Introduction

AWR is a detailed performance analysis report generated by Oracle database. It provides comprehensive information about database performance, wait event, system resources, and much more.

AWR report comes with Oracle Database Enterprise Edition, Diagnostic Pack option. If the customer is running an Enterprise edition without Diagnostic Pack license or Standard Edition, Statspack report should be used for the same purpose.

General guidelines

To generate comprehensive AWR reports for a database right- sizing exercise, follow these guidelines:

- Generate the busiest AWR report for peak workload during short periods, such as one hour or thirty minutes.
- Generate a batch/nighttime AWR report to cover non-daily activities such as batch jobs, backups for an extended period, like 6-7 hours.
- If available, provide any additional AWR reports that may cover important characteristics of the database workload, such as end-of-month or end-of-quarter reporting periods.

Verify that AWR can be generated

The following should be done by the customer, to ensure that an AWR can be generated. Otherwise, a Statspack report should be generated.

- Log on to the database in question using an account with admin privileges
- Run 'show parameter control_management_pack_access'
- Verify that parameter **control_management_pack_access** is not set to NONE. Expected value is either 'DIAGNOSTIC' or 'DIAGNOSTIC+TUNING'.

Get busiest AWRs

To determine the peak load times the customer should do the following.

- Get the <u>busiest awr.sql</u> script.
- If this is not a multi-tenant database, do the following:
 - \circ $\;$ Log on to the database in question using an account with admin privileges.
 - Run the busiest_awr.sql script, to determine the five busiest snap ids, note the top three ones down for future reference.
- If the database in question is a multi-tenant, do the following:
 - Log on to CDB\$root using an account with admin privileges.
 - Run the busiest_awr.sql script, to determine the five busiest snap ids, note top three ones down for future reference.

Generate AWR

The following steps should be taken by the customer to generate the AWR reports.

- If this is not a multi-tenant or RAC database, do the following:
 - \circ $\;$ Log on to the database in question using an account with admin privileges.
 - Run these commands:
 - @\$ORACLE_HOME/rdbms/admin/awrrpt.sql
 - When prompted choose 'html' as the output format

- Press return to get all snapshots.
- When prompted, indicate a relevant snapshot id as previously identified (peak load, batch/nighttime/other relevant) as the begin value. Increment the snapshot id as the end value according to your AWR report coverage.
 For example, when generating the busiest AWR, increment the begin snapshot id by one as the end value.
- Accept default values for the output file.
- Specify a name to your AWR report to be generated or press return for default value.
 Note that the AWR report will be created in the current working directory.
- If the database in question is a multi-tenant, do the following:
 - Log on to CDB\$root using an account with admin privileges.
 - Run these commands
 - @\$ORACLE_HOME/rdbms/admin/awrrpt.sql
 - When prompted choose 'html' as the output format
 - Press return to get all snapshots.
 - When prompted, indicate a relevant snapshot id as previously identified (peak load, batch/nighttime/other relevant) as the begin value. Increment the snapshot id as the end value according to your AWR report coverage.
 - For example, when generating the busiest AWR, increment the begin snapshot id by one as the end value.
 - Accept default values for the output file.
 - Specify a name to your AWR report to be generated or press return for default value.
 Note that the AWR report will be created in the current working directory.
- For RAC database, depending on whether it's multi-tenancy or not, repeat the above on each node in the RAC.