A Performance study on Operator-based stream processing systems

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Stream Computing Systems

- Insights from data in motion
  - It is impossible to store data on disk
  - The volume of the data is very large
- Process data on-the-fly in-memory

Streaming Click-Through Rate Computation
Essence of our Performance Study

- System S (IBM) and S4 (Yahoo)
- Four benchmarks (60 application Scenarios)
- Five metrics
Results - Throughput

Throughput observed for four applications on S4

- CDR Optimized
- VWAP
- Twitter
- Micro-benchmark
- CDR

Throughput observed for five applications on System S

- CDR
- VWAP
- Micro-benchmark
- CDR Optimized
- Twitter
Essence of our Performance Study

- System S (IBM) and S4 (Yahoo)
- Four benchmarks (60 application Scenarios)
- Five metrics
- Conclusions on Stream Processing system architectures

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