: How to generate ASH report from Oracle Database?

ASH reports give a quick glance of how the database has performed between two snapshots. It mainly highlights the following areas:

- Top User Events (frequent wait events)
- Details to the wait events
- Top Queries
- Top Sessions
- Top Blocking Sessions
- Top DB Objects
- Activity Over Time

To generate ASH report, DBA needs to perform the following:

1) Login to DB Server as oracle

2) export ORACLE_SID=PrimeDG

3) cd $ORACLE_HOME/rdbms/admin

4) sqlplus / as sysdba

5) @ashrpt.sql
(or)
@$ORACLE_HOME/rdbms/admin/ashrpt.sql

6) Enter value for report_type: html
Note: Since, we want to open the file in nicely formatted way, we pick html format.

7) Enter value for begin_time: <enter>
Note: Default is last 15 minutes. If you need to change to non-default value, feel fre to change the value. You can change the value as below.

- If the requirement is from past 30 minutes then enter: -30
- if the requirement is from past 1 ½ hours then enter: -1:30
- if the requirement is from past 1 day, then enter: -24:00

8) Enter value for duration: 5
Note: I used 5 minutes as the end time from the begin time specified in Step-6.. Feel free to change the value as per your need.

9) Enter value for report_name: Moid_ASH_testing.html

To pull the report, download a tool call WinSCP. At the moment of writing this page, WinSCP 5.1.4 was the latest version and can be download from www.download.com or by by clicking here.

10) Start WinSCP and configure it connect to server 223 with “oracle” username.

11) Copy the file form UNIX (right side) to Windows (left side).

12) Double click the file to open the report in browser

For your Reference:

How to check the snapshot IDs:

```
prompt
prompt
prompt Enter the number of days to look for snapshot IDs
prompt ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
select dhdi.instance_name,
       dhdi.db_name,
       dhs.snap_id,
       to_char(dhs.begin_interval_time,'MM/DD/YYYY:HH24:MI') begin_snap_time,
       to_char(dhs.end_interval_time,'MM/DD/YYYY:HH24:MI')   end_snap_time,
       decode(dhs.startup_time,dhs.begin_interval_time,'**db restart**',null) db_bounce
  from dba_hist_snapshot dhs,
       dba_hist_database_instance dhdi
 where dhdi.dbid             = dhs.dbid
   and dhdi.instance_number  = dhs.instance_number
   and dhdi.startup_time      = dhs.startup_time
   and dhs.end_interval_time >= to_date(sysdate - &&num_days_back)
 order by db_name, instance_name, snap_id;
```

```
INSTANCE_NAME    DB_NAME      SNAP_ID BEGIN_SNAP_TIME  END_SNAP_TIME    DB_BOUNCE
---------------- --------- ---------- ---------------- ---------------- --------------
PrimeDG          PRIMEDG         2317 05/04/2014:23:00 05/05/2014:00:00
PrimeDG          PRIMEDG         2318 05/05/2014:00:00 05/05/2014:01:00
PrimeDG          PRIMEDG         2319 05/05/2014:01:00 05/05/2014:02:00
PrimeDG          PRIMEDG         2320 05/05/2014:02:00 05/05/2014:03:00
PrimeDG          PRIMEDG         2321 05/05/2014:03:00 05/05/2014:04:00
PrimeDG          PRIMEDG         2322 05/05/2014:04:00 05/05/2014:05:00
PrimeDG          PRIMEDG         2323 05/05/2014:05:00 05/05/2014:06:00
PrimeDG          PRIMEDG         2324 05/05/2014:06:00 05/05/2014:07:00
PrimeDG          PRIMEDG         2325 05/05/2014:07:00 05/05/2014:08:00
PrimeDG          PRIMEDG         2326 05/05/2014:08:00 05/05/2014:09:00
PrimeDG          PRIMEDG         2327 05/05/2014:09:00 05/05/2014:10:00
PrimeDG          PRIMEDG         2328 05/05/2014:10:00 05/05/2014:11:00
```

To check for a specific snapshot ID

```
set linesize 200
select
      dhdi.instance_name,
      dhdi.db_name,
            dhs.snap_id,
            to_char(dhs.begin_interval_time,'MM/DD/YYYY:HH24:MI') begin_snap_time,
            to_char(dhs.end_interval_time,'MM/DD/YYYY:HH24:MI')   end_snap_time,
            decode(dhs.startup_time,dhs.begin_interval_time,'**db restart**',null) db_bounce
  from
      dba_hist_snapshot dhs,
            dba_hist_database_instance dhdi
 where
      dhdi.dbid=dhs.dbid
```

```
      and dhdi.instance_number=dhs.instance_number
      and dhdi.startup_time=dhs.startup_time
      and dhs.snap_ID=&enter_snapid;
```

```
SQL> select
  2     dhdi.instance_name,
        dhdi.db_name,
        dhs.snap_id,
        to_char(dhs.begin_interval_time,'MM/DD/YYYY:HH24:MI') begin_snap_time,
        to_char(dhs.end_interval_time,'MM/DD/YYYY:HH24:MI')   end_snap_time,
        decode(dhs.startup_time,dhs.begin_interval_time,'**db restart**',null) db_boun
  from
        dba_hist_snapshot dhs,
        dba_hist_database_instance dhdi
 where
        dhdi.dbid=dhs.dbid
        and dhdi.instance_number=dhs.instance_number
        and dhdi.startup_time=dhs.startup_time
        and dhs.snap_ID=&enter_snapid;
Enter value for enter_snapid: 2328
old  15:        and dhs.snap_ID=&enter_snapid
new  15:        and dhs.snap_ID=2328

INSTANCE_NAME    DB_NAME      SNAP_ID BEGIN_SNAP_TIME  END_SNAP_TIME    DB_BOUNCE
---------------- --------- ---------- ---------------- ---------------- --------------
PrimeDG          PRIMEDG         2328 05/05/2014:10:00 05/05/2014:11:00
```

How to check the retention time (how long snapshots will stay in sysaux tablespace before they get purged)?

```
col snap_interval format a20
col retention format a20
select
        snap_interval,
        retention
from
        dba_hist_wr_control;
```

```
SNAP_INTERVAL        RETENTION
-------------------- --------------------
+00000 01:00:00.0    +00008 00:00:00.0
```

Where:

- Snap_Interval is the interval between snapshots and
- Retention is how long snapshots should remain in sysaux tablespace before they are purged out.

--Moid Muhammad