

Vasont Oracle Optimizations

The following only serve as recommendations for optimizing an Oracle Database Instance for use with Vasont. Since there are many factors to consider when installing and setting up Oracle, these recommendations may or may not be the optimal settings for your particular environment.

- Execute the analyze script, within the SQL folder of your Vasont Installer, against your Vasont schema. For normal day-to-day usage, run the analyze script on a weekly basis. During periods of high usage (e.g., loading large amounts of content in a short time period), you may opt to run the analyze script more frequently. Ensure that you execute the appropriate analyze script based upon your version of Oracle.
- Adjust the Initialization Parameters from within Oracle. The following Initialization Parameters are recommended for use with the Vasont schema:

For Oracle Servers that have at least 2 GB of memory available:

Initialization Parameter	Minimum	Recommended	Notes
db_block_size	8192 (bytes)	8192 (bytes)	<i>Can only be set during database creation</i>
db_cache_size	50 (MB)	240 (MB), or higher	Part of SGA
db_file_multiblock_read_count	16	32	
java_pool_size	48 (MB)	48 (MB) for Dedicated Server mode, or 64 (MB) for Shared Server mode	
large_pool_size	4 (MB)	4 (MB)	Part of SGA
pga_aggregate_target	48 (MB)	800 (MB), or higher	PGA
shared_pool	80 (MB)	120 (MB), or higher	Part of SGA

For Oracle Servers that have less than 2 GB of memory available:

Initialization Parameter	Minimum	Recommended	Notes
db_block_size	8192 (bytes)	8192 (bytes)	<i>Can only be set during database creation</i>
db_cache_size	50 (MB)	120 (MB), or higher	Part of SGA
db_file_multiblock_read_count	16	32	
java_pool_size	48 (MB)	48 (MB)	
large_pool_size	4 (MB)	4 (MB)	Part of SGA
pga_aggregate_target	48 (MB)	360 (MB), or higher	PGA
shared_pool	80 (MB)	120 (MB), or higher	Part of SGA

IMPORTANT: The sum of the Oracle SGA, Oracle PGA and typical Operating System memory usage should not exceed the physical memory available – Physical memory usage should be maximized, however, by adjusting the SGA and/or PGA parameters. Vasont will benefit most from larger **db_cache_size**, **pga_aggregate_target** and **shared_pool** values (in order of priority).

The Initialization Parameters can be adjusted through the *Enterprise Manager 10g Console* under the *Administration* tab, and clicking on the *All Initialization Parameters* link under the *Database Configuration* section. To permanently change Initialization Parameter values, be sure the *SPFile* radio button is selected – If the *Running* radio button is selected when making changes, the changes will only affect the currently running instance and the parameters will revert to their original values when the Database Instance is restarted.

- If your Operating System supports it, and there is adequate physical memory available, consider using “Large Page Support” to lock the SGA into physical memory. This ensures that the Oracle SGA will not be swapped to virtual memory (a disk-based memory extension) during run-time. Refer to the Oracle Documentation for your specific platform (e.g., the Installation Guide and/or Platform Guide for your specific Operating System). If “Large Page Support” is not available for your platform, check to see if the **lock_sga** Initialization Parameter is supported – This Parameter can also be used to lock the SGA into physical memory in the event the OS does not include “Large Page Support”.
- Ensure that both the *TEMP* and *UNDOTBS1* Tablespace sizes are set at the following minimum values. For Oracle, adjust the following Tablespace sizes:
 - *TEMP* **400 MB**
 - *UNDOTBS1* **400 MB**

These settings can be adjusted through the *Enterprise Manager 10g Console* under the *Administration* tab and then clicking on the *Tablespaces* link under the *Storage* section.

If there is sufficient disk capacity, also ensure that the *TEMP* and *UNDOTBS1* Tablespace datafiles are set to “autoextend”. This will allow these Tablespaces to grow to their optimal (and a stable) run-time size.