

Using the SQLAccess Advisor to Recommend Materialized Views and Indexes

Purpose

This module describes how you can use the SQL Access Advisor to get materialized views and index recommendations to optimize performance.

Topics

This module will discuss the following topics:

- ☒ [Overview](#)
- ☒ [Prerequisites](#)
- ☒ [Preparing the Environment](#)
- ☒ [Using the SQL Cache to Get Recommendations](#)
- ☒ [Reviewing and Implementing the Recommendations](#)

 **Place the cursor on this icon to display all screenshots. You can also place the cursor on each icon to see only the screenshot associated with it.**

Overview

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The SQLAccess Advisor provides a number of procedures which can be called to help decide which materialized views and indexes to create and drop. It makes this decision using either a hypothetical workload, which it bases on your schema, or from an actual workload which can be provided by the user, from Oracle Trace or from the contents of the SQL cache.

Workloads may also be filtered according to different criteria, such as only use queries containing these tables or queries which have a priority between this range.

Prerequisites

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Before starting this module, you should have:

1. Completed the [Configuring Linux for the Installation of Oracle Database 10g](#) lesson
2. Completed the [Installing the Oracle Database 10g on Linux](#) lesson

3. Download and unzip [saa.zip](#) into your working directory (i.e. /home/oracle/wkdir)

Preparing the Environment

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To prepare the environment for using the SQLAccess Advisor, you perform the steps below. Materialized views and indexes can be present when the advisor is run, but for the purposes of this example they are removed so that you can see what the advisor will recommend. You need to also setup the cache so that the SQLAccess Advisor can generate some recommendations. Perform the following:

1. Open a terminal window and execute the following commands to clean up your environment:

```
sqlplus system/<password>
DROP MATERIALIZED VIEW all_cust_sales_mv;

DROP MATERIALIZED VIEW costs_mv;

DROP MATERIALIZED VIEW costs_pm_mv;

DROP MATERIALIZED VIEW cust_sales_mv;

DROP MATERIALIZED VIEW some_cust_sales_mv;

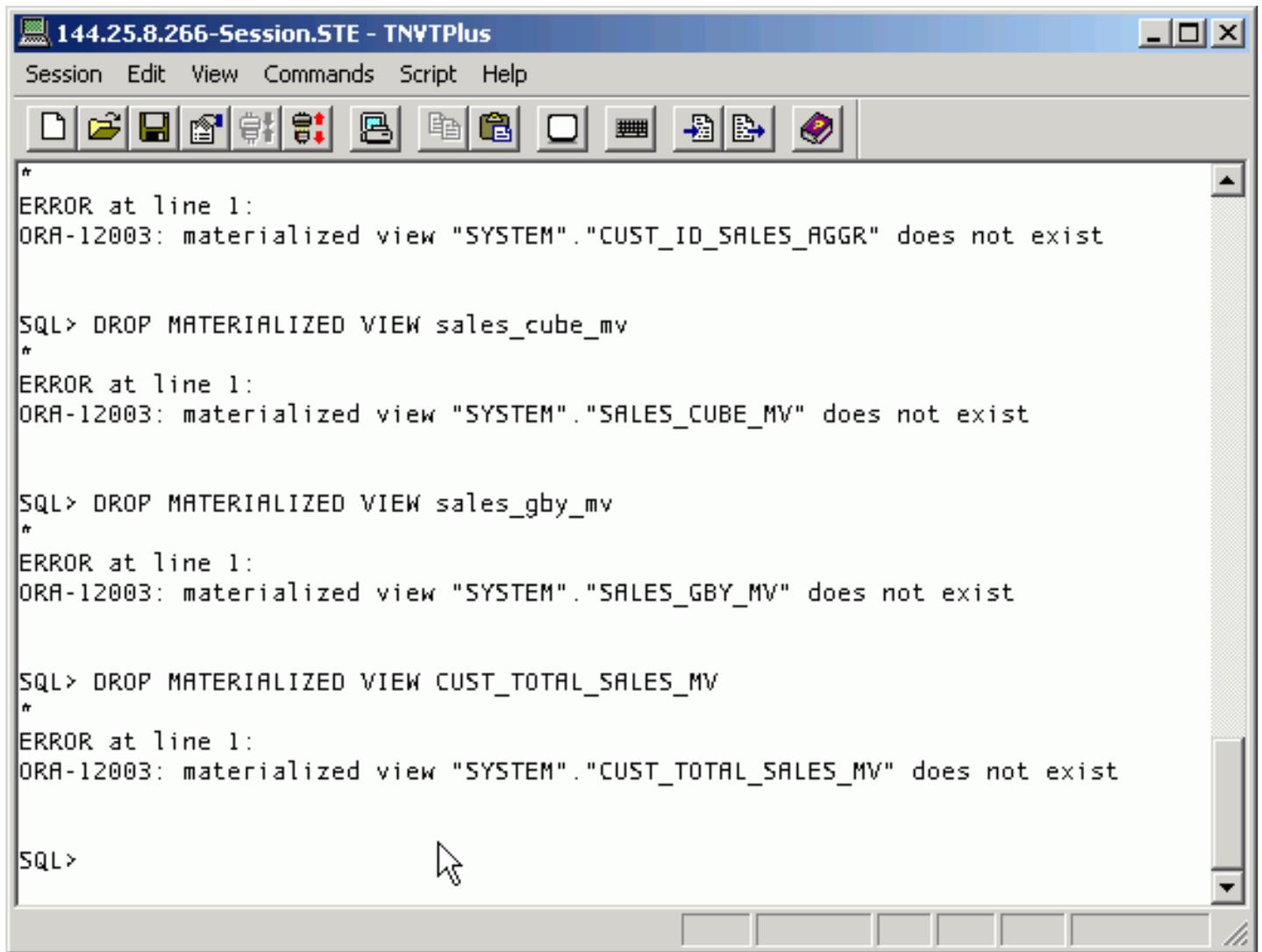
DROP MATERIALIZED VIEW cust_id_sales_aggr;

DROP MATERIALIZED VIEW sales_cube_mv;

DROP MATERIALIZED VIEW sales_gby_mv;

DROP MATERIALIZED VIEW CUST_TOTAL_SALES_MV;

DROP MATERIALIZED VIEW CUST_SALES_TIME_MV;
```



```
144.25.8.266-Session.STE - TNYTPlus
Session Edit View Commands Script Help

ERROR at line 1:
ORA-12003: materialized view "SYSTEM"."CUST_ID_SALES_AGGR" does not exist

SQL> DROP MATERIALIZED VIEW sales_cube_mv
*
ERROR at line 1:
ORA-12003: materialized view "SYSTEM"."SALES_CUBE_MV" does not exist

SQL> DROP MATERIALIZED VIEW sales_gby_mv
*
ERROR at line 1:
ORA-12003: materialized view "SYSTEM"."SALES_GBY_MV" does not exist

SQL> DROP MATERIALIZED VIEW CUST_TOTAL_SALES_MV
*
ERROR at line 1:
ORA-12003: materialized view "SYSTEM"."CUST_TOTAL_SALES_MV" does not exist

SQL>
```

5. Now you need to create the cache. Execute the following commands:

```
alter system flush shared_pool;

grant advisor to sh;

connect sh/sh;

SELECT c.cust_last_name, sum(s.amount_sold) AS dollars,

sum(s.quantity_sold) as quantity

FROM sales s , customers c, products p

WHERE c.cust_id = s.cust_id

AND s.prod_id = p.prod_id
```

