SQL Tuning Health-Check Script (SQLHC) (Doc ID 1366133.1)

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APPLIES TO:

Oracle Database - Personal Edition - Version 10.2.0.1 and later
Oracle Database - Enterprise Edition - Version 10.2.0.1 and later
Oracle Database - Standard Edition - Version 10.2.0.1 and later
Oracle Database Products > Oracle Database Suite > Oracle Database
Information in this document applies to any platform.

PURPOSE

Download the SQL Tuning Health-Check Script

Download the SQLHC Script Here (.zip archive).

What is the SQL Tuning Health-Check Script (SQLHC)?

The SQL Tuning Health-Check Script is a tool developed by the Oracle Server Technologies Center of Expertise. The tool, also known as SQLHC, is used to check the environment in which a single SQL Statement runs, checking Cost-based Optimizer (CBO) statistics, schema object metadata, configuration parameters and other elements that may influence the performance of the one SQL being analyzed.

Licensing (SQLHC requires no license and is FREE)

As in the title of this section, SQLHC requires no license and is FREE.
Since SQLHC can use information from AWR reports if the Diagnostic or Tuning pack are installed, it asks if these packs are licensed at your site. For more details refer to the licensing section in the SQLHC FAQ:

> Document 1454160.1 FAQ: SQL Health Check (SQLHC) Frequently Asked Questions

Overview of the SQL Tuning Health-Check Script

An overview video about SQLHC is available here :

Document 1455583.1 SQL Tuning Health-Check Script (SQLHC) Video

Show More

The intention of SQLHC is to allow users to avoid SQL Performance from being affected by avoidable problems by ensuring that the environment that an individual SQL runs in is sound.

It does this while leaving "no database footprint" ensuring it can be run on all systems.

When executed for one SQL_ID, this script generates an HTML report with the results of a set of health-checks around the one SQL statement provided. You can find the SQL_ID of a statement from an AWR or ASH report or you can select it from the database using the V$SQL view. See:

Document 1627387.1 How to Determine the SQL_ID for a SQL Statement

Health-checks are performed over:

- CBO Statistics for schema objects accessed by the one SQL statement being analyzed
- CBO Parameters
- CBO System Statistics
- CBO Data Dictionary Statistics
- CBO Fixed-objects Statistics

NOTE: A webcast has been recorded entitled: "How to Improve SQL Performance with the New Health Check Tool?".
This can be found, along with many other recorded webcasts, here:

Document 740964.1 Advisor Webcast Archived Recordings

A FAQ for the SQL Healthcheck script (SQLHC) can be found here:

Document 1417774.1 FAQ: SQLHC HealthCheck Frequently Asked Questions

Additionally, we welcome any additional health-checks that you may suggest.
If any specific health-checks are needed and not covered by this script, then as long as the health-check can be produced with a SQL Command (leaving no database footprint) then these can be implemented in future versions.

Please add comments to this Document for any desired additions.

Best Practices

Pro-Active Problem Avoidance and Diagnostic Collection

Although some problems may be unforeseen, in many cases problems may be avoidable if signs are detected early enough. Additionally, if an issue does occur, it is no use collecting information about that issue after the event. SQLHC is one of the tools that support recommend for collecting such diagnostics. For information on suggested uses, other proactive preparations and diagnostics, see:

Document 1482811.1 Best Practices: Proactively Avoiding Database and Query Performance Issues
Document 1477599.1 Best Practices Around Data Collection For Performance Issues

Ask Questions, Get Help, And Share Your Experiences With This Article

Would you like to explore this topic further with other Oracle Customers, Oracle Employees, and Industry Experts?

Click here to join the discussion where you can ask questions, get help from others, and share your experiences with this specific article.
Discover discussions about other articles and helpful subjects by clicking here to access the main My Oracle Support Community page for Database Tuning.

REQUIREMENTS

Execute this script from SQL*Plus connecting as SYS, DBA or a user with access to Data Dictionary views.

NOTE: The script ADDS NO OBJECTS TO THE DATABASE. It simply reports and advises on existing objects

CONFIGURING

There is no configuration required.

INSTRUCTIONS

1. Login to the database server and set the environment used by the Database Instance
2. Download the "sqlhc.zip" archive file and extract the contents to a suitable directory/folder
3. Connect into SQL*Plus as SYS, a DBA account, or a user with access to Data Dictionary views and simply execute the

3. Connect into SQL*Plus as SYS, a DBA account, or a user with access to Data Dictionary views and simply execute the "sqlhc.sql" script. It will request to enter two parameters:

   i. Oracle Pack License (**T**uning, **D**iagnostics or **N**one) [T|D|N] (required)
   If site has both Tuning and Diagnostics licenses then specify **T** (Oracle Tuning pack includes Oracle Diagnostics)

   ii. A valid SQL_ID for the SQL to be analyzed.

