

## WebSphere Business Component Composer Benchmark for



UK Post Office:

### **Benchmarking WebSphere Business Component Composer to ensure customer confidence.**

#### The story

Mid-December, UK Post Office asked IBM to prove that WebSphere product on zSeries platform is able to achieve 240 transactions per second, to demonstrate linearity and to make them confident on WebSphere Business Component Composer (WSBCC) product. This number of transactions per second is the customer forecast for the year 5 of the project (2006).

It has been decided to run a benchmark at this transaction level using an existing platform installed in Montpellier. This platform was primarily designed to support functional tests for another customer.

UK Post Office wanted to have the results before Christmas time.

#### Building the benchmark environment

The MOP team built up the environment within 1 week upgrading a 9672 – RX6 configuration to use the full capacity of the machine (10 CPs, 1 LPAR, 1 GB central storage, 512 MB extended storage) and installing the injection environment (PC and AIX machines). The injector tool based on Java has been provided by the WSBCC Lab and included user's activity simulation, configurable think time, report of failure/success of connection and elapsed time. The lab also provided servlets running on Websphere to report:

- ✍ Active threads
- ✍ Total transactions processed
- ✍ Transaction rate
- ✍ Time in processor

The software configuration was:

- ✍ OS/390 V2R7

- ✍ IBM HTTP Server V5R1
- ✍ Websphere 3.02 Standard Edition
- ✍ JDK 1.1.8
- ✍ WSBCC 4.0

The network was a LAN and was not dedicated to the benchmark.

### Running the benchmark – The results

During 2 days, the team made of people from UK, Germany, Barcelona Lab in Spain and zSeries Benchmark center in MOP run the benchmark to achieve the customer objectives.

The benchmark demonstrated linearity from 50 tx/s up to 270 tx/s. We stopped at this level due to network bottlenecks as well as injectors limitations and because the customer challenges were achieved:

- ✍ Linearity up to 270 tx/s has been proved
- ✍ No evidence of breakdown within range tested
- ✍ Highest transaction rate achieved and maintained for 10 minutes indicating WSBCC stability within PO requirements

Since then, new tests for different customers provided higher transactions rate up to 340 tx/s and more depending on the transaction complexity.

### International teamwork to get success

UK Post office decided on December 29<sup>th</sup> 2000 to use WSBCC.

Thanks to real IBM teamwork across UK, Germany, Spain and France we were able to combine our efforts through the benchmark to achieve the customer challenges.

UK Post Office can now move forward to the development of their solution with a high degree of confidence in the WebSphere Business Component Composer product.

### Additional information

IBM Design Centers for e-transaction processing: [http://www.ibm.com/servers/design\\_center](http://www.ibm.com/servers/design_center)

Patrick Jousen, Project Manager IBM Design Center for e-transaction Processing Montpellier France

Dave Strachan, CRM Technical Pre-Sales EMEA WebSphere Business Components

**Performance is in Internal Throughput Rate (ITR) ratio based on measurements and projections using**

standard IBM benchmarks in a controlled environment. The actual throughput that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput improvements equivalent to the performance ratios stated here.