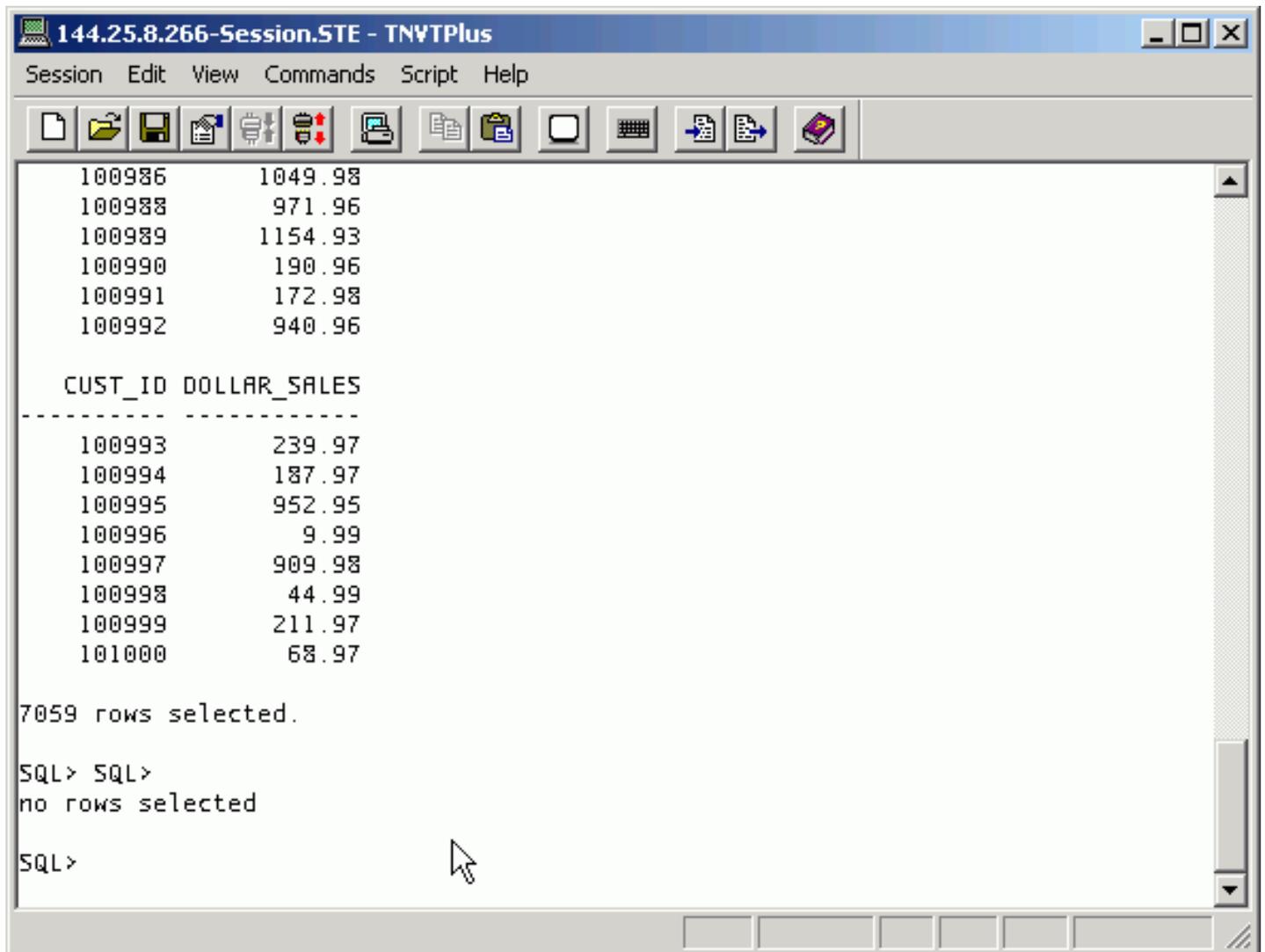
```
AND c.cust_state_province IN ('Dublin','Galway')

GROUP BY c.cust_last_name;

SELECT c.cust_id, SUM(amount_sold) AS dollar_sales

FROM sales s, customers c WHERE s.cust_id= c.cust_id GROUP BY c.cust_id;

select sum(unit_cost) from costs group by prod_id;
```

A screenshot of a SQL client window titled "144.25.8.266-Session.STE - TNVTPPlus". The window has a menu bar with "Session", "Edit", "View", "Commands", "Script", and "Help". Below the menu bar is a toolbar with various icons for file operations and execution. The main area displays the results of a query. The first part shows a list of customer IDs and their dollar sales, with a header "CUST_ID DOLLAR_SALES" and a dashed line separator. The second part shows "7059 rows selected." and the third part shows "SQL> SQL> no rows selected" and "SQL>".

CUST_ID	DOLLAR_SALES
100986	1049.98
100988	971.96
100989	1154.93
100990	190.96
100991	172.98
100992	940.96

100993	239.97
100994	187.97
100995	952.95
100996	9.99
100997	909.98
100998	44.99
100999	211.97
101000	68.97

Using the SQL Cache to Get Recommendations

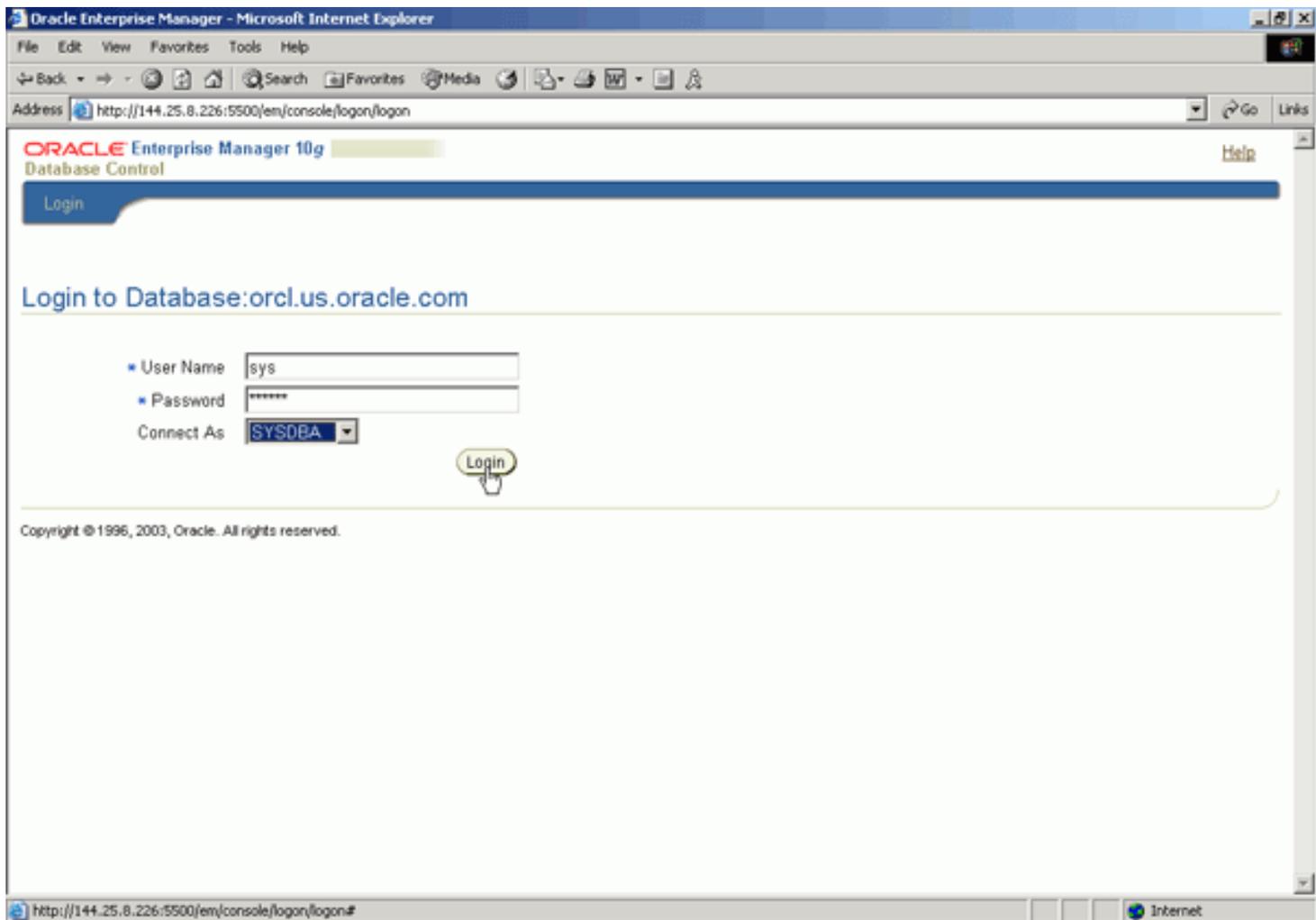
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You will use the SQL Cache you just setup to get some recommendations from the SQL Access Advisor. Perform the following:

