

Call for Papers **DBTest 2008**

1st International Workshop on Testing Database Systems

Vancouver, June 13, 2008

<http://research.microsoft.com/dmx/dbtest2008>

Co-located with ACM SIGMOD Conf.

Motivation and Scope

The functionality provided by modern database management systems (DBMS) is continuously expanding. New trends in hardware architectures, new data storage requirements, and new usage patterns drive the need for continuous innovation and expansion in modern database engines. As a result, DBMS are becoming increasingly complex and difficult to validate. Moreover, while DBMS functionality has advanced significantly during the past 10 years, the methodology for testing and tuning has not evolved accordingly. Testing and tuning a database system are becoming increasingly expensive and are often dominating the release cycle of a database product. It is not unusual that fifty percent of the development cost is spent on testing and tuning and that several months are reserved for testing before a new release can be shipped. Without revolutionary new ideas, the situation is going to become even worse in future.

The purpose of this workshop is to expose to the academic community the challenges and practical impact of adequate database testing, and encourage further research in the area. The long term goal is to devise new technique that reduce the cost and time to test and tune database products so that users and vendors can spend more time and energy on actual innovations. Obviously, the general area of testing has attracted a great deal of attention in the software engineering community. However, testing DBMS imposes particular challenges and opportunities which have not been addressed in either the database or software engineering community. Only recently, DBMS testing has gained more attention in the database community.

The participants of this workshop will be from both industry and academia. In addition to novel techniques, the workshop will present war stories in order to define and better understand the problem space.

Topics of Interest

- DBMS testing techniques
- Generation of synthetic data for test databases
- Generation of stochastic test models for large test matrices

- Techniques and algorithms for automatic program verification
- Maximizing code coverage of engine components
- Testing correctness of DBMS components
- Test-modeling of DBMS engines and components
- Testing and designing systems that are robust to estimation inaccuracies
- Testing the efficiency of adaptive policies and components
- Minimizing, automating and ranking of engine tuning parameters
- Identifying performance bottlenecks
- Workload characterization with respect to performance metrics
- Workload characterization with respect to engine components
- Metrics for predictability of query and workload performance
- Metrics for query plan robustness
- Security and vulnerability testing
- War Stories

Paper Submission

DBTest 2008 invites the submission of original contributions in the area of database system testing and tuning. As mentioned above, DBTest is also interested in war stories and practitioners' reports on techniques and issues in testing and tuning database systems. Papers should be formatted according to the ACM guidelines and SIGMOD proceedings template available at:

http://www.sigmod08.org/sigmod_formatting.shtml

Papers should not be longer than six pages and should be submitted in PDF by E-Mail to the workshop chairs:

Leo Giakoumakis, Microsoft Corporation, USA (leogia@microsoft.com)

Donald Kossmann, ETH Zürich, Switzerland (kossmann@inf.ethz.ch)

Important Dates

Paper Submission:	April 11, 2008
Notification of acceptance:	May 9, 2008
Camera-ready:	May 23, 2008
Workshop:	June 13, 2008

Contact

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