

ORACLE tutorial

Lesson 3 (DBA Checklist II)

Defining a Daily Checklist

A daily checklist should quickly determine the current state and stability of the system. Consider the following tasks for inclusion in a daily checklist:

- Make sure the database is available; log into the applications and perform basic functions.
- Make sure the database backup was successful.
- Make sure database archiving is functioning properly and the archive log files are being moved to tape properly.
- Review the *alert.log* file of the Oracle database instance to determine if there are any errors indicating problems with the database. It's a good idea to review the output of these critical log files more than once a day. You may find it useful to direct the output to these log files to your screen, so you can monitor the output on a regular basis.
- Make sure resources on the system are sufficient to provide acceptable performance. This may involve running processes to review contention for CPU, memory, network, or disk resources.
- Look for segments in the database that are running out of resources (e.g., extents) or growing at an excessive rate. You may need to adjust the storage parameters of these segments. Capture the output from these daily reports and store this for future reference. The output from these reports will assist in determining future space and performance requirements.

Defining a Weekly Checklist

The weekly checklist should focus primarily on database maintenance. You may want to consider the following ideas for inclusion in the weekly checklist:

- Clean out or rebuild interim tables.
- Purge log files.
- Adjust storage parameters on database objects.
- Review user settings to ensure proper defaults and grants.

Defining a Semi-Monthly Checklist

The semi-monthly checklist should focus on maintenance and tuning.

These checkpoints may need to be run on a weekly, or even a bi-weekly basis if the system is relatively new or is undergoing significant tuning. You may want to consider the following tasks for inclusion in the semimonthly checklist:

- Review changes in segment growth when compared to previous reports to identify segments with a harmful growth rate.
- Review common Oracle tuning points such as cache hit ratio, latch contention, and other points dealing with memory management; compare with past reports to identify harmful trends or determine impact of recent tuning adjustments.
- Review database file activity; compare to past output to identify trends that could lead to possible contention.
- Include checkpoints to investigate fragmentation (e.g., row chaining).
- Compare reports on CPU, memory, network and disk utilization both from Oracle and the operating system (work with the system administrator) to identify trends that could lead to contention for any one of these resources in the near future.
- Make the adjustment necessary to avoid the contention for system resources. This may include scheduled down time or request for additional resources.

Developing checklists with sound management techniques will provide a road-map for experienced or inexperienced DBAs alike to identify and resolve problems before they reach the crisis stage.

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Next DBA Checklist - Part IV



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