1. Open your browser and enter the following URL:

`http://<hostname>:5500/em`

Enter `sys/<password>` as **SYSDBA** and click **Login** .



2. Scroll to the bottom of the Home page and click on **Advisor Central** under Related Links.

The screenshot displays the Oracle Enterprise Manager (SYS) console interface. The browser address bar shows the URL: http://144.25.8.226:5500/em/console/database/instance/sitemap?event=doLoad&target=ord.us.oracle.com&type=oracle_database.

At the top, there are several status indicators: Archiving (Disabled), Flashback Logging (Disabled), Segment Findings (Not Configured), Policy Violations (0), and Dump Area Used (%) (Unavailable). On the right, there are counts for Alerts: Alert Log (No ORA- errors), Critical Warnings (0), and Warnings (1).

Alerts

Severity	Category	Name	Message	Alert Triggered	Last Value	Time
Warning	User Audit	Audited User	User SYS logged on from EDCDR26P1_	Jan 9, 2004 8:10:59 AM	0	Jan 9, 2004 8:10:59 AM

Related Alerts

Severity	Target Name	Target Type	Category	Name	Message	Alert Triggered	Last Value	Time
Critical	edcdr26p1.us.oracle.com Host	Disk Activity	Disk Activity	Disk Utilization (%)	Disk Utilization for hda is 97.82%	Jan 8, 2004 11:19:52 AM	99.54	Jan 9, 2004 9:34:52 AM

Job Activity

Jobs scheduled to start no more than 7 days ago

Scheduled Executions	0	Suspended Executions	0
Running Executions	0	Problem Executions	0

Critical Patch Advisories

Warning Patch Advisories 0

Patch Advisory information may be stale. Oracle MetaLink refresh job has not run successfully in 72 hours.

Job [RefreshFromMetalink](#)

Home | [Performance](#) | [Administration](#) | [Maintenance](#)

Related Links

Advisor Central	Alert History	Alert Log Content
All Metrics	Blackouts	iSQL*Plus
Jobs	Manage Metrics	Metric Collection Errors
Monitoring Configuration	User-Defined Metrics	

Database | [Setup](#) | [Preferences](#) | [Help](#) | [Logout](#)

The browser address bar at the bottom shows: <http://144.25.8.226:5500/em/console/database/instance/advisorTasks?event=doLoad&dbPageNum=1&target=ord.us.oracle.com&type=oracle>

3. Click on the **SQL Access Advisor** link.

Oracle Enterprise Manager 10g Database Control

Database: orcl.us.oracle.com > Advisor Central

Logged in As SYS

Page Refreshed Jan 9, 2004 9:49:37 AM [Refresh](#)

Advisors

[ADDM](#) [Memory Advisor](#) [Segment Advisor](#)
[SQL Tuning Advisor](#) [MTRR Advisor](#) [Undo Management](#)
[SQL Access Advisor](#)

Advisor Tasks [Change Default Expiration](#)

Search

Select an advisory type and optionally enter a task name to filter the data that is displayed in your results set.

Advisory Type: Task Name: Advisor Runs: [Go](#)

Results

[View Result](#) [Delete](#) [Actions](#) [Re-schedule](#) [Go](#)

Select	Advisory Type	Name	Description	User	Status	Start Time	End Time	Expires In (days)
<input checked="" type="checkbox"/>	ADDM	ADDM:1042673101_1_48	ADDM auto run: snapshots [47, 48], instance 1, database id 1042673101	SYS	COMPLETED	Jan 9, 2004 9:31:03 AM	Jan 9, 2004 9:31:03 AM	30

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[About Oracle Enterprise Manager 10g Database Control](#)

Database | [Setup](#) | [Preferences](#) | [Help](#) | [Logout](#)

4. Make sure **Current and Recent SQL Activity** is checked and click on **Show Advanced Options** .

Oracle Enterprise Manager (SYS) - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://144.25.8.226:5500/em/console/database/sqlaccess/sqlAccess?event=loadBadvisoryCentralURL=/em/console/database/instance/advisorTasks%3FdbPageNum%3D1%2f

ORACLE Enterprise Manager 10g Database Control

Setup Preferences Help Logout Database

Workload Source Recommendation Options Schedule Review

SQL Access Advisor: Workload Source

Database **orcl.us.oracle.com** Logged in As **SYS** 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.

Import Workload from SQL Repository
Choose any SQL Tuning Set from the SQL Repository that you own.
SQL Tuning Set [SQL Tuning Sets](#)

User-Defined Workload; Import SQL from a Table
The table must contain at least SQL_TEXT and USERNAME columns.
Table

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.
Tables
Comma-separated list

TIP Enter "Schema.%" to specify all the tables belonging to a particular schema.

