

Performance Testing Details/Defined

The testing will progress to the point of 10,000 logins and 1,000,000 transactions. This level of testing should by no means maximize the capacity of the servers, nor the IBM DB2 SSac Sa product. The goal of this test plan is for Performance testing only.

Stress testing or soak testing is not the goal of this test case. Although the intent is to increase the transaction processing incrementally and in complexity, there will be no real usable results to increase to the point of failure. Failure of any component is not expected.

Tools Used

JAVAPERFTST
PERFTST2
DTW,
ACE
ct_sqsh
db_sqsh

Method

Automated testing harness employed to run the following:

<Application Name>, <Procedure name>

- Application Name; Procedure 0; 1 users with Progressive transactions up to 100,000. No stored procedures and no triggers.
- Application Name; Procedure 2; 1 users with Progressive transactions up to 100,000. 1 Stored Procedure using 1 – 4 data elements, and no triggers.
- Application Name; Procedure 2; 1 users with Progressive transactions up to 500,000. 3 Stored Procedures using 5 – 10 data elements, and no triggers.
- Application Name; Procedure 2; 1 users with Progressive transactions up to 500,000. 3 Stored Procedures using 5 – 10 data elements, and 2 triggers.
- Application Name; Procedure 2; 1 users with Progressive transactions up to 1,000,000. 5 Stored Procedures using 5 – 10 data elements, and 3 triggers.
- Application Name; Procedure 2; 5 users with Progressive transactions up to 100,000. No stored procedures and no triggers.
- Application Name; Procedure 2; 5 users with Progressive transactions up to 100,000. 1 Stored Procedure using 1 – 4 data elements, and no triggers.
- Application Name; Procedure 2; 5 users with Progressive transactions up to 500,000. 3 Stored Procedures using 5 – 10 data elements, and no triggers.
- Application Name; Procedure 2; 10 users with Progressive transactions up to 500,000. 3 Stored Procedures using 5 – 10 data elements, and 2 triggers.
- Application Name; Procedure 2; 10 users with Progressive transactions up to 500,000. 5 Stored Procedures using 5 – 10 data elements, and 3 triggers.
- Application Name; Procedure 2; 10 users with Progressive transactions up to 500,000. 3 Stored Procedures using 5 – 10 data elements, and no triggers.
- Application Name; Procedure 2; 25 users with Progressive transactions up to 1,000,000. 3 Stored Procedures using 5 – 10 data elements, and 2 triggers.

- Application Name; Procedure 2; 25 users with Progressive transactions up to 1,000,000. 5 Stored Procedures using 5 – 10 data elements, and 3 triggers.
- Application Name; Procedure 2; 75 users with Progressive transactions up to 1,000,000. 5 Stored Procedures using 5 – 10 data elements, and 3 triggers.
- Application Name; Procedure 2; 100 users with Progressive transactions up to 1,000,000. 7 Stored Procedures using 5 – 10 data elements, and 3 triggers.
- Application Name; Procedure 2; 250 users with Progressive transactions up to 1,000,000. 7 Stored Procedures using 5 – 10 data elements, and 3 triggers.
- Application Name; Procedure 2; 500 users with Progressive transactions up to 1,000,000. 7 Stored Procedures using 5 – 10 data elements, and 3 triggers.

Testing Reports

A final set of charts as well as a written report will be produced to document the findings. The following are expected:

- Sybase transaction processing exceeds that of IBM DB2 SSacSA.
- Sybase transaction processing exceeds that of DB2.
- The baseline processing time charted over a series of applications offers some lull and some spike conditions.

Bug Reporting

Any Bugs identified during testing will be documented and testing of that area will be postponed until the bug is resolved. Testing will continue with the next test and a report will be produced will all test that are completed.

Test Environment

Server testing:

- Dell Quad Processor
- 6GB Memory
- 7200 SATA drive
- WIN7 64-bit
- WIN7 32-bit in VMware image under WIN7 64-bit
- AIX 64-bit
- Solaris 10
- Red Hat 64-bit
- Red Hat 32-bit in VMware image under Red Hat 64-bit

Exclusions

- No 3rd party tool testing.
- Applications utilizing complex Triggers.
- Erroneous or illegal data in transactions.
- Concurrency testing will be performed after baseline is established.
- Soak testing will be a part of the Reliability Test Plan.

- Although Client / Server variables are being tested, this plan does not provide integration testing.
- Spike testing using both Users and Application Procedures will be performed in a separate test case after baseline is established.

Test Deliverables

- Performance testing goals
- Workload definitions
- User scenario designs
- Performance test designs
- Test procedures
- System baseline/System-under-test configurations
- Metrics to collect
- Performance Report
- Test scripts/suites
- Test run results
- Analysis reports against the collected data
- Performance related error reports (e.g., failed transactions)
- Functional bug reports (e.g., data integrity problems)
- Periodic status reports
- Final report

Team Members

<listed here>