

17 Using Workload Analysis

Workload Analysis helps you identify, quantify, and eliminate the reason for regression or improvements.

A common reason for database performance regression is regressed SQL statements caused by query plan change increased data volumes or increased activity in the database.

Workload Analysis performs an analysis of top queries in the database from two different time points expected to be or similar. Regressed statements can then be tuned by using SQL Tuning Advisor or SQL Plan baselines.

Accessing Workload Analysis in Enterprise Manager

You access Workload Analysis in Oracle Enterprise Manager Cloud Control using two methods.

Method 1:

1. Click the **Targets** drop-down list.
2. Select **Databases**.
3. In the **Name** column, select your database name. For example, **rep_database**.
4. From the **Performance** drop-down list, select **Workload Analysis**.
5. In the Database Login screen, select a **Named** or **New** credential, and then click **Login** to access Workload An

Method 2:

1. Click the **Targets** drop-down list.
2. Expand **Databases** and click **Database Instance**.
3. In the **Target Name** column, click the database name. For example, **rep_database**.
4. From the **Performance** drop-down list, select **Workload Analysis**.
5. In the Database Login screen, select a **Named** or **New** credential, and then click **Login** to access Workload An

Overview of Workload Analysis

Workload Analysis provides near real-time analysis of database top SQL statements to identify changed performance reason for changed performance using historical execution statistics.

A workload is a set of SQL statements that you run in the database or PDB. It can be limited to a specific application in the application using filters or it can span the complete database or PDB. These statements with statistics and explain plans are stored in a SQL Tuning Set (STS).When collecting STS from Automatic Workload Repository (AWR) it is limited to top N statements that can be modified with `dbms_workload_repository.modify_snapshot_settings(to`
`[number]).`

The Workload Analysis feature compares two SQL tuning sets from different time points in a production database compared to the SQL Performance Analyzer which only analyzes one SQL tuning set in a test database before and change. You can compare the 2 SQL tuning sets either based on a certain criteria or based on the top statements for database.

While the SQL Performance Analyzer helps to analyze performance data at the database level, Workload Analysis helps analyze performance data at the application level.

If you are using a reference workload, then before you start analyzing performance data using Workload Analysis, create a SQL tuning set for your workload.

There are two types of Workload Analysis options currently available.

- Scheduled Analysis
- One-Time Analysis

Both scheduled analysis and one-time analysis have options to view data without any time limit.

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