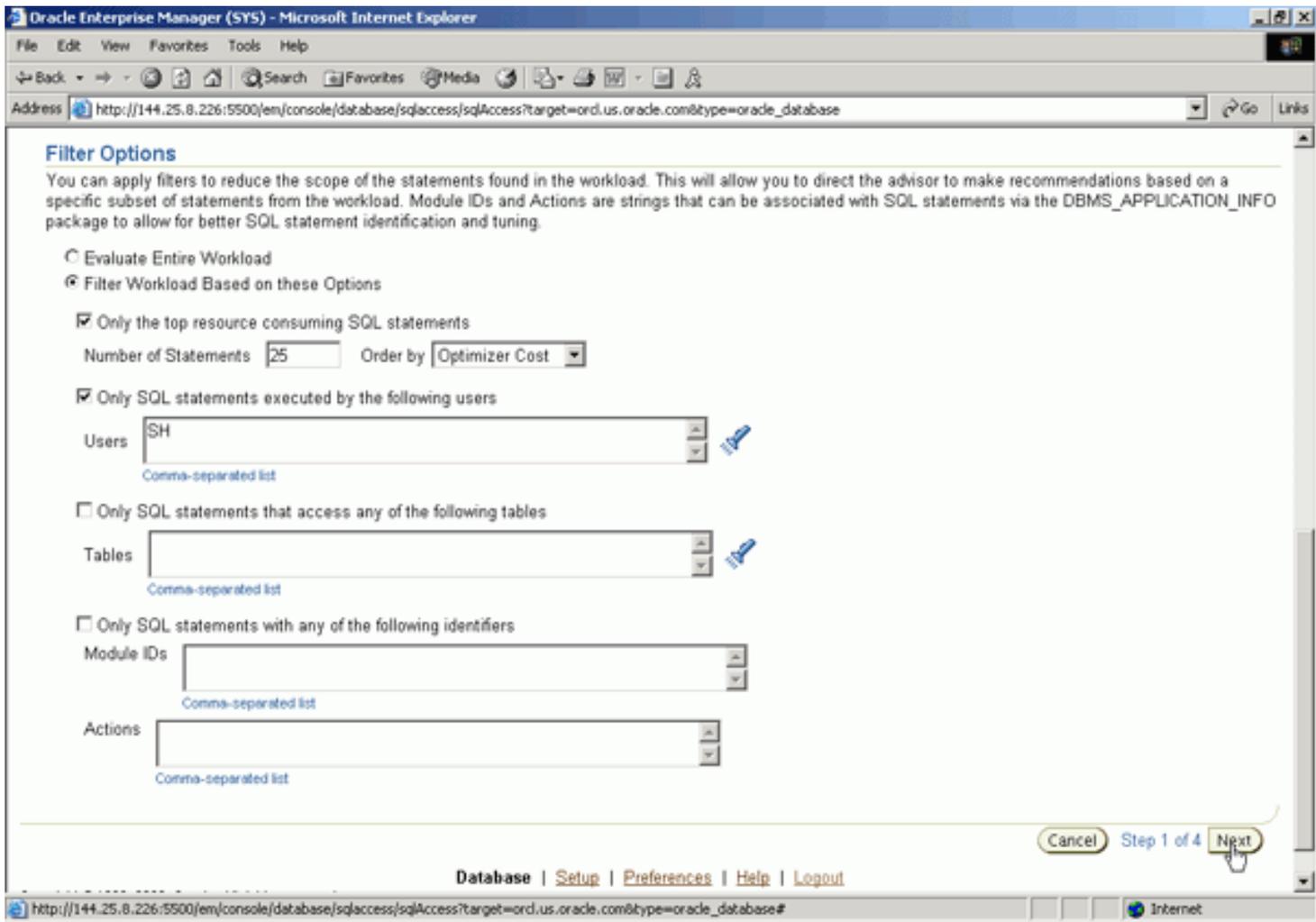
[▶ Show Advanced Options](#)

Cancel Step 1 of 4 Next

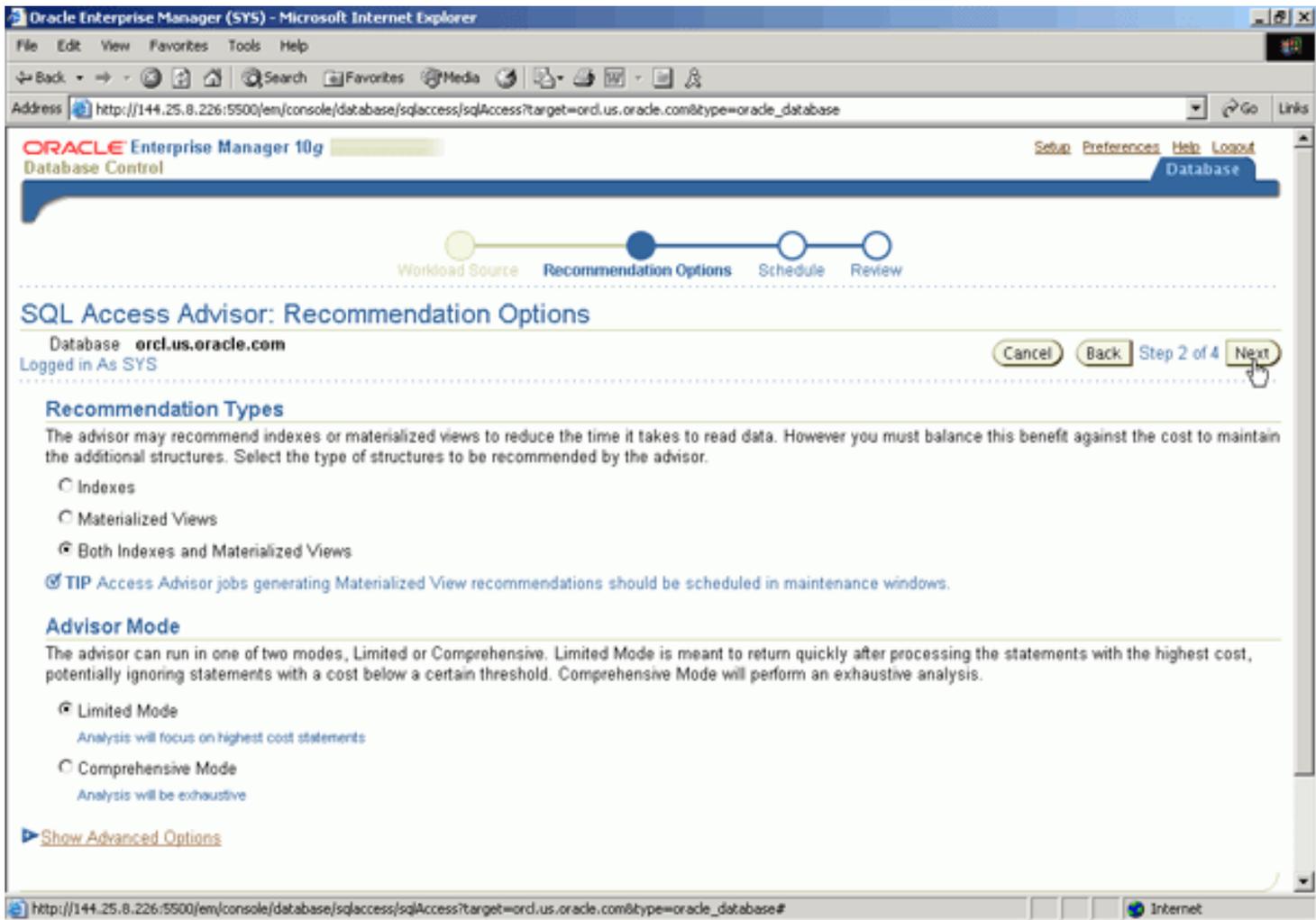
http://144.25.8.226:5500/em/console/database/sqlaccess/sqlAccess?event=loadBadvisoryCentralURL=/em/console/database/instance/ad

