InterBase 7.5.1 and Firebird 1.5.2 TPC-R based test results

First thing I'd like to apologizes to all readers for delay with publishing TPC-R based test (<u>see "How to run..." here</u>) results which were announced in Issue 3. We've encountered some non-expected results and checked them twice before published.

Our first goal was testing of existed current release versions of InterBase and Firebird – InterBase 7.5.1 and Firebird 1.5.2 accordingly. Well, we've encountered problems with InterBase 7.5.1 testing – it generated so bad plan for queries 3 and 20 that we were not able to wait its finishing, so these queries were omitted in test results.

The overall conclusion is that InterBase 7.5.1 has problem with optimizer work and as result many queries are executed with bad plans. Also it seems like data access methods is worse than Firebird, because queries with the same plans usually executed slower.

Hardware and software configuration

Test results shown below are gathered from computer Pentium 4, 2.4Ghz, 1Gb RAM DDR3200, HDD 160Gb. Windows XP SP2 is installed, system restore is turned off.

We've run test on several configurations (Windows XP/2003 and Linux, database size coefficient = 1 and 10) and encountered similar results.

Thanks

Many thanks to Anton Glazunov and Sergey Mereutsa for assistance!

Results

Full logs are available here (zippedtxt format): Firebird 1.5.2 SuperServer InterBase 7.5.1

Execution time and queries plans are available here (zipped Excel): http://www.ibdeveloper.com/test/tpcr ib751 fb152.zip

Below you can find table with results (execution time only) for InterBase 7.51. and Firebird 1.5.

#	Firebird 1.5	InterBase 7.5.1	Diff. %
1	145,87	258,94	43,67
2	47,20	220,53	78,60
3	360,83	skipped*	
4	125,31	170,99	26,72
5	217,19	254,89	14,79
6	56,02	309,18	81,88
7	390,54	627,95	37,81
8	354,14	376,03	5,82
9	4.417,47	6.526,00	32,31
10	357,58	365,98	2,30
11	131,35	132,17	0,62
12	145,69	366,50	60,25
13	339,75	497,74	31,74
14	237,57	393,39	39,61
15	25,92	72,87	64,43
16	10,83	30,45	64,43
17	27,09	45,02	39,83
18	66,95	126,18	46,94
19	190,95	12,98	-1.371,11
20	1.812,91	skipped*	
21	433,62	1.003,56	56,79
22	126,05	200,13	37,02

[•] means that execution time was too long to wait for query finishing (6 hours and more).

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