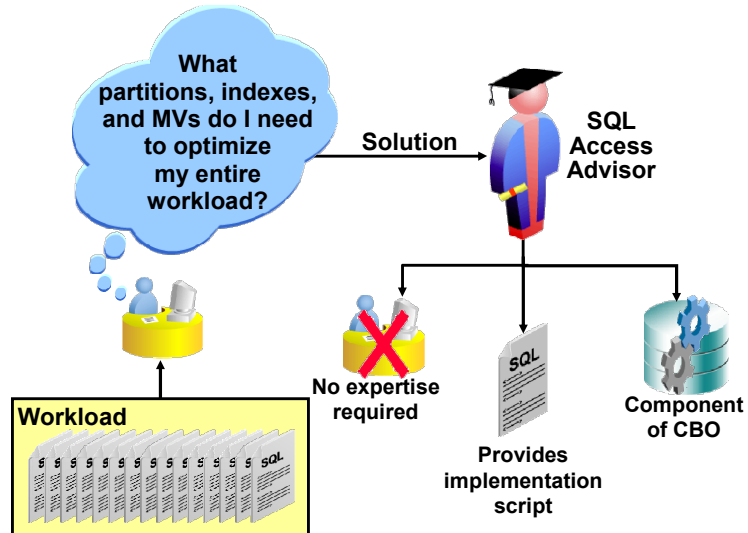


Using SQL Access Advisor

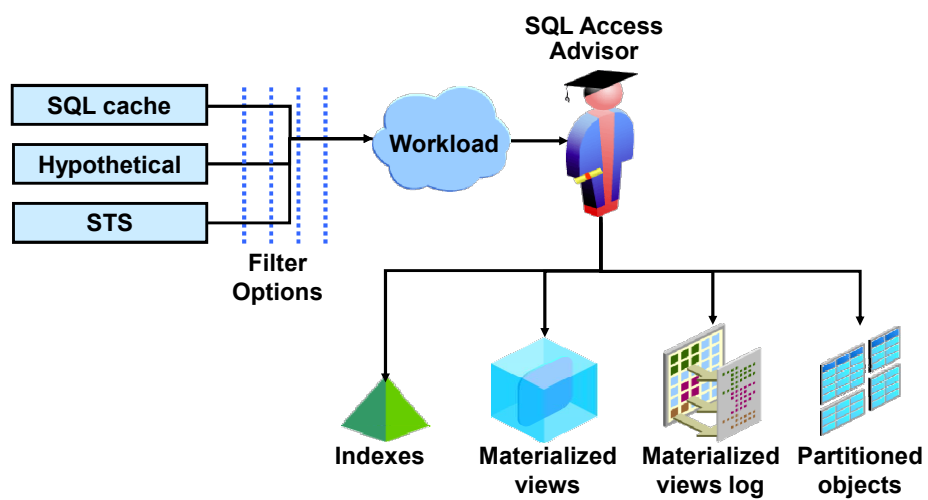
Objectives

After completing this lesson, you should be able to use SQL Access Advisor.

SQL Access Advisor: Overview



SQL Access Advisor: Usage Model



Possible Recommendations

Recommendation	Comprehensive	Limited
Add new (partitioned) index on table or materialized view.	YES	YES
Drop an unused index.	YES	NO
Modify an existing index by changing the index type.	YES	NO
Modify an existing index by adding columns at the end.	YES	YES
Add a new (partitioned) materialized view.	YES	YES
Drop an unused materialized view (log).	YES	NO
Add a new materialized view log.	YES	YES
Modify an existing materialized view log to add new columns or clauses.	YES	YES
Partition an existing unpartitioned table or index.	YES	YES

SQL Access Advisor Session: Initial Options

Related Links

- [Access](#)
- [Add Exadata Cell Targets](#)
- [Advisor Central](#)
- [Alert History](#)
- [Alert Log Contents](#)
- [Alert Metrics](#)
- [Baseline Metric Thresholds](#)
- [Blackouts](#)
- [EM SQL History](#)

Database Instance: orcl.example.com >

Advisor Central

Advisors Checkers

Advisors

- [ADDM](#)
- [Memory Advisors](#)
- [SQL Advisor](#)
- [Automatic Undo Management](#)
- [MTTR Advisor](#)
- [SQL Performance Analyzer](#)

SQL Advisors

The SQL Advisors address several important use cases having to do with SQL: identify physical structures optimizing a SQL workload, tune individual statements with heavy execution plans, identify and correct result set divergence, build test cases for failed SQL.