Internet

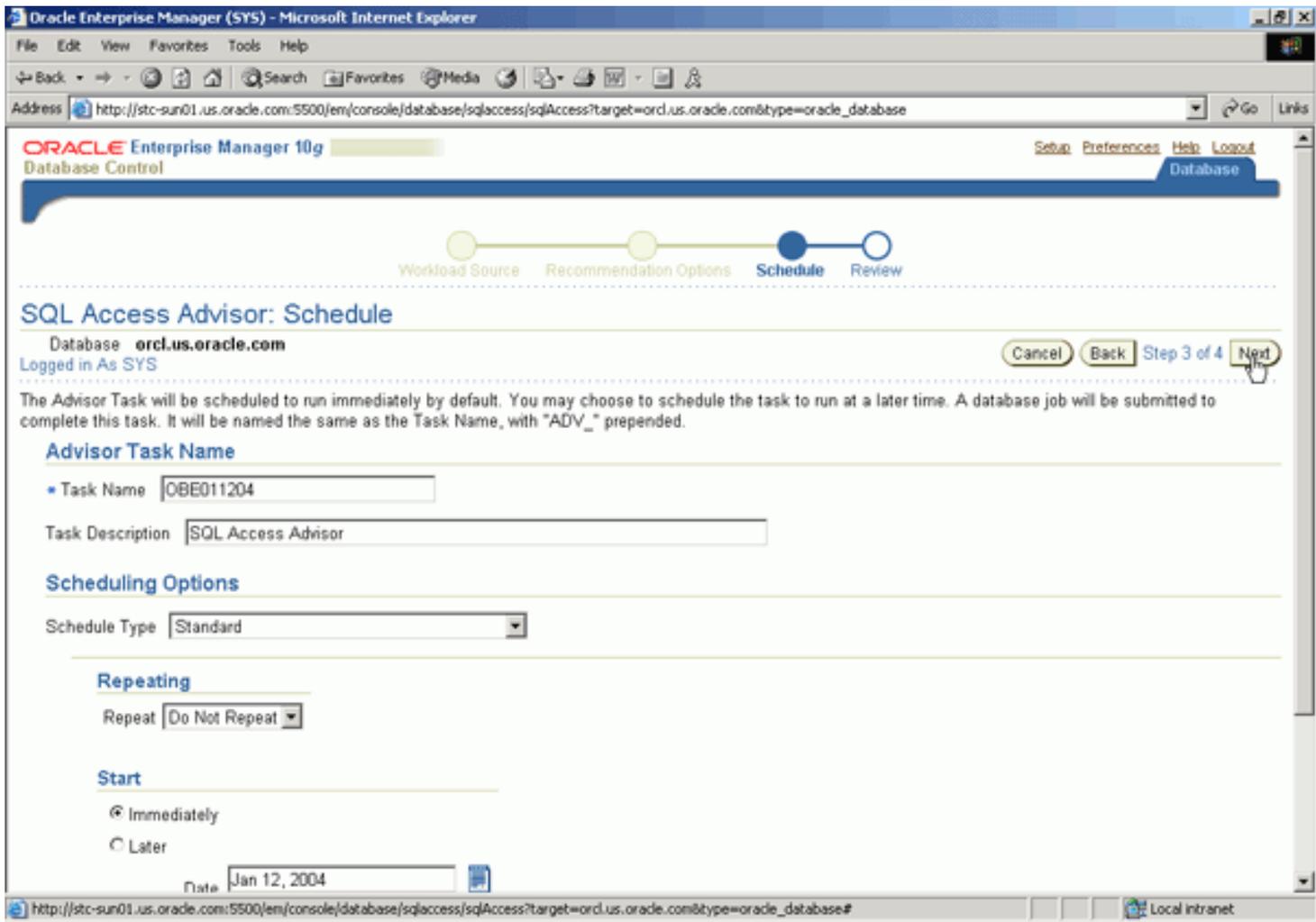
5. Scroll down. Under Filter Options, select **Filter workload based on these options** and check the filter **Only SQL statements executed by the following users** . Then enter **SH** in the Users field and click **Next** .



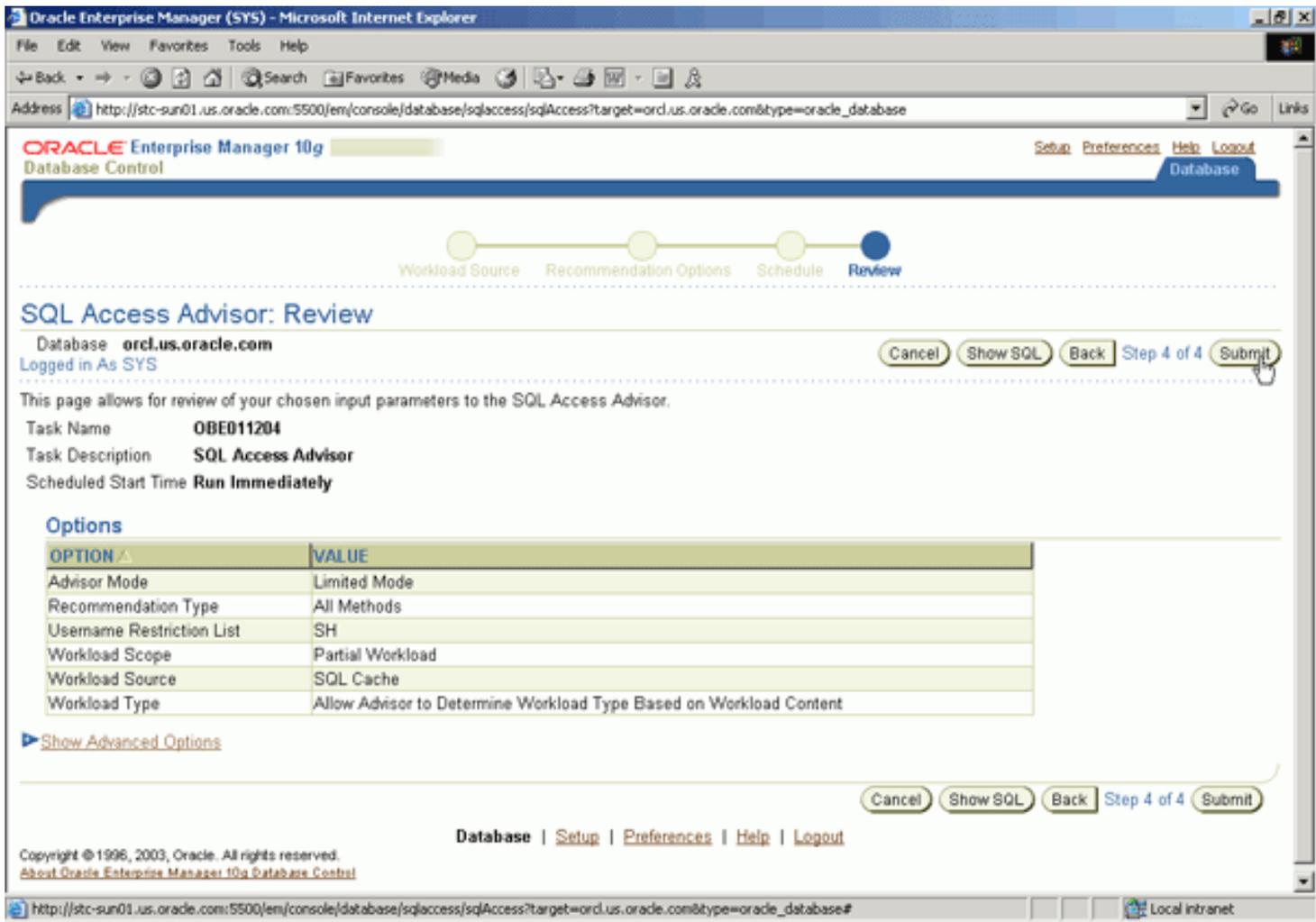
6. Click **Both Materialized Views and Indexes** and click **Next** .



7. Enter the task name **OBE<Today's Date>** , select **Standard** for the Schedule Type and click **Next** .



8. At the summary window, click **Submit** .



Reviewing and Implementing the Recommendations

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Now you can look at the results and implement them if you wish. Perform the following:

1. Make sure your job is selected and click **View Result** .

The screenshot shows the Oracle Enterprise Manager 10g interface. At the top, there is a navigation bar with 'Database Control' and 'Database' tabs. Below that, the page title is 'Advisor Central' and it shows 'Logged in As SYS'. A green confirmation banner states 'Advisor Task created successfully: OBE011204'. Below this, there are sections for 'Advisors' (listing ADDM, SQL Tuning Advisor, SQL Access Advisor, Memory Advisor, MTTR Advisor, Segment Advisor, and Undo Management) and 'Advisor Tasks'. A search section allows filtering by 'Advisory Type' (set to 'SQL Access Advisor') and 'Advisor Runs' (set to 'All'). The 'Results' section contains a table with one row of data. The 'View Result' button is highlighted over the 'Name' column of the table row.

