

PolePosition

the open source database benchmark

<http://www.polepos.org>

Participating teams

db4o

the open source object database for Java and .NET

<http://www.db4o.com>

HXTT Text (CSV)

lightweight 100% Java engine for raw data, flat text , CSV file, TSV file, fixed-length, and variable-length binary file

<http://www.hxtt.com/text.html>

MySQL

the world's most popular open source database

<http://www.mysql.com>

Mckoi

an open source Java SQL database system

<http://mckoi.com/database/>

Derby

the Apache Derby project

<http://incubator.apache.org/derby/>

HSQldb

lightweight 100% Java SQL database engine

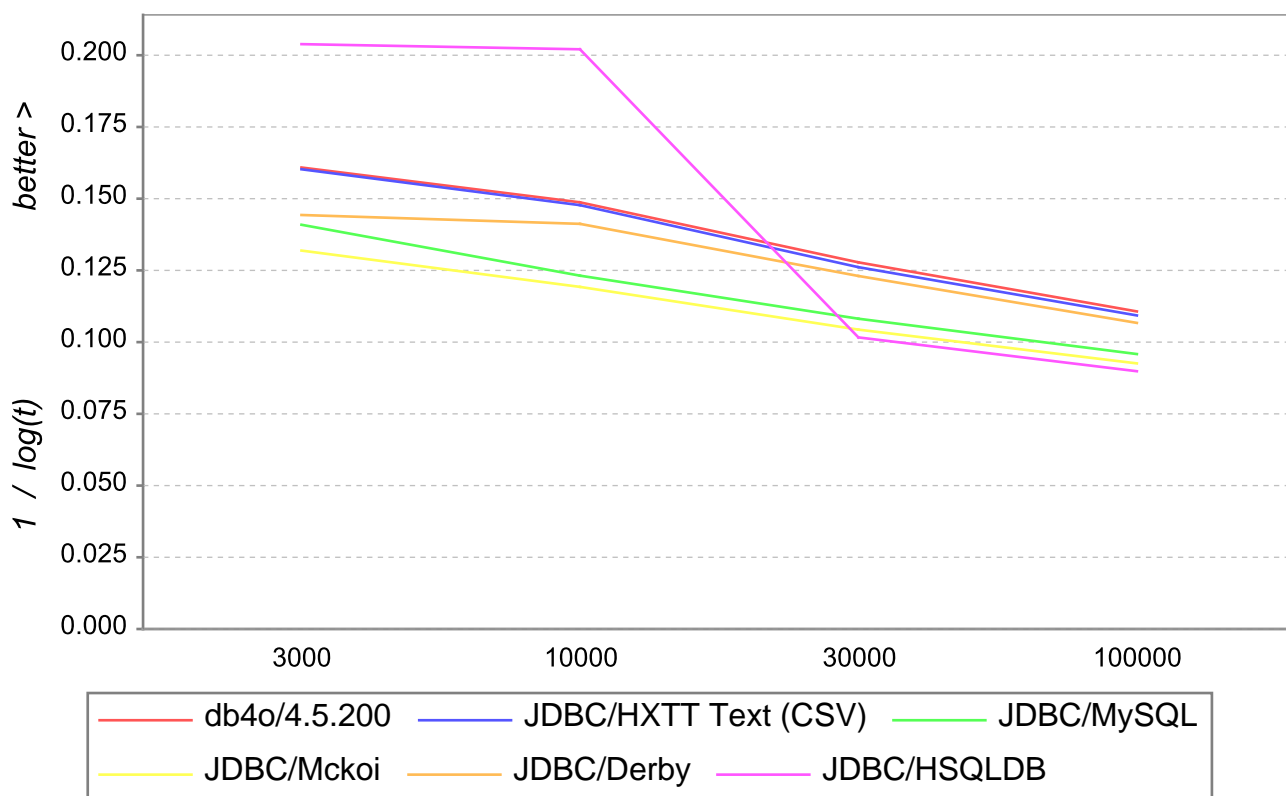
<http://hsqldb.sourceforge.net/>

Circuit: Melbourne

writes, reads and deletes unstructured flat objects of one kind in bulk mode

Lap: write

t [time in ms]	objects:3000	objects:10000	objects:30000	objects:100000
db4o/4.5.200	501	832	2500	8376
JDBC/HXTT Text	513	870	2775	9401
JDBC/MySQL	1208	3357	10354	33994
JDBC/Mckoi	1961	4382	14503	49029
JDBC/Derby	1022	1189	3382	11753
JDBC/HSQLDB	135	141	18740	68103

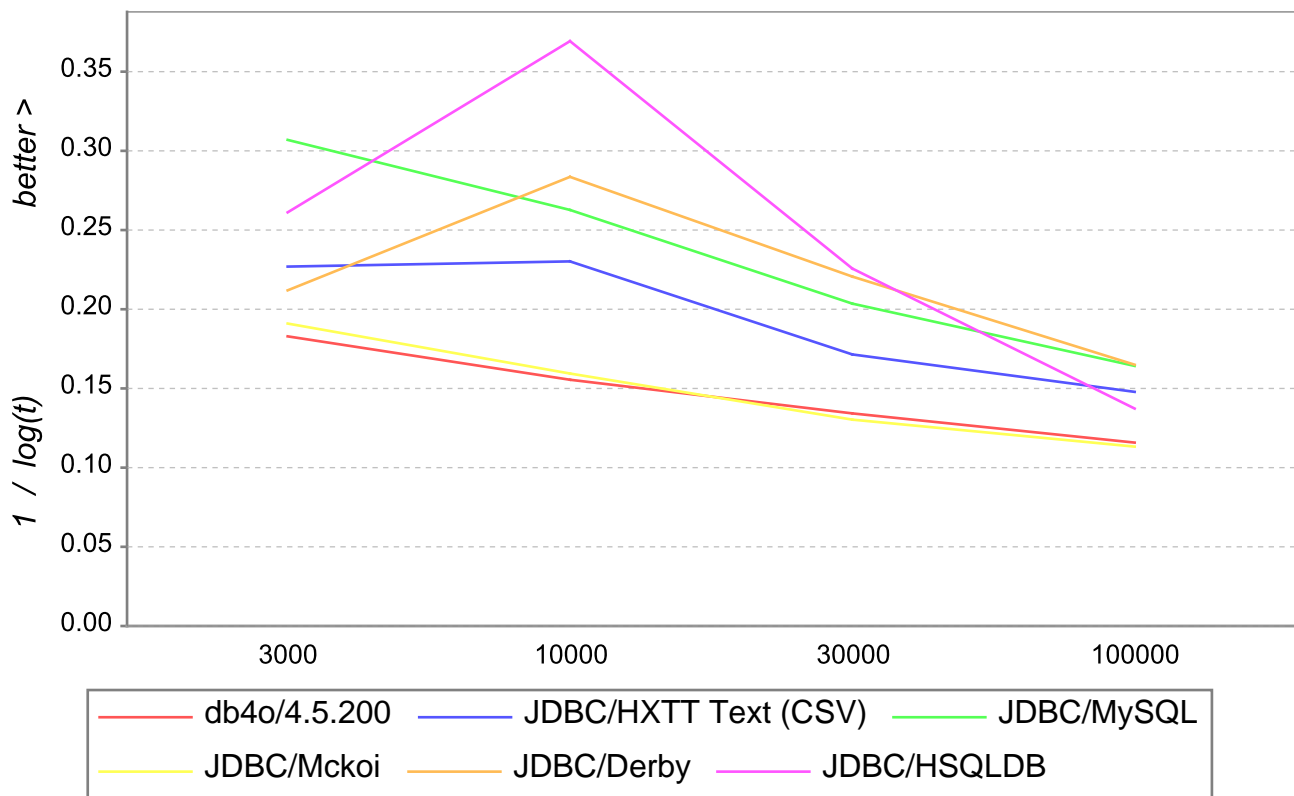


Circuit: Melbourne

writes, reads and deletes unstructured flat objects of one kind in bulk mode

Lap: read

t [time in ms]	objects:3000	objects:10000	objects:30000	objects:100000
db4o/4.5.200	237	621	1718	5622
JDBC/HXTT Text	82	77	341	866
JDBC/MySQL	26	45	136	441
JDBC/Mckoi	188	530	2152	6831
JDBC/Derby	112	34	93	429
JDBC/HSQLDB	46	15	84	1456

