

# PERFORMANCE TUNING WITH TUTOOL

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### TuTool today

- Eclipse based application.
- Working versions for Windows and for UNIX.
- More than 900 scripts for Performance Tuning.
- Automatic adaptation to connected database version. User deals only with relevant scripts.
- TuTool is able to tune Oracle databases from 7.3 onwards.
- License check for diagnostic and tuning pack beginning with 10g.
- Switch between complete version and essential scripts.
- Associative user interface is implemented. User is able to select a script for the next step from a handful of scripts associated with the current one.
- RAC functionality
- Tool doesn't have any repository of its own. It uses awr and statspack repository instead.
- Graphical features based on
  - automatic workload repository (awr)
  - statspack repository
  - active sessions history (ash)
- TuTool in internet: www.tutool.de



## Advantages of TuTool

- Very wide functionality.
- Usage without any installation on client's hardware.
- Adaptation to connected database version. Only scripts relevant to the connected Oracle version are shown in the table of scripts.
- Customers can use their own scripts with TuTool if they are adjusted to this tool. This
  adjustment is very simple.
- Built-in check of diagnostic and tuning pack licenses from 10.1 onwards.
- Concept of prescripts provides a great flexibility for SQL tuning.
- Recording of script results. It is especially important for SQL tuning, later analysis and documentation purposes.
- Extraction of bind values from memory, awr, sql monitoring reports (also from historical) reduces significantly a manual effort during sql tuning.
- Associative user interface simplifies the usage of TuTool tremendously.



#### Technical requirements

- Oracle's client installation (the best the complete version). If you install instant client then with SQL\*Plus (must) and tkprof (optional).
- Databases are to be accessed via SQL\*Net.
- The tool for Windows can be supplied with and without portable JAVA version. In the second case (as well as for UNIX) JAVA should be installed on the computer.
- Currently JAVA version 1.8 1.11 is needed.
- Because of using a browser, the tool requires browser installation WebKitGTK and the appropriate LD\_LIBRARY\_PATH setting for UNIX platforms.
- For UNIX one has to configure a SQL\*Plus editor with an option for waiting the edit session to finish. For ex. "gvim -f".



#### Preparing a database user for the tool

#### Back to Directory of Topics

Working under normal (not SYS) Account					
Start	Comment	Description	SQL	Result	Protocol
create_tool_X_views	generates a create script for the X_\$ views used in this tool, input parameter: user to grant select privileges on the X_\$ views (default: public), container (for multitenant) - CDB, PDB, NONE, (default: NONE)	Show Desc	Show SQL	Show Result	<u>On/Off</u>
grant_tool_sys_tables	generates a script to grant the select privileges on the SYS tables used in this tool, input parameter: user to grant select privileges on the SYS tables (default: public)	Show Desc	Show SQL	Show Result	On/Off
prepare_not_sys_user12	prepares not sys user for working with this tool, input parameter: user name (default: user XYZ), container - CDB, PDB, NONE, (default: NONE)		Show SQL	Show Result	On/Off

- You can work with the tool as user SYS or prepare a special database user for this purpose.
- For preparing you have to create a new database user and to execute in tool as DBA user the appropriate script from the topic "Working under normal (not SYS) Account" for this user.
- This script produces commands that should be executed by user SYS. After that you can configure a database connection for your user.

#### Preparing a database user for the tool

- For preparing a user in multitenant database one should do the following:
  - Create the common user in cdb\$root.
  - Generate commands for privileges to this user in cdb\$root and in pdb.
  - Grant privileges to this user in cdb\$root and in each pdb one needs to tune.