Select	Advisory Type	Name	Description	User	Status	Start Time	End Time	Expires In (days)
<input checked="" type="checkbox"/>	SQL Access Advisor	OBE011204	SQL Access Advisor	SYS	CREATED	Jan 12, 2004 9:29:07 AM		30

2. Click on the Recommendation ID 1 to see the details of the Recommendations.

Oracle Enterprise Manager (SYS) - Microsoft Internet Explorer

Address: http://stc-sun01.us.oracle.com:5500/em/console/database/sqlaccess/sqlAccess?task_id=78&event=view_result&advisoryCentralURL=/em/console/database/instance/advisorTask

Advisor Central > SQL Access Advisor Logged in As SYS

Recommendations for Task: OBE011204

Task Name: **OBE011204**
 Status: **COMPLETED**
 Advisor Mode: **LIMITED**

Started: **Jan 12, 2004 9:29:12 AM**
 Ended: **Jan 12, 2004 9:29:25 AM**
 Running Time (seconds): **13**
 Time Limit (seconds): **UNLIMITED**

View: Recommendations

Recommendations

The following chart and table initially show the top recommendations ordered by their percentage improvement to the total cost of the whole workload. The top recommendation will have the biggest total performance improvement.

Recommendations Ordered by Workload Cost Benefit (%)

Recommendation ID	Workload Cost Benefit (%)
1	86.59
2	13.22

Select Recommendations for Implementation

[Schedule Implementation](#) [Show SQL](#)

[Select All](#) | [Select None](#)

Select	Recommendation ID	Actions	Workload Cost Benefit (%)	Estimated Space Used (MB)	Affected SQL Statements
<input checked="" type="checkbox"/>	4		86.59	0.148	1
<input checked="" type="checkbox"/>	5		13.22	0.047	1

[Show Advanced Options](#)

Address: http://stc-sun01.us.oracle.com:5500/em/console/database/sqlaccess/sqlAccess?event=rec_details&vvalue=1&pageName=/database/sqlacc

- Here you can customize the Object Name, Schema and Tablespace to implement the recommendations. Scroll down and change the Schema Name for the Create Materialized View to **SH** and click **OK**.

Oracle Enterprise Manager - SQL Access Advisor: Edit Actions - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://stc-sun01.us.oracle.com:5500/em/console/database/sqlaccess/sqlAccess?event=rec_details&value=1&pageName=/database/sqlaccess/reviewRec&target=orcl.us.oracle

ORACLE Enterprise Manager 10g Database Control Setup Preferences Help Logout Database

Advisor Central > SQL Access Advisor Logged in As SYS

Recommendation: 1

The Actions table lists the actions of the selected recommendation. You may change the values of any of the editable fields. If you edit any name, dependent names, which are shown as readonly, will be updated accordingly. If the Tablespace field is left blank the default tablespace of the schema will be used. When you click OK, the SQL script is modified, but it is not actually executed until you select 'Schedule Implementation' on the Recommendations page.

Cancel OK

Actions

Action	Object Name	Index Object Table	Schema	Tablespace
CREATE MATERIALIZED VIEW LOG		"SH"."CUSTOMERS"	"SH"	
CREATE MATERIALIZED VIEW LOG		"SH"."SALES"	"SH"	
CREATE MATERIALIZED VIEW	"MV\$\$_00070002"		"SH"	
GATHER TABLE STATISTICS	"MV\$\$_00070002"		"SYS"	

SQL Affected by Recommendation

Statement ID	Statement	Workload Cost Benefit (%)	Original Cost	New Cost	SQL Cost Benefit (%)	Execution Count
1	SELECT c.cust_id, SUM(amount_sold) AS dollar_sales FROM sales s, customers c WHERE s.cust_id= c.cust_id GROUP BY c.cust_id	86.59	5639	7	99.88	1

Cancel OK

Database | Setup | Preferences | Help | Logout

http://stc-sun01.us.oracle.com:5500/em/console/database/sqlaccess/sqlAccess?event=rec_details&value=1&pageName=/database/sqlacc Local intranet

- To see the SQL Script that will be executed when you schedule the implementation, click **Show SQL**.

Oracle Enterprise Manager (SYS) - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://stc-sun01.us.oracle.com:5500/em/console/database/sqlaccess/sqlAccess?target=orcl.us.oracle.com&type=oracle_database&dbPageNum=1

Status: **COMPLETED** Error: **JAN 12, 2004 9:29:23 AM**
 Advisor Mode: **LIMITED** Running Time (seconds): **13**
 Time Limit (seconds): **UNLIMITED**

View: Recommendations

Recommendations

The following chart and table initially show the top recommendations ordered by their percentage improvement to the total cost of the whole workload. The top recommendation will have the biggest total performance improvement.

Recommendations Ordered by Workload Cost Benefit (%)

Recommendation ID	Workload Cost Benefit (%)
1	86.59
2	13.22

Select Recommendations for Implementation

Schedule Implementation Show SQL

Select All | Select None

Select	Recommendation ID	Actions	Workload Cost Benefit (%)	Estimated Space Used (MB)	Affected SQL Statements
<input checked="" type="checkbox"/>	1	4	86.59	0.148	1
<input checked="" type="checkbox"/>	2	5	13.22	0.047	1

Show Advanced Options

Database | Setup | Preferences | Help | Logout

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[About Oracle Enterprise Manager 10a Database Control](#)

http://stc-sun01.us.oracle.com:5500/em/console/database/sqlaccess/sqlAccess?target=orcl.us.oracle.com&type=oracle_database&dbPa Local intranet

5. Scroll down to the bottom and you will see the statements to create the materialized view with the change you just made. Click **OK**.

The screenshot shows the Oracle Enterprise Manager SQL Access Advisor interface. The browser window title is "Oracle Enterprise Manager - SQL Access Advisor: Show SQL - Microsoft Internet Explorer". The address bar shows the URL: http://stc-sun01.us.oracle.com:5500/em/console/database/sqlaccess/sqlAccess?target=orcl.us.oracle.com&type=oracle_database&dbPageNum=1. The main content area displays the following SQL code:

```

INCLUDING NEW VALUES;

CREATE MATERIALIZED VIEW "SH"."MV$$_00070002"
REFRESH FAST WITH ROWID
ENABLE QUERY REWRITE
AS SELECT SH.SALES.CUST_ID C1, SUM("SH"."SALES"."AMOUNT_SOLD") M1, COUNT("SH"."SALES"."AMOUNT_SOLD")
M2, COUNT(*) M3 FROM SH.CUSTOMERS, SH.SALES WHERE SH.SALES.CUST_ID = SH.CUSTOMERS.CUST_ID
GROUP BY SH.SALES.CUST_ID;

begin
dbms_stats.gather_table_stats("SH","MV$$_00070002",NULL,dbms_stats.auto_sample_size);
end;
/

CREATE MATERIALIZED VIEW "SYS"."MV$$_00070003"
REFRESH FAST WITH ROWID
ENABLE QUERY REWRITE
AS SELECT SH.CUSTOMERS.CUST_STATE_PROVINCE C1, SH.CUSTOMERS.CUST_LAST_NAME C2, SUM
("SH"."SALES"."AMOUNT_SOLD")
M1, COUNT("SH"."SALES"."AMOUNT_SOLD") M2, SUM("SH"."SALES"."QUANTITY_SOLD")
M3, COUNT("SH"."SALES"."QUANTITY_SOLD") M4, COUNT(*) M5 FROM SH.CUSTOMERS,
SH.PRODUCTS, SH.SALES WHERE SH.SALES.CUST_ID = SH.CUSTOMERS.CUST_ID AND
SH.SALES.PROD_ID = SH.PRODUCTS.PROD_ID AND (SH.CUSTOMERS.CUST_STATE_PROVINCE
IN ('Galway', 'Dublin')) GROUP BY SH.CUSTOMERS.CUST_STATE_PROVINCE, SH.CUSTOMERS.CUST_LAST_NAME;

begin
dbms_stats.gather_table_stats("SYS","MV$$_00070003",NULL,dbms_stats.auto_sample_size);
end;
/

```

At the bottom right of the browser window, there is an "OK" button. The status bar at the bottom shows "Local intranet".

