

Lawson Payroll Performance Tune-Up Case Study

Project: Increase Payroll Performance after Lawson Environment Upgrade

Industry: Healthcare

Business Challenges:

After a major environment upgrade, this healthcare organization was faced with payroll performance issues which included long run times on large payroll jobs and slow database performance.

High Level Business Solution:

Created and facilitated a list of configuration changes that ultimately decreased large payroll job runtimes by 75% and increased ORACLE database performance overall.

Business/Technical Solution Details:

- Configuration files were put into place based on stats collected and processing times on the largest ORACLE files.
- Program messaging edited to induce faster processing times by bypassing work file processing and using straight database processing based on the number of historical records and number of benefits plans per employee.
- Large database table indexes were rebuilt by increasing initial number of records and number records to increment by to 1000. ORACLE timestats collected to verify.
- Buffer size variable changed to allow more records buffered before program commit.
- Examples of runtime changes are: PR140 is 45 minutes from 2 hrs and 45 mins: TA170 is 30 minutes from 3 hrs and 47 mins; PR160 is 1 hr from 2hrs and 30 mins.
- ORACLE sga_target_size reconfigured to 1250 MB to reset sga_max_size / sga_target_size free memory, db_cache_size, shared_pool_size, large_pool_size, and java_pool_size.
- Set WORKAREA_SIZE_POLICY=AUTO & PGA_AGGREGATE_TARGET to the maximum amount of PGA memory.
- Additional 8 GB of physical memory added to database server.
- Reviewed/changed server I/O waits file system configuration and remounted.
- Reviewed/modified payroll workflow by scheduling nightly recurring jobs to increase processing time and reduce workload.
- Automated job runs and increased UNIX printer font to better facilitate report output to distribution groups.