdsadmin.rdsadmin\_util.force\_logging(true);

Oracle method:-

alter database force logging;

You can use the following Amazon RDS method to remove the database from FORCE LOGGING mode.

Amazon RDS method:-

exec rdsadmin.rdsadmin\_util.force\_logging(false);

Oracle method:-

alter database no force logging;

**Retaining Archived Redo Logs:-**

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Retaining archived redo logs locally on your DB instance is supported for Oracle version 11.2.0.2.v7 and later.

You can retain archived redo logs locally on your DB instance for use with products like Oracle LogMiner (DBMS\_LOGMNR). After you have retained the redo logs, you can use LogMiner to analyze the logs as explained in the Oracle documentation.

Use the Amazon RDS procedure rdsadmin.rdsadmin\_util.set\_configuration to retain archived redo logs. The following example shows how to retain 24 hours of redo logs:

exec rdsadmin.rdsadmin\_util.set\_configuration('archivelog retention hours',24);

select sum(blocks \* block\_size) bytes

from v$archived\_log

where first\_time >=sysdate-X/24 and dest\_id=1;

**Setting Supplemental Logging:-**

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You can use the following Amazon RDS method to enable supplemental logging.

Amazon RDS method

exec rdsadmin.rdsadmin\_util.alter\_supplemental\_logging('ADD');

Oracle method

alter database add supplemental log;

You can use the following Amazon RDS method to disable supplemental logging.

Amazon RDS method

exec rdsadmin.rdsadmin\_util.alter\_supplemental\_logging('DROP');

Oracle method

alter database drop supplemental log;

You can use the following Amazon RDS method to to enable supplemental logging for all fixed-length maximum size columns.

Amazon RDS method

exec rdsadmin.rdsadmin\_util.alter\_supplemental\_logging('ADD','ALL');

Oracle method

alter database add supplemental log data (ALL) columns;

You can use the following Amazon RDS method to to enable supplemental logging for primary key columns. In addition to PRIMARY KEY, you can also specify UNIQUE and FOREIGN KEY.

Amazon RDS method

exec rdsadmin.rdsadmin\_util.alter\_supplemental\_logging('ADD','PRIMARY KEY');

Oracle method

alter database add supplemental log data (PRIMARY KEY) columns;

**Common DBA Miscellaneous Tasks for Oracle DB Instances:**

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Creating New Directories in the Main Data Storage Space

Creating new directories is supported for Oracle version 11.2.0.4.v1 and later.

You can use the following Amazon RDS method to create additional directories.

Amazon RDS method

exec rdsadmin.rdsadmin\_util.create\_directory('MY\_DIR');

Oracle method

create directory MY\_DIR as '/my/os/pathname';

The create\_directory() method lets you create up to 10,000 directories, all located in your main data storage space.

You can list the directories by querying the DBA\_DIRECTORIES view. The system chooses the actual host pathname automatically:

select \* from DBA\_DIRECTORIES where directory\_name='MY\_DIR';

select directory\_path from DBA\_DIRECTORIES where directory\_name='MY\_DIR';

DIRECTORY\_PATH

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/rdsdbdata/userdirs/01

**Listing and Reading Files in a DB Instance Directory:-**

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You can use the RDSADMIN.RDS\_FILE\_UTIL.LISTDIR() Amazon RDS method to list the files in any DB instance directory (from DBA\_DIRECTORIES) that you have access to,

as shown in the following example:

select \* from table(RDSADMIN.RDS\_FILE\_UTIL.LISTDIR('DATA\_PUMP\_DIR'));

If you find a text file that you want to read, you can use the RDSADMIN.RDS\_FILE\_UTIL.READ\_TEXT\_FILE() Amazon RDS method.

The following example reads the filename.log file in the DATA\_PUMP\_DIR directory:

select \* from table(RDSADMIN.RDS\_FILE\_UTIL.READ\_TEXT\_FILE('DATA\_PUMP\_DIR','filename.log'));

To access the alert log, use the following command:--

select message\_text from alertlog;

To access the listener log, use the following command:--

select message\_text from listenerlog;

**Retaining Archived Redo Logs:**

**----------------------------------------------**

Retaining archived redo logs locally on your DB instance is supported for Oracle version 11.2.0.2.v7 and later.

Use the Amazon RDS procedure rdsadmin.rdsadmin\_util.set\_configuration to retain archived redo logs. The following example shows how to retain 24 hours of redo logs:

exec rdsadmin.rdsadmin\_util.set\_configuration('archivelog retention hours',24);

**Working with Oracle Trace Files:--**

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This section describes Amazon RDS-specific procedures to create, refresh, access, and delete trace files.

Listing Files

Two procedures are available to allow access to any file within the background\_dump\_dest. The first method refreshes a view containing a listing of all files currently in the background\_dump\_dest:

exec rdsadmin.manage\_tracefiles.refresh\_tracefile\_listing;

Once the view is refreshed, use the following view to access the results.

rdsadmin.tracefile\_listing

An alternative to the previous process (available beginning with version 11.2.0.3.v1) is to use "from table" to stream non-table data in a table-like format to list DB directory contents:

SELECT \* FROM table(rdsadmin.rds\_file\_util.listdir('BDUMP'));

The following query shows text of a log file:

SELECT text FROM table(rdsadmin.rds\_file\_util.read\_text\_file('BDUMP','alert\_xxx.log'));