

TEMENOS T24 Benchmark Results on an HP/Oracle Platform

In May 2004, HP, Oracle and TEMENOS collaborated on a benchmarking exercise to demonstrate to the banking community an ability to handle the present and future core banking requirements of large banks. The TEMENOS T24 application was supported by best of breed infrastructure components from HP (Itanium based HP Integrity servers) and Oracle.

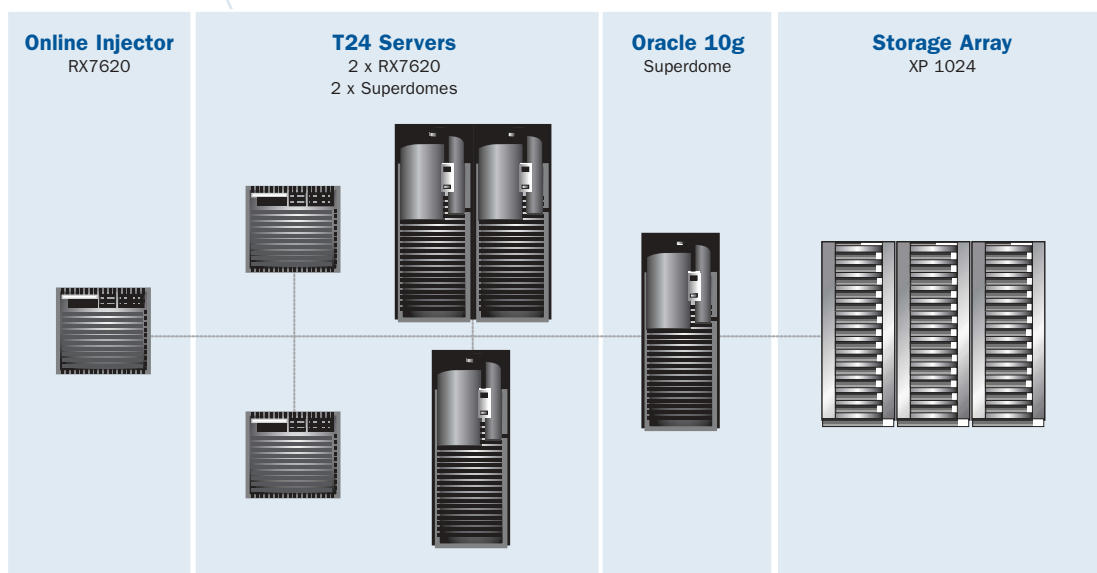
Objectives

- To demonstrate the ability of TEMENOS T24 running on HP Integrity Superdomes using Oracle 10g (Database and Application Server) to support the demands of large banking institutions in the world from a centralized processing facility.
- To demonstrate the scalability of TEMENOS T24 running on HP Integrity Superdomes across multiple application servers

The benchmarking exercise sought to establish proof points for two key requirements from the core banking systems of the banks – Performance and Scalability. Two aspects of performance are relevant – the capability to process on-line transactions and the close of business capability to run the end of day batch processes.

Benchmark Configuration

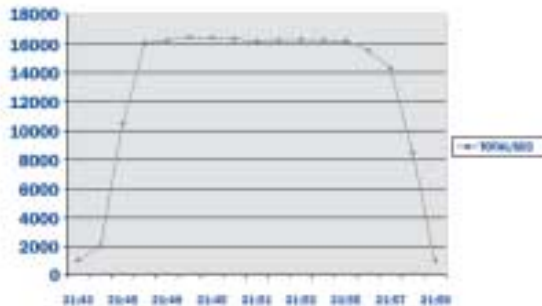
The testing was done at the HP Cupertino Performance Center on the HP Integrity servers based on Intel's Itanium processor with HP-UX11i. The infrastructure included the leading mid range systems rx7620s and partitioned and non partitioned high end Superdomes. The Storage solution was comprised of the state-of-the-art HP Storage Works Disk Array XP 1024.



Results

Two key tests were carried out in order to prove the performance of TEMENOS T24 within a high volume retail banking environment. The first test was used to evaluate the speed with which account accruals could be processed for a 13 million account database. These accruals ran at a rate of 16,250 per second, which completed this portion of the close of business in less than 14 minutes. The second involved injecting online transactions into TEMENOS T24 in order to simulate concentrated daily use of the application. The online throughput test achieved a rate of 2,153 transactions per second, equating to over 50 million per eight hour day.

SUMMARY OF CLOSE OF BUSINESS RUN



SUMMARY OF ONLINE ACCOUNTING TEST



SERVER UTILIZATION/SERVER RANGE

The immense scalability of TEMENOS T24 was also demonstrated during the benchmarking in two ways. Firstly, multiple application servers were used, with each server constituting a different configuration. This illustrated the potential for clients to use existing and new hardware simultaneously in developing a resilient and scalable architecture. Secondly, the CPU utilization of the servers scaled in a linear fashion, as greater numbers of transactions were passed to TEMENOS T24. At the peak levels of transaction throughput, CPU utilization across the available server capacity ranged between 40% and 60%, providing considerable additional capacity for further increases in transactions.

Conclusions

The benchmark demonstrated unambiguously TEMENOS T24 performance, both on-line and close of business, to meet most banking requirements on HP Integrity Superdome Servers using Oracle 10g. A White Paper covering all aspects of the benchmark is available for those requiring more detail.

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