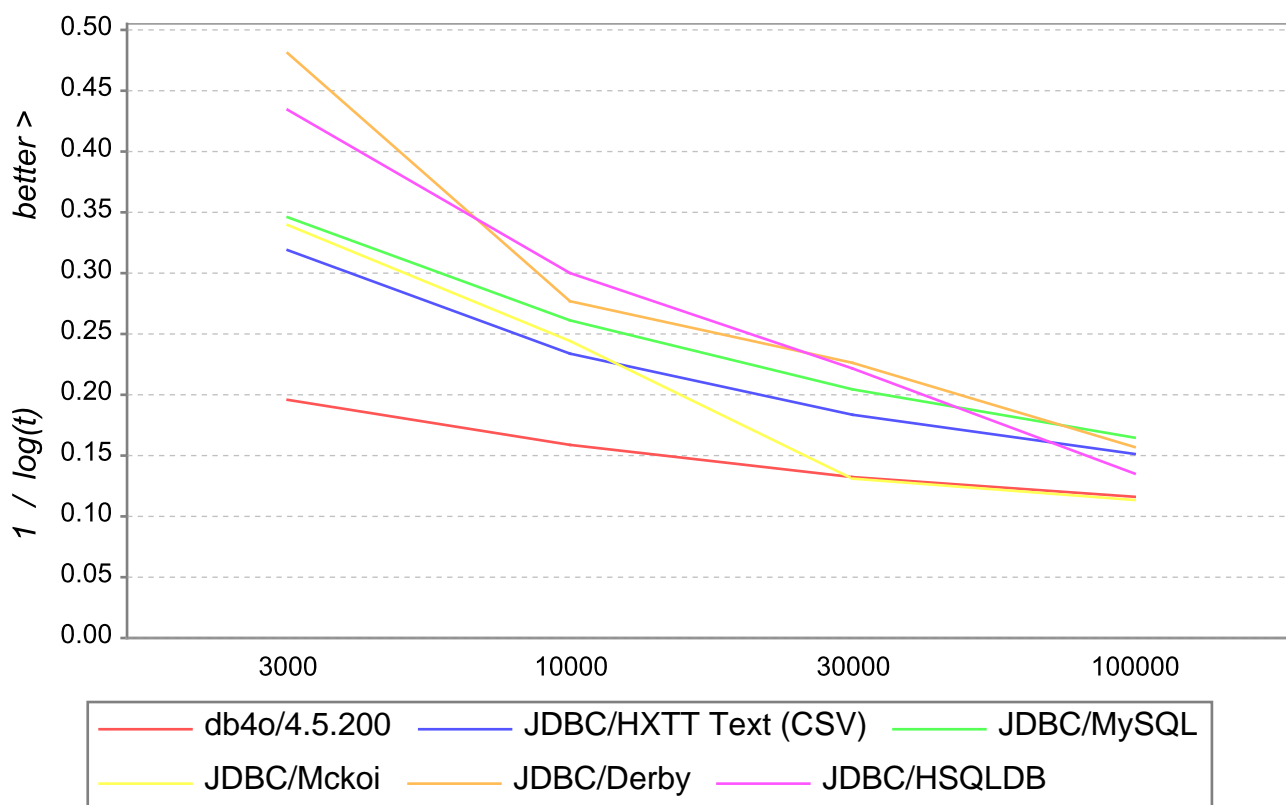


Circuit: Melbourne

writes, reads and deletes unstructured flat objects of one kind in bulk mode

Lap: read_hot

t [time in ms]	objects:3000	objects:10000	objects:30000	objects:100000
db4o/4.5.200	165	543	1915	5500
JDBC/HXTT Text	23	72	232	741
JDBC/MySQL	18	46	133	433
JDBC/Mckoi	19	60	2057	6721
JDBC/Derby	8	37	83	583
JDBC/HSQldb	10	28	91	1631

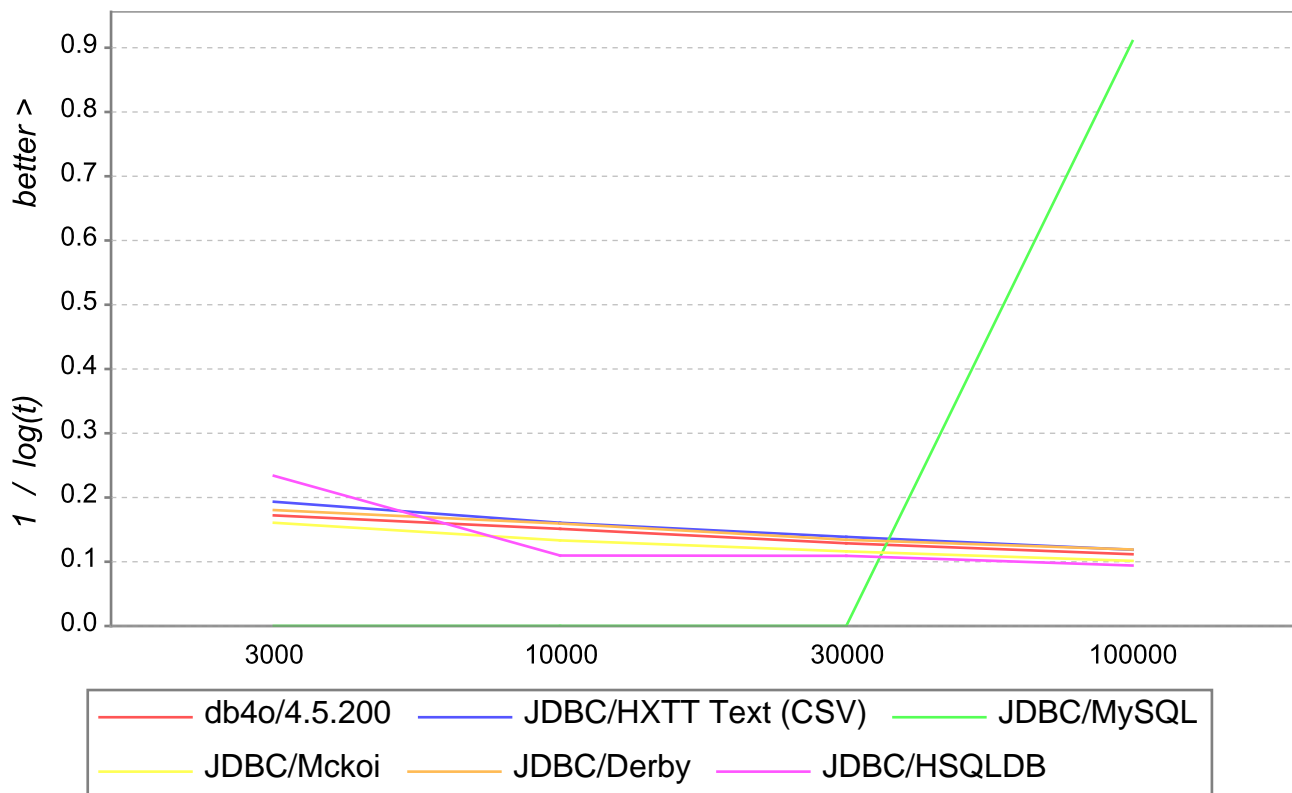


Circuit: Melbourne

writes, reads and deletes unstructured flat objects of one kind in bulk mode

Lap: delete

t [time in ms]	objects:3000	objects:10000	objects:30000	objects:100000
db4o/4.5.200	333	744	2361	7746
JDBC/HXTT Text	176	505	1353	4556
JDBC/MySQL	1	1	1	3
JDBC/Mckoi	504	1815	5476	19182
JDBC/Derby	255	528	1721	4437
JDBC/HSQldb	72	9108	9443	41180