6. To implement the recommendations, click **Schedule Implementation**.

Oracle Enterprise Manager 10g
Database Control

Advisor Central > SQL Access Advisor Logged in As SYS

Recommendations for Task: OBE011204

Task Name	OBE011204	Started	Jan 12, 2004 9:29:12 AM
Status	COMPLETED	Ended	Jan 12, 2004 9:29:25 AM
Advisor Mode	LIMITED	Running Time (seconds)	13
		Time Limit (seconds)	UNLIMITED

View: Recommendations

Recommendations

The following chart and table initially show the top recommendations ordered by their percentage improvement to the total cost of the whole workload. The top recommendation will have the biggest total performance improvement.

Recommendations Ordered by Workload Cost Benefit (%)

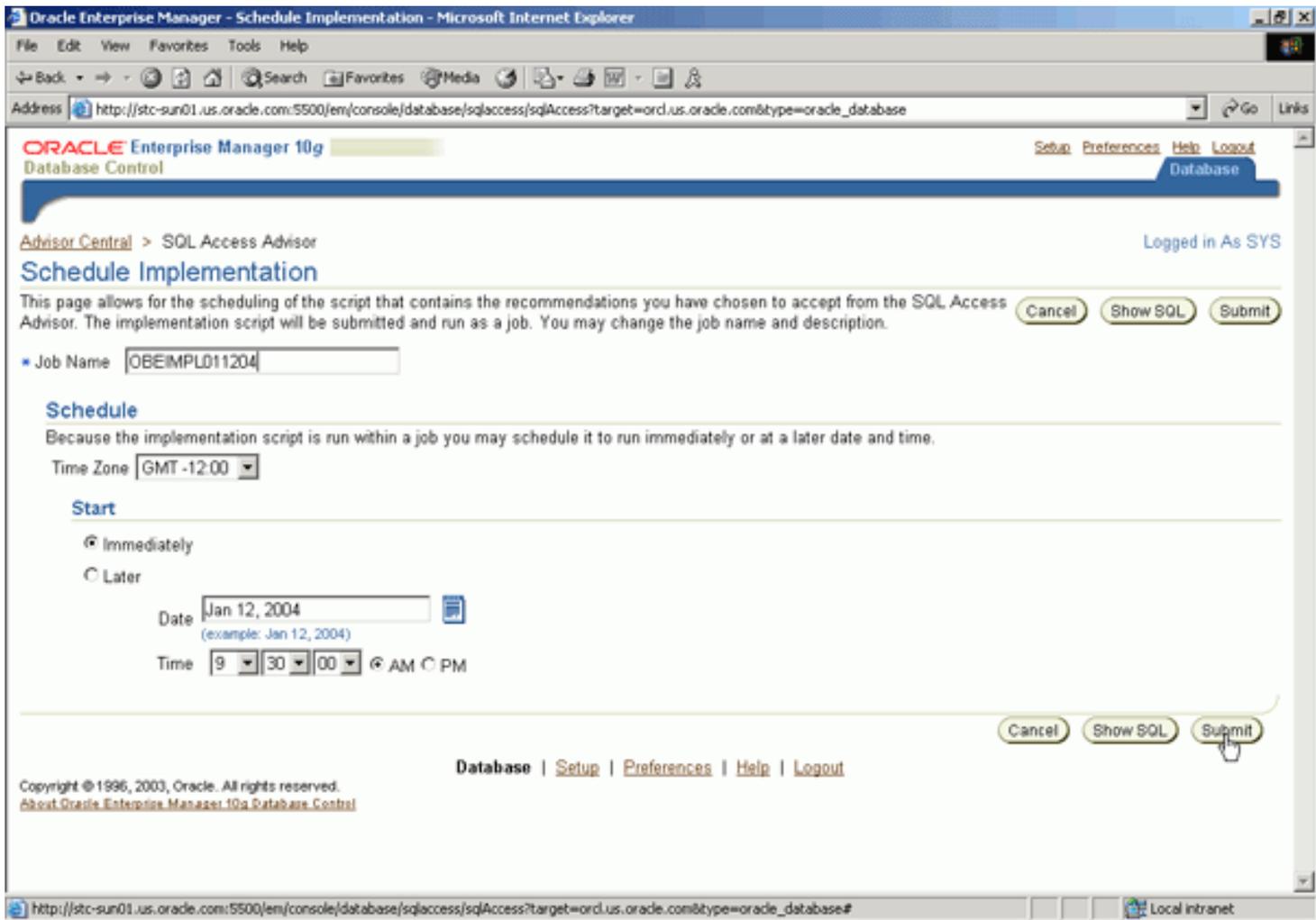
Recommendation ID	Workload Cost Benefit (%)
1	~85
2	~15

Select Recommendations for Implementation

[Select All](#) | [Select None](#) [Schedule Implementation](#) [Show SQL](#)

Select	Recommendation ID	Actions	Workload Cost Benefit (%)	Estimated Space Used (MB)	Affected SQL Statements
<input type="checkbox"/>					

7. Enter **OBEIMPL<today's date>** for the Job Name and click **Submit** .



8. Your implementation job was created and is now running. Click the **Run History** tab.

The screenshot shows the Oracle Enterprise Manager 10g interface. At the top, there is a navigation bar with 'Setup', 'Preferences', 'Help', and 'Logout' links. Below this, the page title is 'Scheduler Jobs' and it indicates 'Logged in As SYS'. A green confirmation banner states: 'Job SYS.OBEIMPL011204 has been created successfully'. Below the banner, there are tabs for 'Scheduled', 'Running', 'Disabled', and 'Run History'. The 'Run History' tab is active, showing a table with the following data:

Select	Name	Owner	Start Date	Elapsed Time (seconds)	CPU Used (seconds)	Session ID	Resource Consumer Group	Previous Runs
<input checked="" type="checkbox"/>	OBEIMPL011204	SYS	Jan 12, 2004 5:34:52 AM -12:00	4.43	0	136		0

Below the table, there are buttons for 'Edit', 'View', 'Stop', and 'Delete'. At the bottom of the page, there is a footer with copyright information and links for 'Database', 'Setup', 'Preferences', 'Help', and 'Logout'.

9. Make sure your job is selected and click **View** .

The screenshot shows the Oracle Enterprise Manager 10g interface for Scheduler Jobs. The page is titled "Scheduler Jobs" and shows a table of job run history. The table has columns for Name, Owner, Status, Completion Date, and Run Duration (minutes). The jobs listed are OBEIMPL011204, ADV_OBE011204, and two instances of PURGE_LOG. The status for all jobs is "SUCCEEDED".

Select	Name	Owner	Status	Completion Date	Run Duration (minutes)
<input checked="" type="radio"/>	OBEIMPL011204	SYS	SUCCEEDED	Jan 12, 2004 9:35:29 AM -08:00	0.61
<input type="radio"/>	ADV_OBE011204	SYS	SUCCEEDED	Jan 12, 2004 9:29:25 AM -08:00	0.28
<input type="radio"/>	PURGE_LOG	SYS	SUCCEEDED	Jan 12, 2004 7:28:31 AM -08:00	0.03
<input type="radio"/>	PURGE_LOG	SYS	SUCCEEDED	Jan 4, 2004 4:02:03 PM -08:00	0.01

Review the summary and click your **database** breadcrumb .

10.