For example:

```
# sqlplus / as sysdba
SQL> START sqlhc.sql T djkbyr8vkc64h
```

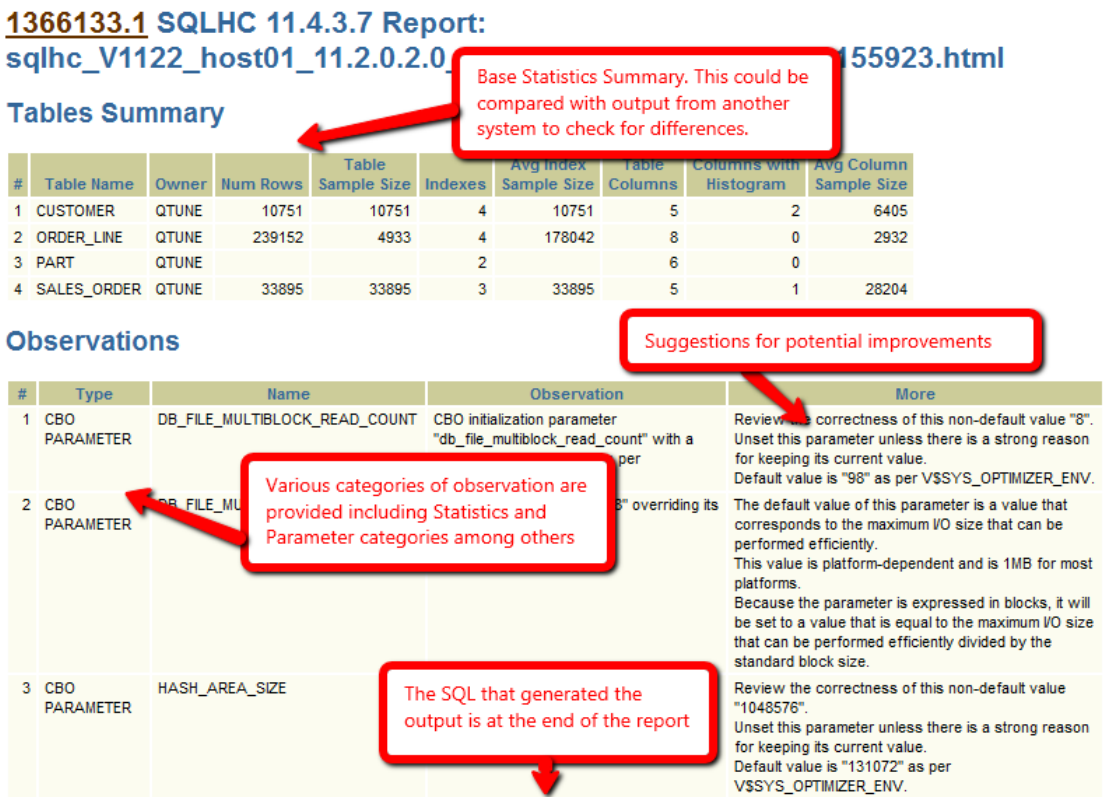
CAUTION

This sample code is provided for educational purposes only, and is not supported by Oracle Support. It has been tested internally, however, we do not guarantee that it will work for you. Ensure that you run it in your test environment before using.

SCRIPT

Download the SQLHC Script Here (.zip archive).

SAMPLE OUTPUT



Discuss SQLHC!

The window below is a live discussion of this article (not a screenshot). We encourage you to join the discussion by clicking the "Reply" link below for the entry you would like to provide feedback on. If you have questions or implementation issues with the information in the article above, please share that below.

Все места > My Oracle Support Community > Oracle Database (MOSC) > SQL Performance (MOSC) > Обсуждения

27 Ответы Последний ответ: 24.11.2014 3:21 автор: **975836**

Steve Dixon-Oracle 04.12.2013 11:40

Level 5

Discussion about the SQL Health-Check Script (SQLHC Notes:1366133.1 and 1455583.1

This thread is for the discussion about the SQL Health-Check Script (SQLHC) as Featured in:
Note:1366133.1 SQL Tuning Health-Check Script (SQLHC)

and in the overview video in:

Note:1455583.1 SQL Tuning Health-Check Script (SQLHC) Video

Please post your comments about this article, questions and observations about SQLHC or just ways you hav
community users.
Thanks!
https://support.oracle.com/CSP/main/article?cmd=show&type=NOT&id=1455583.1

51079 Просмотров **Метки:**

Средний рейтинг пользователей | **Моя оценка:**

REFERENCES

NOTE:1460440.1 - Script PXHCDR.SQL: Parallel Execution Health-Checks and Diagnostics Reports
NOTE:1477599.1 - Best Practices: Proactive Data Collection for Performance Issues
NOTE:224270.1 - TRCANLZR (TRCA): SQL_TRACE/Event 10046 Trace File Analyzer - Tool for Interpreting Raw SQL Traces
NOTE:1627387.1 - How to Determine the SQL_ID for a SQL Statement
NOTE:1455583.1 - SQL Tuning Health-Check Script (SQLHC) Video
NOTE:215187.1 - SQLT Diagnostic Tool
NOTE:1417774.1 - FAQ: SQL Health Check (SQLHC) Frequently Asked Questions
NOTE:243755.1 - Script to produce HTML report with top consumers out of PL/SQL Profiler DBMS_PROFILER data
NOTE:1482811.1 - Best Practices: Proactively Avoiding Database and Query Performance Issues

Didn't find what you are looking for? Ask in Community...

Attachments

- SQLHC PPT Presentation (1.32 MB)
- Annotated SQLHC example (89.48 KB)
- SQLHC Tool (80.38 KB)
- SQLHC Output Sample (1.2 MB)

Related

Products

- Oracle Database Products > Oracle Database Suite > Oracle Database > Oracle Database - Personal Edition > RDBMS > Generic SQL Performance, SQL Execution, Query Optimizer
- Oracle Database Products > Oracle Database Suite > Oracle Database > Oracle Database - Enterprise Edition > RDBMS > Generic SQL Performance, SQL Execution, Query Optimizer
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- Oracle Database Products > Oracle Database Suite > Oracle Database

Keywords

CBO; CHECK; INSTALL & CONFIGURE; PERFORMANCE; SCRIPT; SQL TUNING; SQLHC

Translations

- English Source
- Chinese 简体中文
- Japanese 日本語

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