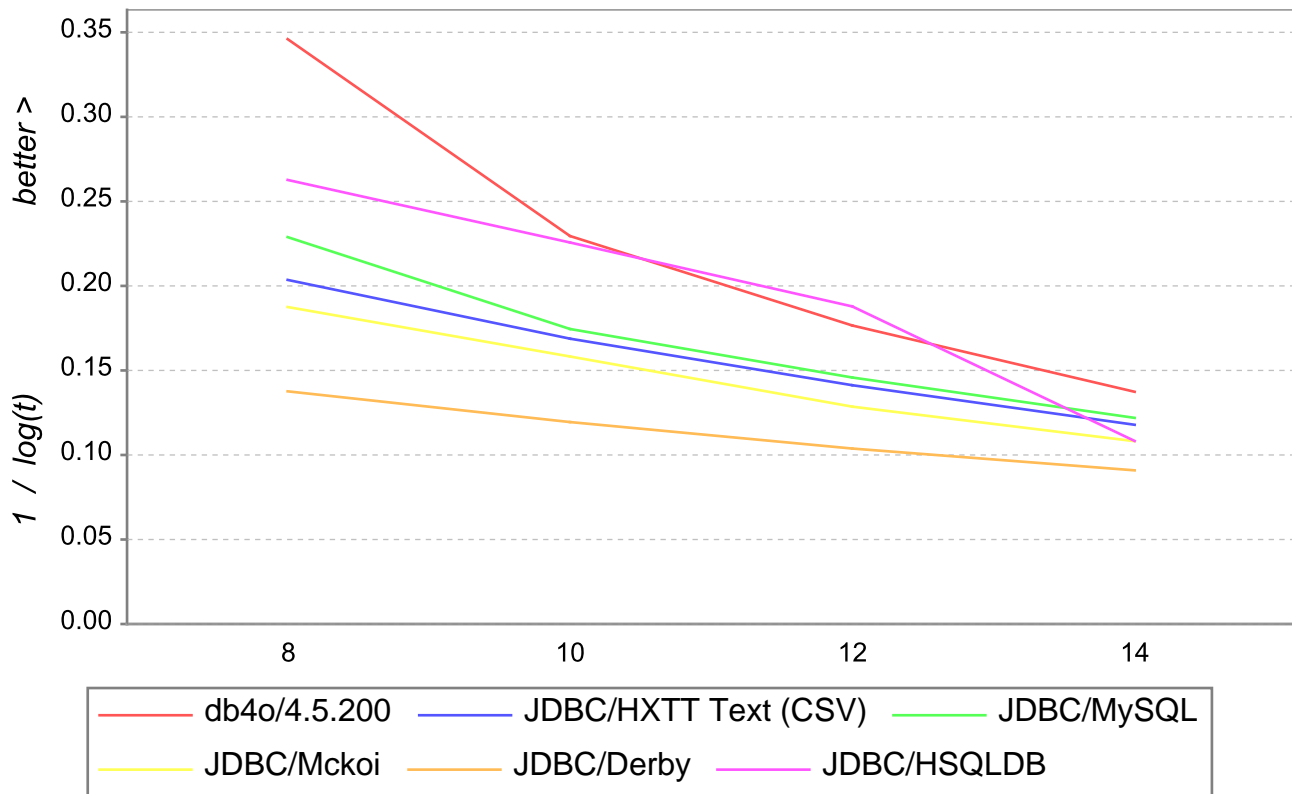


Circuit: Sepang

writes, reads and then deletes an object tree

Lap: write

t [time in ms]	depth:8	depth:10	depth:12	depth:14
db4o/4.5.200	18	78	288	1450
JDBC/HXTT Text	136	374	1187	4838
JDBC/MySQL	79	308	951	3644
JDBC/Mckoi	207	555	2384	10368
JDBC/Derby	1429	4316	15265	59827
JDBC/HSQldb	45	84	205	10257

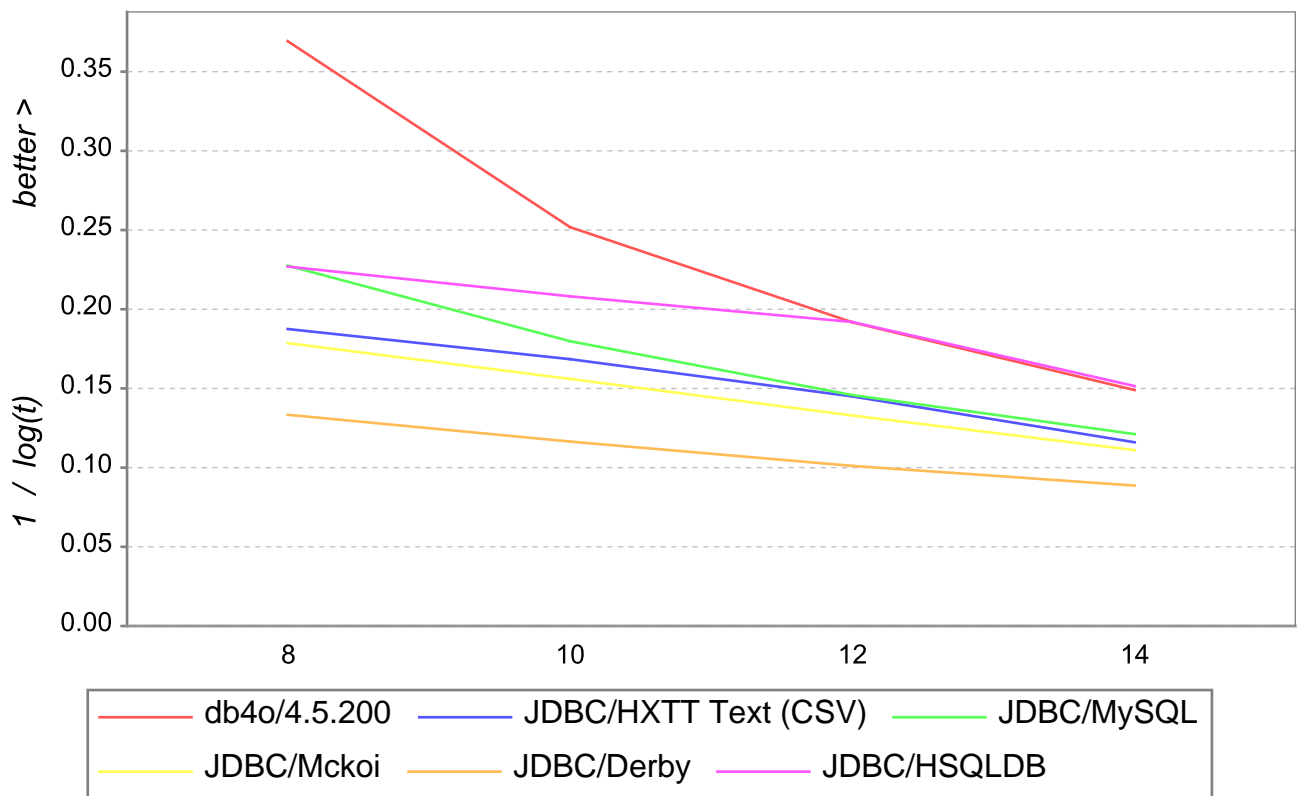


Circuit: Sepang

writes, reads and then deletes an object tree

Lap: read

t [time in ms]	depth:8	depth:10	depth:12	depth:14
db4o/4.5.200	15	53	184	822
JDBC/HXTT Text	207	378	991	5540
JDBC/MySQL	81	260	951	3839
JDBC/Mckoi	270	608	1851	8146
JDBC/Derby	1804	5355	19742	79179
JDBC/HSQldb	82	122	183	736