The screenshot displays the Oracle Enterprise Manager 10g Database Control interface. The browser title is "Oracle Enterprise Manager (SYS) - View Job: SYS.OBEIMPL011204 - Microsoft Internet Explorer". The address bar shows the URL: http://stc-sun01.us.oracle.com:5500/em/console/database/instance/schr/job?pname=SYS&event=view&name=OBEIMPL011204&target=ord.us.oracle.com&type=oracle_dat. The page is titled "View Job: SYS.OBEIMPL011204" and shows the user is logged in as SYS.

The job configuration is divided into three sections:

- General:**
 - Name: OBEIMPL011204
 - Owner: SYS
 - Enabled: FALSE
 - Description:
 - Logging Level: Log job runs only (RUNS)
 - Job Class: DEFAULT_JOB_CLASS
 - Auto Drop: FALSE
 - Restartable: FALSE
- Schedule:**
 - Repeat: Do Not Repeat
 - Start Date: Jan 12, 2004 5:34:52 AM GMT -12:00
- Options:**
 - Priority: Medium
 - Schedule Limit (minutes):
 - Maximum Runs:
 - Maximum Failures:
 - Job Weight: 1
 - Instance Stickiness: TRUE

The **Command** section shows the PL/SQL Block:

```

PL/SQL DECLARE

    taskname varchar2(30);

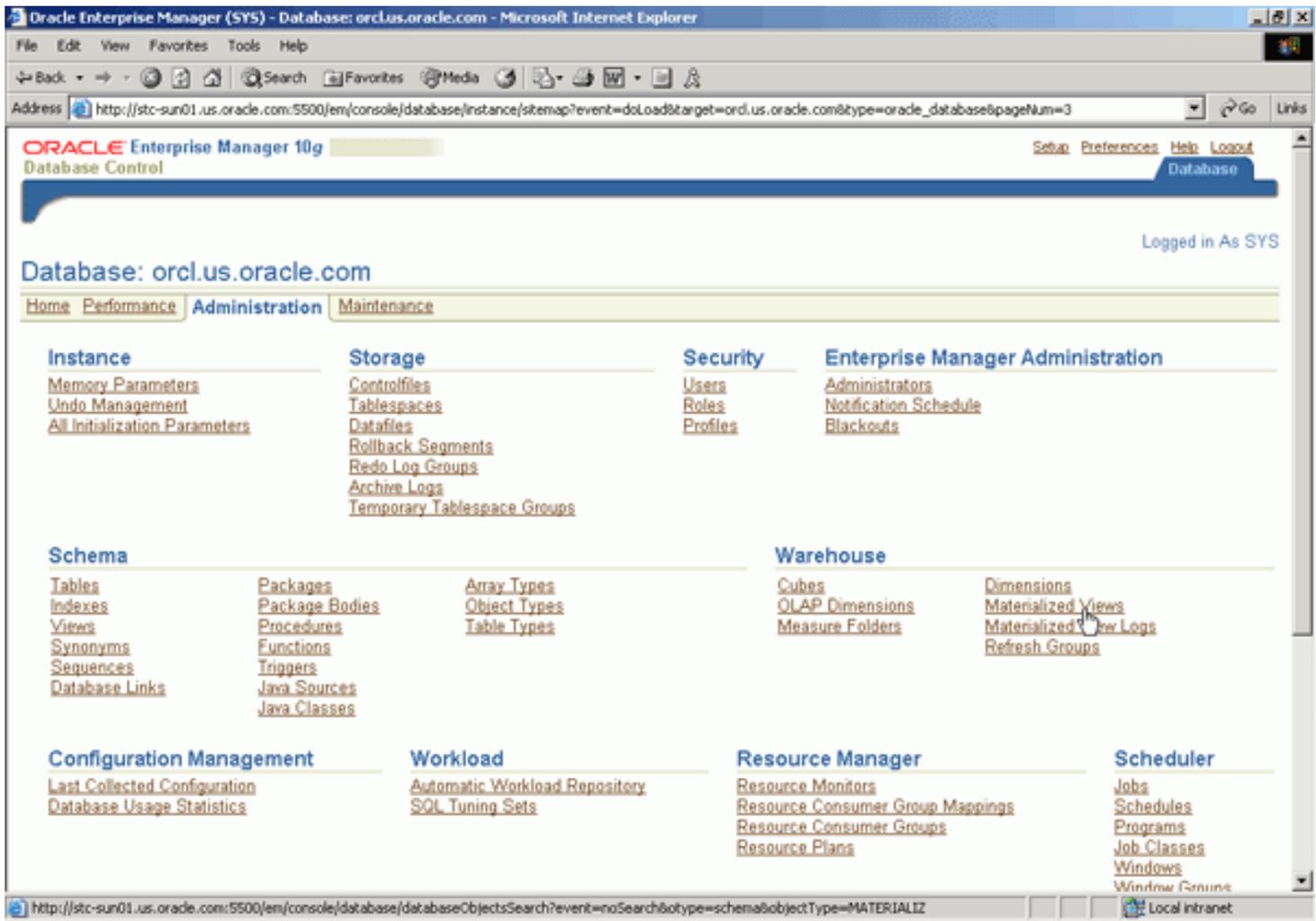
BEGIN
    taskname := 'OBE011204';
    dbms_advisor.implement_task(taskname);
END;

```

The browser status bar at the bottom shows the URL: http://stc-sun01.us.oracle.com:5500/em/console/database/instance/sitemap?event=doLoad&target=ord.us.oracle.com&type=oracle_dat and the connection is identified as "Local intranet".

Click **Materialized View** from the Administration tab.

11.



Enter **HR** in the schema field and click **Go** .

12.

Oracle Enterprise Manager (SYS) - Materialized Views - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://stc-sun01.us.oracle.com:5500/em/console/database/databaseObjectsSearch?event=noSearch&otype=schema&objectType=MATERIALIZED_VIEW&target=ord.us.oracle Go Links

ORACLE Enterprise Manager 10g Database Control [Setup](#) [Preferences](#) [Help](#) [Logout](#) Database

Database: [orcl.us.oracle.com](#) > Materialized Views Logged in As SYS

Materialized Views

Search

Select an object type and optionally enter a schema name and an object name to filter the data that is displayed in your results set.

Object Type: Schema: Object Name:

To run an exact match search or to run a case sensitive search, double quote the search criteria. The wildcard (%) symbol can still be used in a double quoted search string.

Results

Select Schema	Materialized View(Snapshot)	Master Owner	Master Table	Master Link	Type	Updatable	Can Use Log	Last Refresh
No search conducted								

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<http://stc-sun01.us.oracle.com:5500/em/console/database/databaseObjectsSearch?event=noSearch&otype=schema&objectType=MATERIALIZED> Local intranet

13.

Notice that the newly created Materialized View appears in the list. Click the **Database** breadcrumb then click the **Home** tab.

The screenshot shows the Oracle Enterprise Manager 10g Database Control interface. The page title is "Materialized Views" and the user is logged in as SYS. The search criteria are set to Object Type: Materialized View, Schema: SH, and Object Name: (empty). The search results table is as follows:

Select	Schema	Materialized View(Snapshot)	Master Owner	Master Table	Master Link	Type	Updatable	Can Use Log	Last Refresh
<input checked="" type="radio"/>	SH	CAL_MONTH_SALES_MV	SH	TIMES		FORCE	NO	YES	2004-01-12 07:34:19
<input type="radio"/>	SH	FWEEK_PSCAT_SALES_MV	SH	PRODUCTS		FORCE	NO	YES	2004-01-12 07:34:20
<input type="radio"/>	SH	MV\$\$_00070002	SH	SALES		FAST	NO	YES	2004-01-12 09:34:55

 Place the cursor on this icon to hide all screenshots.