SQL Access Advisor

Evaluate an entire workload of SQL and recommend indexes, partitioned tables, and materialized views that will improve the collective performance of the workload.

SQL Access Advisor: Initial Options

Select a set of initial options.

- ☐ Verify use of access structures (indexes, materialized views, partitioning, etc) only
- ☒ Recommend new access structures
 - ☒ Inherit Options from a previously saved Task or Template

SQL Access Advisor Session: Initial Options

SQL Access Advisor: Initial Options

Select a set of initial options. Cancel Continue

☐ Verify use of access structures (indexes, materialized views, partitioning, etc) only

☒ Recommend new access structures

☒ Inherit Options from a previously saved Task or Template

Overview

The SQL Access Advisor evaluates SQL statements in a workload Source, and can suggest indexes, partitioning, materialized views and materialized view logs that will improve performance of the workload as a whole.

☒ **TIP** You are selecting the starting point for the wizard. All options can be changed from within the wizard.

Tasks and Templates

View: Templates Only

View Options

Select	Name	Description	Last Modified	Type
<input type="radio"/>	SQLACCESS_EMTASK	Default Enterprise Manager task template	Jul 21, 2010 4:17:14 PM UTC	Default Template
<input type="radio"/>	SQLACCESS_GENERAL	General purpose database template	Jul 21, 2010 4:17:13 PM UTC	Template
<input checked="" type="radio"/>	SQLACCESS_OLTP	OLTP database template	Jul 21, 2010 4:17:14 PM UTC	Template
<input type="radio"/>	SQLACCESS_WAREHOUSE	Data Warehouse database template	Jul 21, 2010 4:17:14 PM UTC	Template

Cancel Continue

SQL Access Advisor: Workload Source

Workload Source Recommendation Options Schedule Review


Logged in As SH

SQL Access Advisor: Workload Source

Database: **orcl** Cancel Step 1 of 4 Next

Select the source of the workload that you want to use for the analysis. The best workload is one that fully represents all the SQL statements that access the underlying tables.

☐ Current and Recent SQL Activity
SQL will be selected from the cache.

☒ Use an existing SQL Tuning Set.
SQL Tuning Set: 

☐ Create a Hypothetical Workload from the Following Schemas and Tables
The advisor can create a hypothetical workload if the tables contain dimension or primary/foreign key constraints.
Schemas and Tables:
Add

Comma-separated list

☒ **TIP** Enter a schema name to specify all the tables belonging to that schema.

Filter Options

SQL Access Advisor: Recommendation Options

Workload Source Recommendation Options Schedule Review Logged in As SH

SQL Access Advisor: Recommendation Options

Database **orcl** Cancel Back Step 2 of 4 **Next**

Recommendation Types

Select the type of structures to be recommended by the advisor. The advisor performs a global analysis of the SQL workload to help improve schema design. If no recommendation types are selected the advisor will evaluate existing structures only.

- ☒ Indexes
- ☒ Materialized Views
- ☒ Partitioning

Advisor Mode

The advisor can run in one of two modes, Limited or Comprehensive. Limited Mode is meant to return quickly after processing the statements with the highest cost, potentially ignoring statements with a cost below a certain threshold. Comprehensive Mode will perform an exhaustive analysis.