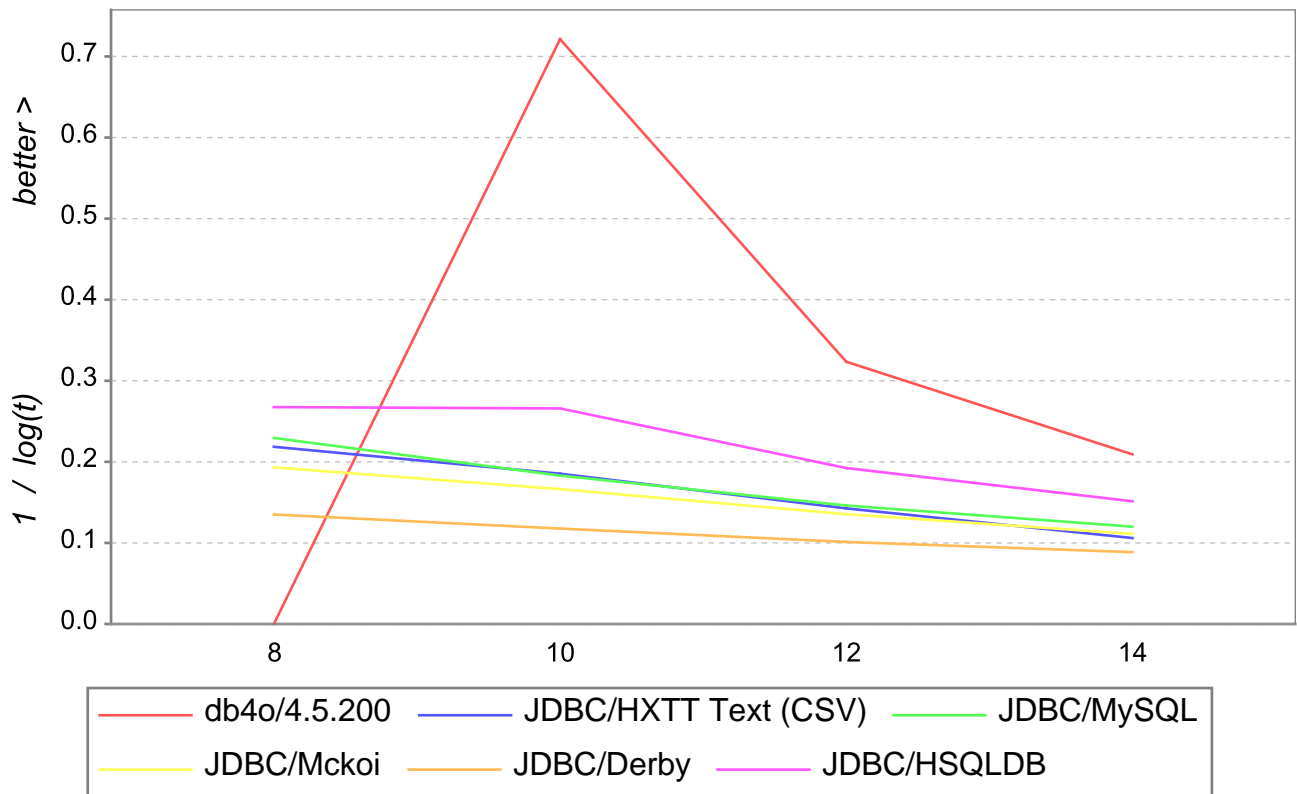


Circuit: Sepang

writes, reads and then deletes an object tree

Lap: read_hot

t [time in ms]	depth:8	depth:10	depth:12	depth:14
db4o/4.5.200	1	4	22	119
JDBC/HXTT Text	97	220	1109	12443
JDBC/MySQL	78	236	936	4142
JDBC/Mckoi	177	408	1604	8052
JDBC/Derby	1641	4889	19523	79250
JDBC/HSQldb	42	43	181	738

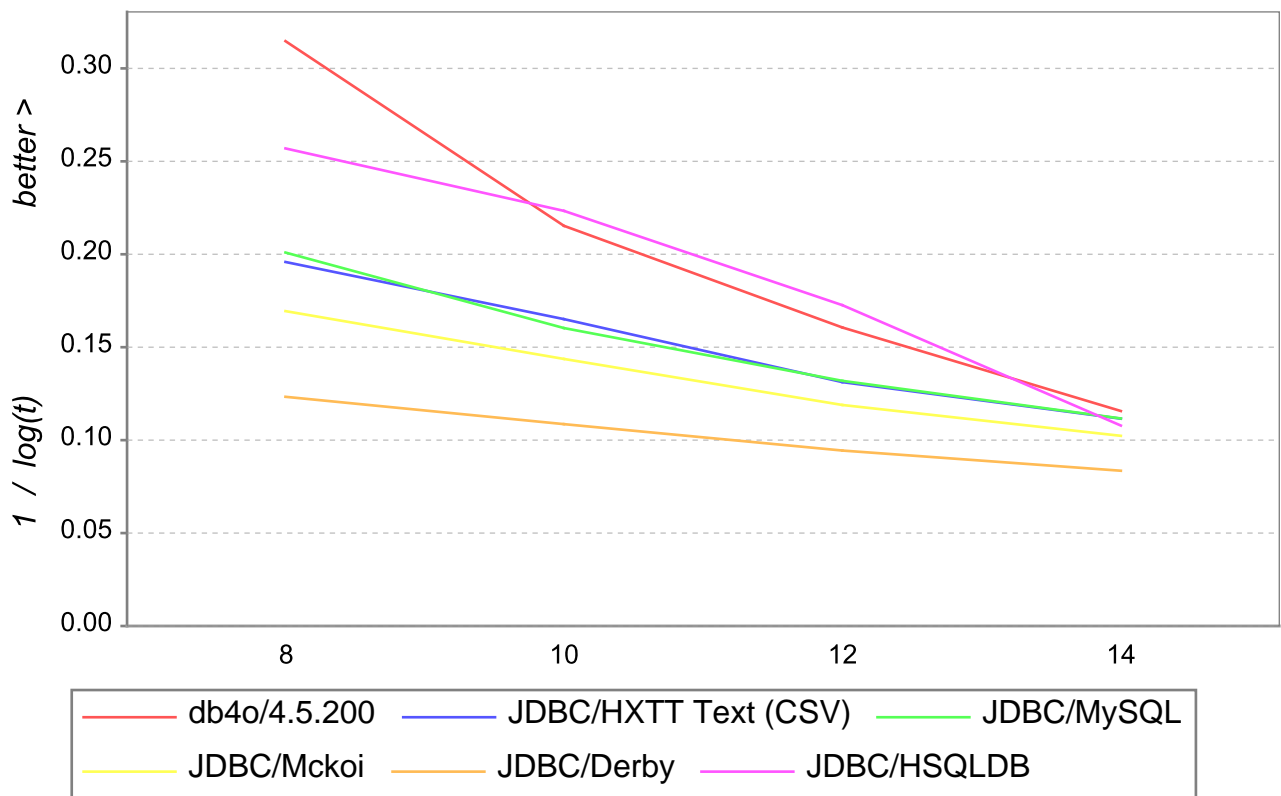


Circuit: Sepang

writes, reads and then deletes an object tree

Lap: delete

t [time in ms]	depth:8	depth:10	depth:12	depth:14
db4o/4.5.200	24	104	506	5681
JDBC/HXTT Text	165	427	2040	7823
JDBC/MySQL	145	512	1961	7749
JDBC/Mckoi	366	1053	4487	17537
JDBC/Derby	3323	9967	39851	158032
JDBC/HSQldb	49	88	328	10632

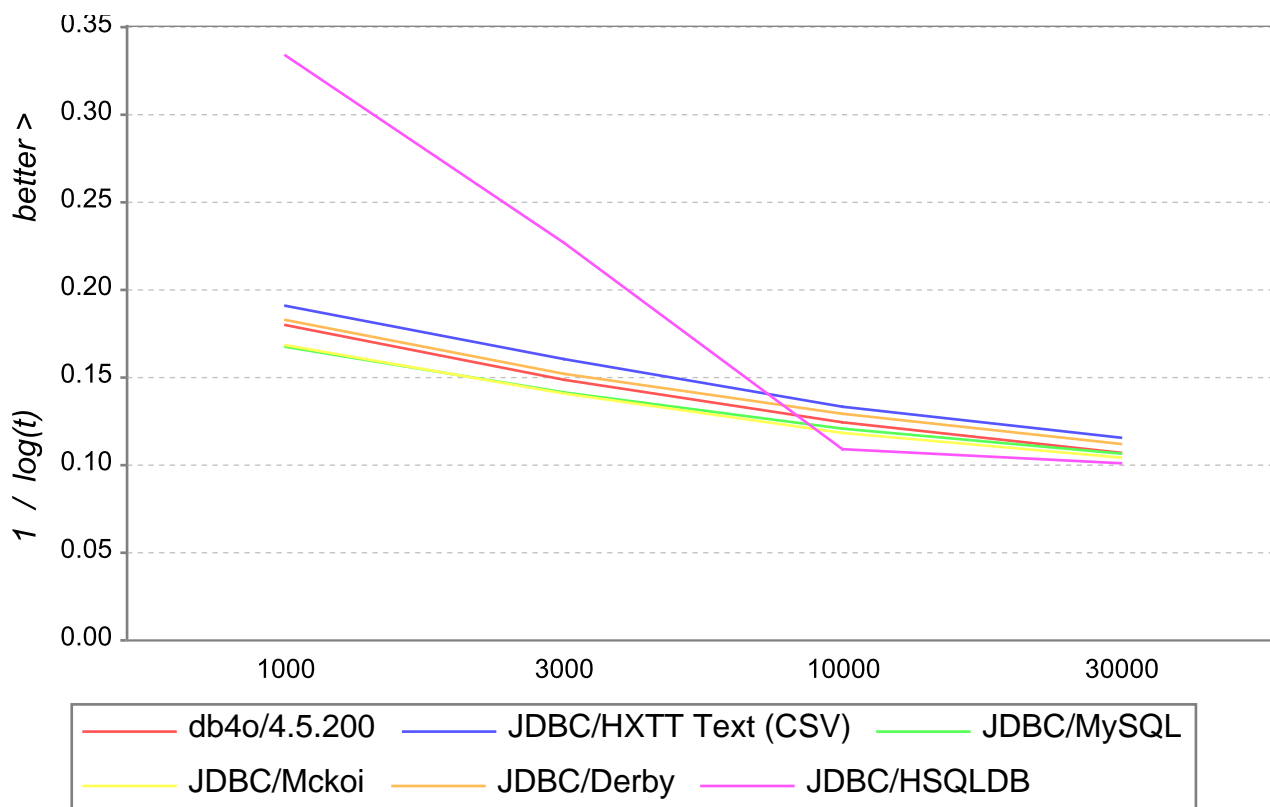


Circuit: Bahrain

write, query, update and delete simple flat objects individually

Lap: write

t [time in ms]	selects:900 objects:1000 updates:100	selects:900 objects:3000 updates:100	selects:900 objects:10000 updates:100	selects:900 objects:30000 updates:100
db4o/4.5.200	259	832	3086	11386
JDBC/HXTT Text	188	507	1806	5677
JDBC/MySQL	391	1171	3928	11876
JDBC/Mckoi	378	1210	4656	14562
JDBC/Derby	237	716	2280	7471
JDBC/HSQLDB	20	82	9555	19765

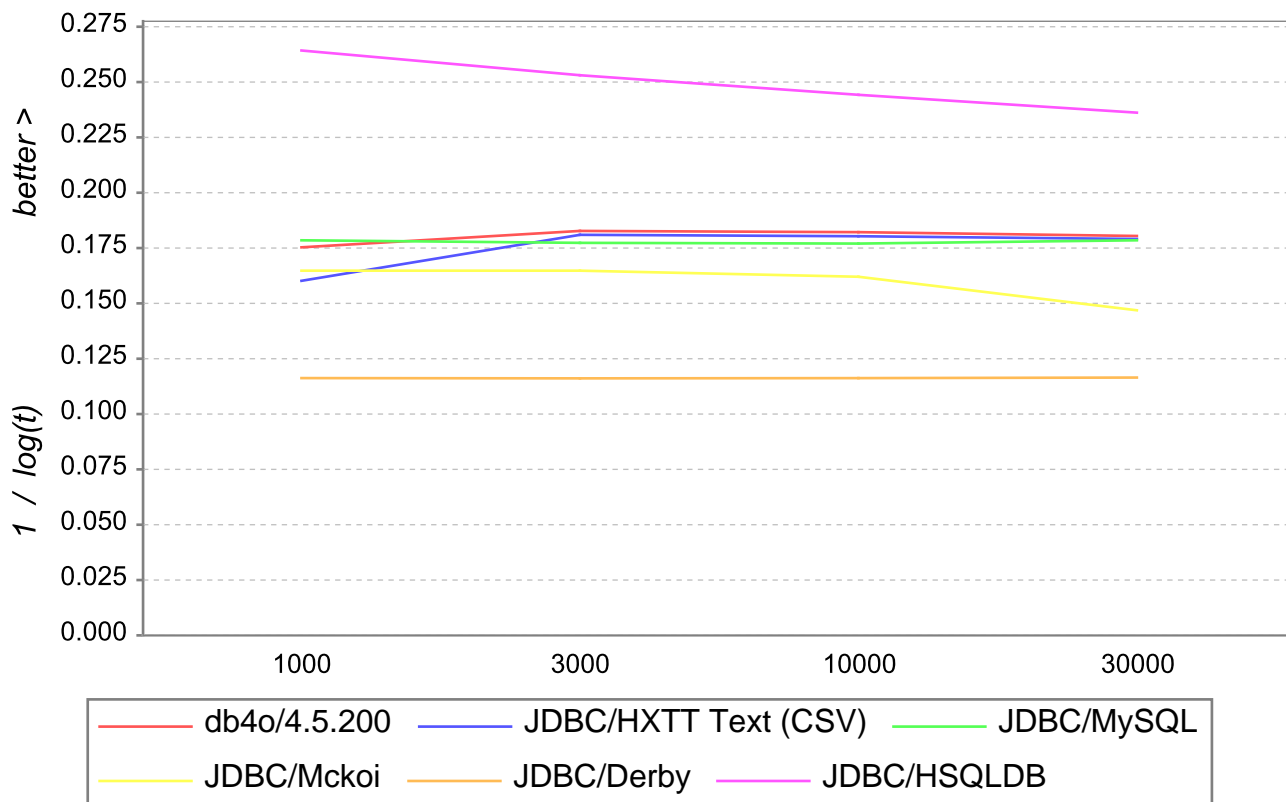


Circuit: Bahrain

write, query, update and delete simple flat objects individually

Lap: query_indexed_string

t [time in ms]	selects:900 objects:1000 updates:100	selects:900 objects:3000 updates:100	selects:900 objects:10000 updates:100	selects:900 objects:30000 updates:100
db4o/4.5.200	300	238	242	255
JDBC/HXTT Text	514	251	256	266
JDBC/MySQL	271	281	284	271
JDBC/Mckoi	432	432	479	905
JDBC/Derby	5446	5494	5451	5350
JDBC/HSQLDB	44	52	60	69