- ☐ Limited Mode
Analysis will focus on highest cost statements
- ☒ Comprehensive Mode
Analysis will be exhaustive

[Advanced Options](#)

SQL Access Advisor: Schedule and Review

Workload Source Recommendation Options Schedule Review Logged in As SH

SQL Access Advisor: Schedule

Database **orcl** Cancel Back Step 3 of 4 **Next**

Advisor Task Information

Task Name:

Task Description:

Journaling Level:

Task Expiration (days):

Total Time Limit (minutes):

Scheduling Options

Schedule Type:

Time Zone:

Repeating:

Start: ☐ Immediately ☐ Later

Date:

Time:

SQL Access Advisor: Review

Database **orcl** Cancel Show SQL Back Step 4 of 4 **Submit**

Information

No filter options have been specified. If this workload contains a large number of SQL statements, the SQL Access Advisor analysis may take a long time to complete. To specify filter options, click the link below.

[Filter Options](#)

Please review the SQL Access Advisor options and values you have selected.

Task Name: **SQLACCESS803916**

Task Description: **SQL Access Advisor**

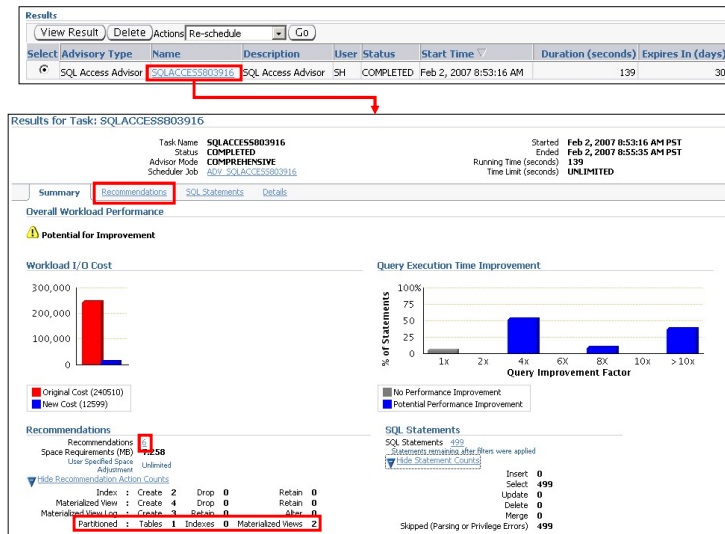
Scheduled Start Time: **Run Immediately**

Options

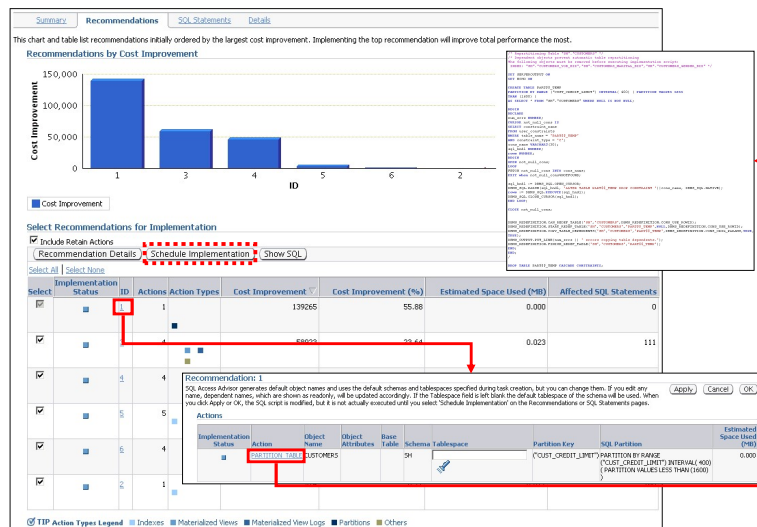
Show All Options

Modified Option	Value	Description
<input checked="" type="checkbox"/> SQL Tuning Set	SH-SQLSET_TEST_500	Import Workload from SQL Repository
<input checked="" type="checkbox"/> Workload Source	SQL Tuning Set	The source of SQL statements to be used to create the workload

SQL Access Advisor: Results



SQL Access Advisor: Results and Implementation



Quiz

Identify two available workload analysis methods.

- a. Comprehensive
- b. Complete
- c. Partial
- d. Limited

Quiz

SQL Access Advisor identifies but cannot help resolve performance problems relating to the execution of SQL statements.

- a. True
- b. False

Summary

In this lesson, you should have learned how to use SQL Access Advisor.