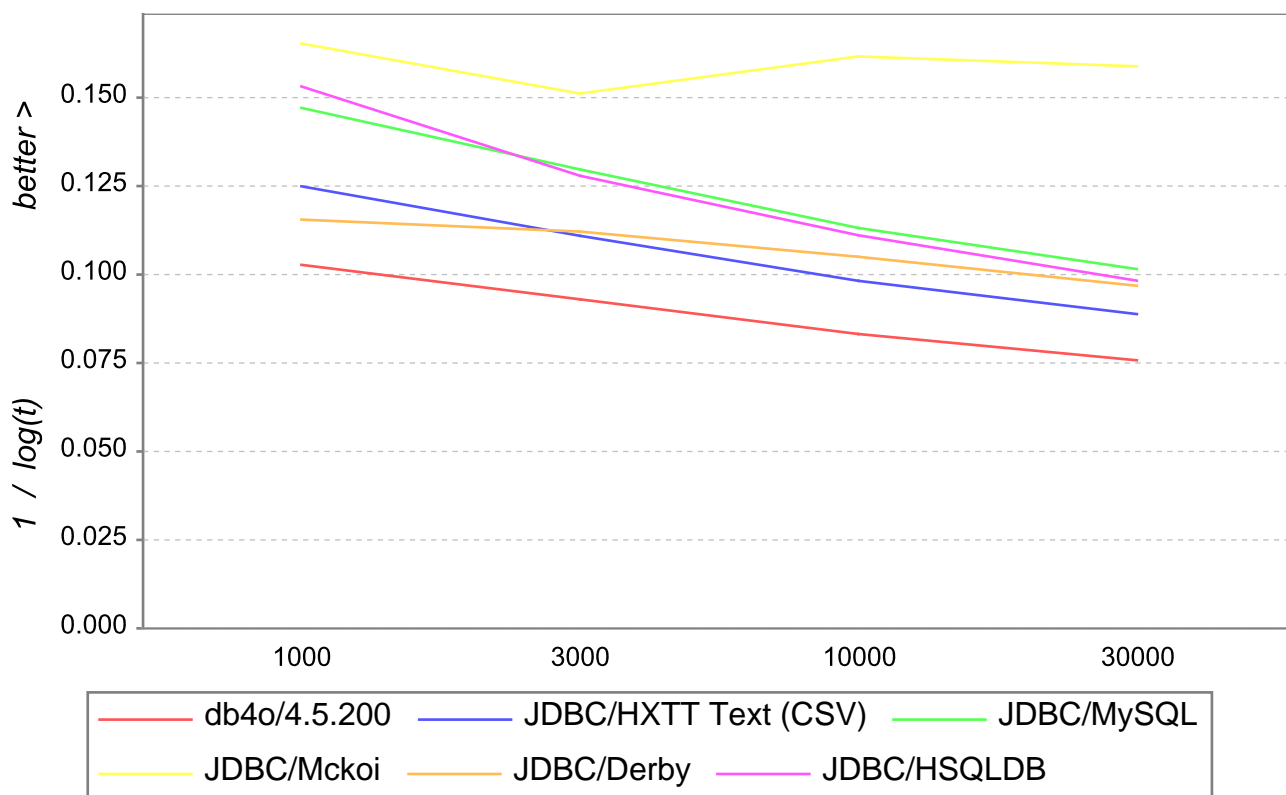


Circuit: Bahrain

write, query, update and delete simple flat objects individually

Lap: query_string

t [time in ms]	selects:900 objects:1000 updates:100	selects:900 objects:3000 updates:100	selects:900 objects:10000 updates:100	selects:900 objects:30000 updates:100
db4o/4.5.200	16869	46755	166017	539610
JDBC/HXTT Text	2993	8207	26412	77542
JDBC/MySQL	896	2229	6882	18921
JDBC/Mckoi	424	746	486	542
JDBC/Derby	5744	7460	13663	30550
JDBC/HSQLDB	685	2483	8110	26263

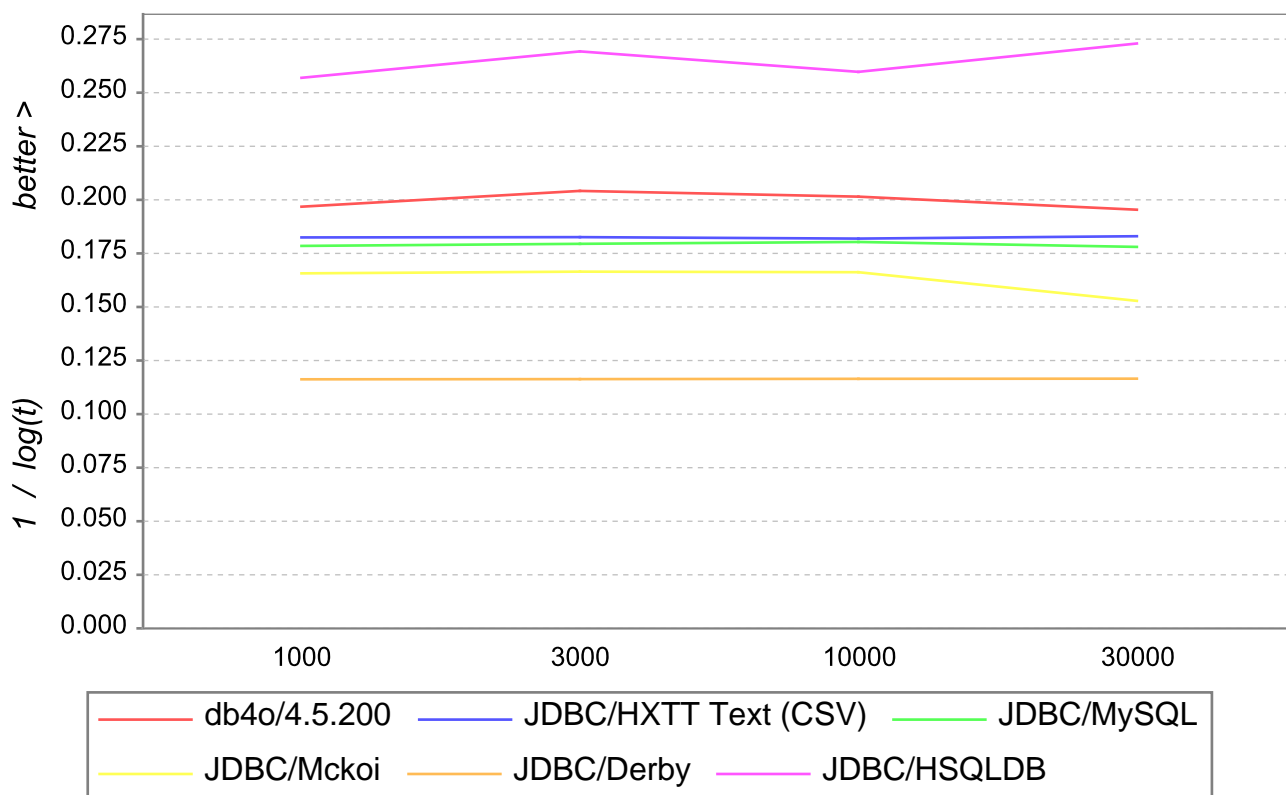


Circuit: Bahrain

write, query, update and delete simple flat objects individually

Lap: query_indexed_int

t [time in ms]	selects:900 objects:1000 updates:100	selects:900 objects:3000 updates:100	selects:900 objects:10000 updates:100	selects:900 objects:30000 updates:100
db4o/4.5.200	161	134	143	167
JDBC/HXTT Text	240	239	244	236
JDBC/MySQL	271	263	256	275
JDBC/Mckoi	418	406	410	694
JDBC/Derby	5445	5411	5358	5327
JDBC/HSQLDB	49	41	47	39

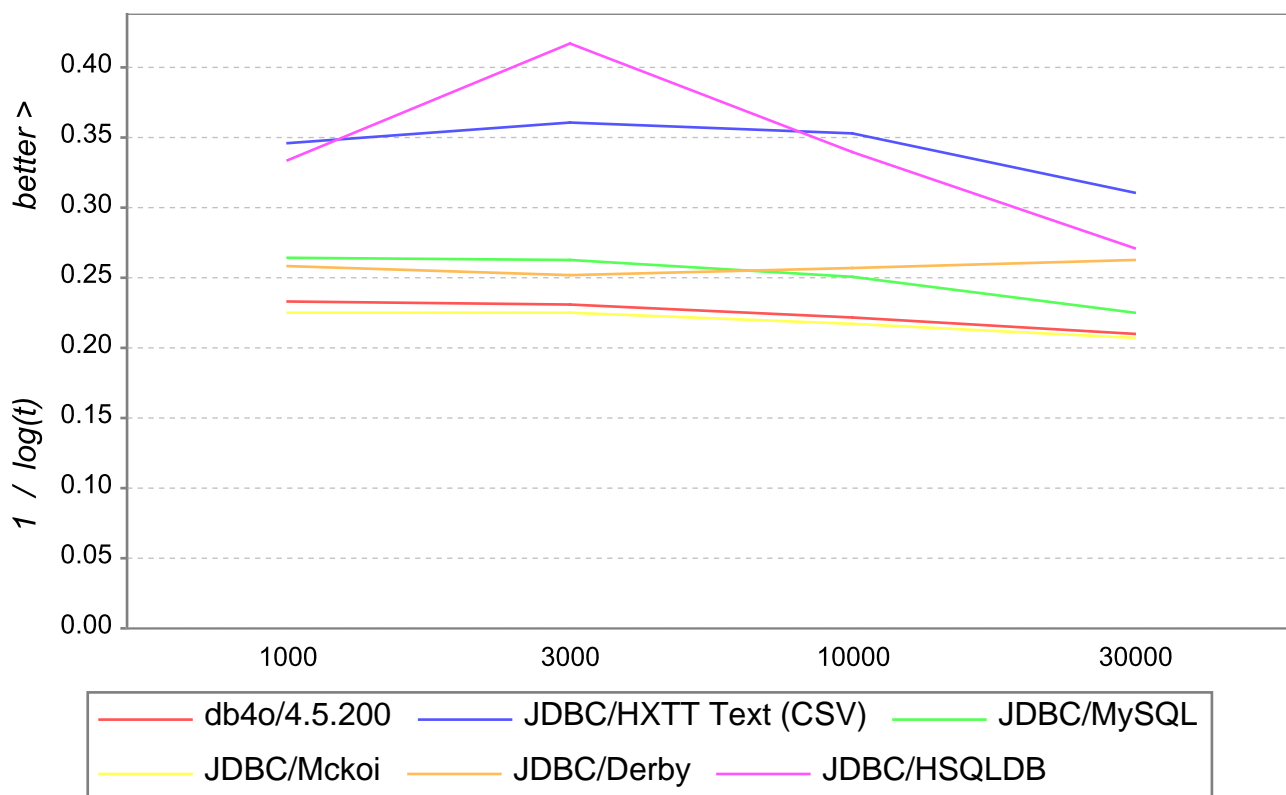


Circuit: Bahrain

write, query, update and delete simple flat objects individually

Lap: update

t [time in ms]	selects:900 objects:1000 updates:100	selects:900 objects:3000 updates:100	selects:900 objects:10000 updates:100	selects:900 objects:30000 updates:100
db4o/4.5.200	73	76	91	117
JDBC/HXTT Text	18	16	17	25
JDBC/MySQL	44	45	54	85
JDBC/Mckoi	85	85	100	125
JDBC/Derby	48	53	49	45
JDBC/HSQLDB	20	11	19	40

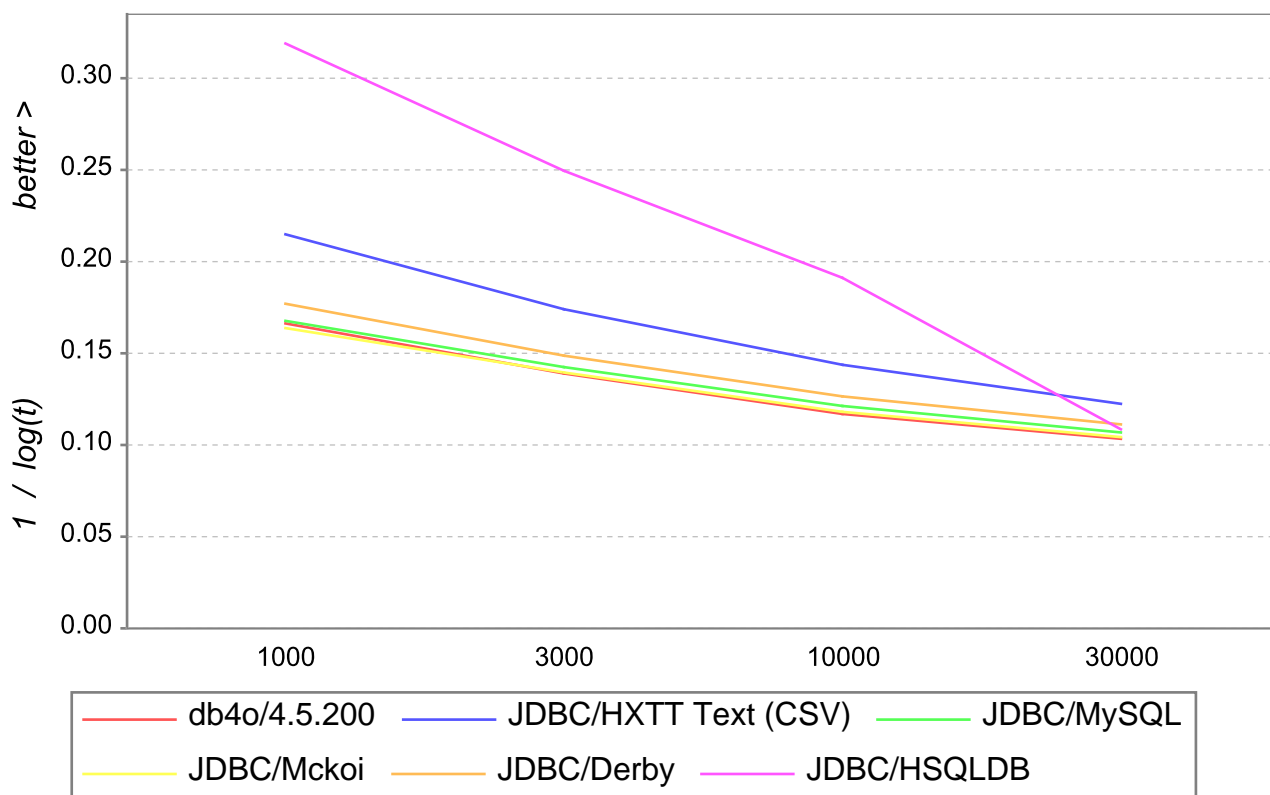


Circuit: Bahrain

write, query, update and delete simple flat objects individually

Lap: delete

t [time in ms]	selects:900 objects:1000 updates:100	selects:900 objects:3000 updates:100	selects:900 objects:10000 updates:100	selects:900 objects:30000 updates:100
db4o/4.5.200	409	1333	5180	15879
JDBC/HXTT Text	105	313	1051	3520
JDBC/MySQL	389	1117	3807	11603
JDBC/Mckoi	449	1296	4769	14583
JDBC/Derby	284	832	2711	8020
JDBC/HSQLDB	23	55	187	10007

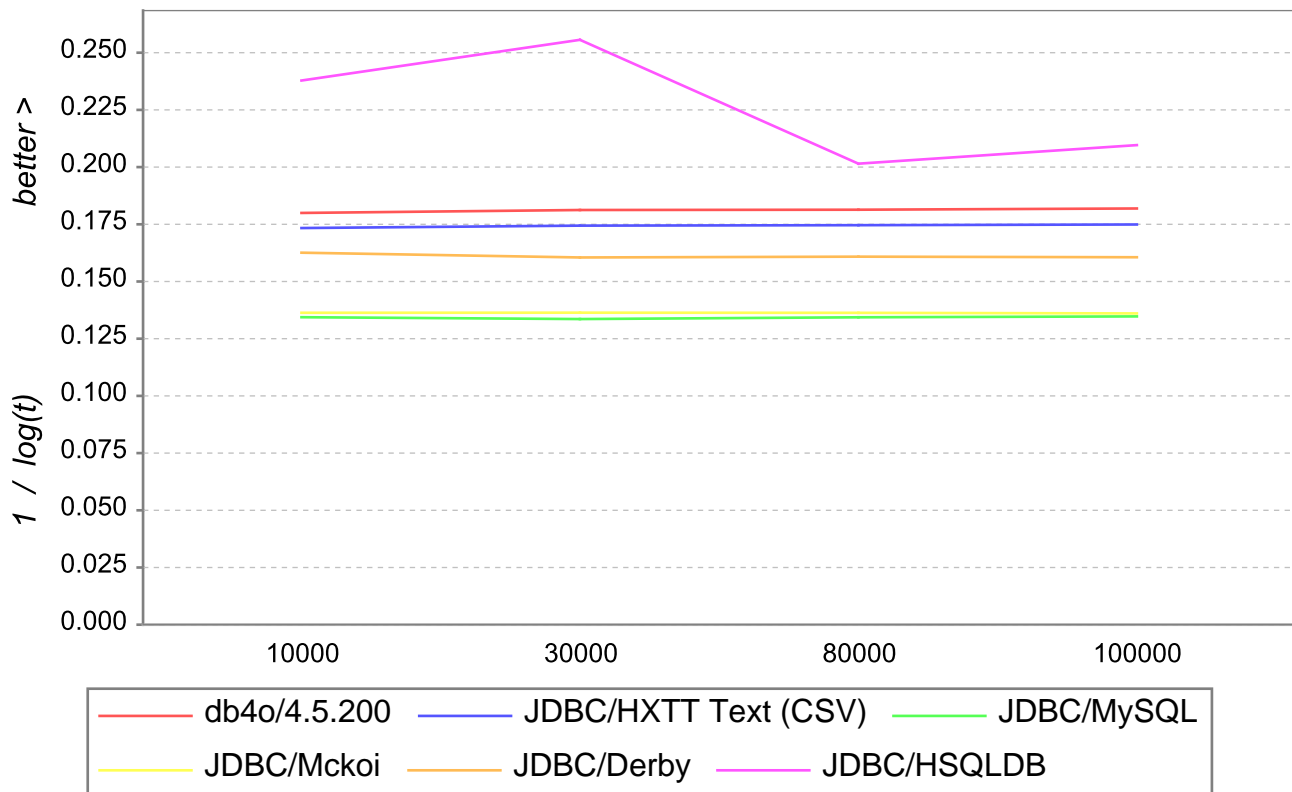


Circuit: Imola

retrieves objects by native id

Lap: retrieve

t [time in ms]	selects:5000 objects:10000	selects:5000 objects:30000	selects:5000 objects:80000	selects:5000 objects:100000
db4o/4.5.200	259	249	248	244
JDBC/HXTT Text	320	309	307	304
JDBC/MySQL	1705	1783	1708	1672
JDBC/Mckoi	1534	1530	1536	1557
JDBC/Derby	469	508	501	506
JDBC/HSQldb	67	50	143	118

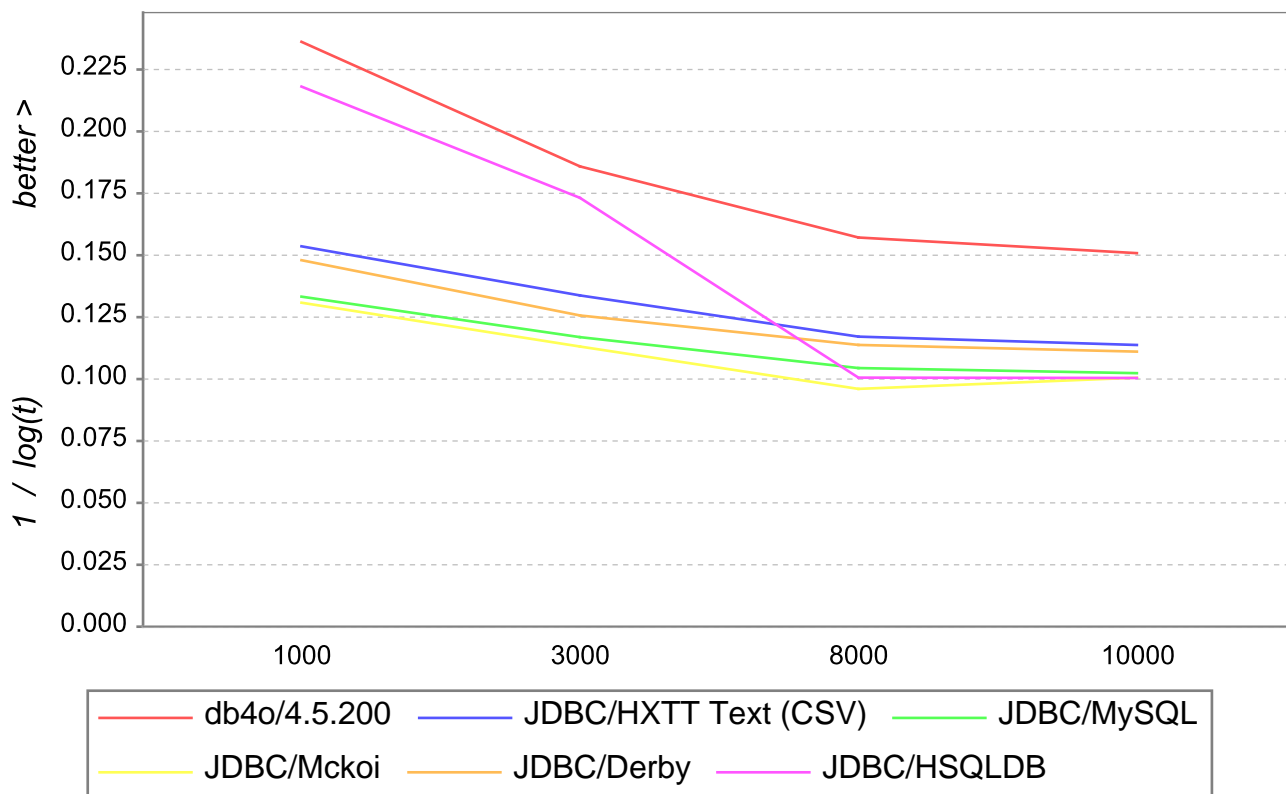


Circuit: Barcelona

writes, reads, queries and deletes objects with a 5 level inheritance structure

Lap: write

t [time in ms]	selects:100 objects:1000	selects:100 objects:3000	selects:100 objects:8000	selects:100 objects:10000
db4o/4.5.200	69	217	580	757
JDBC/HXTT Text	672	1764	5102	6572
JDBC/MySQL	1814	5180	14397	17466
JDBC/Mckoi	2086	6895	33308	20840
JDBC/Derby	860	2854	6558	8127
JDBC/HSQldb	98	322	20807	21083

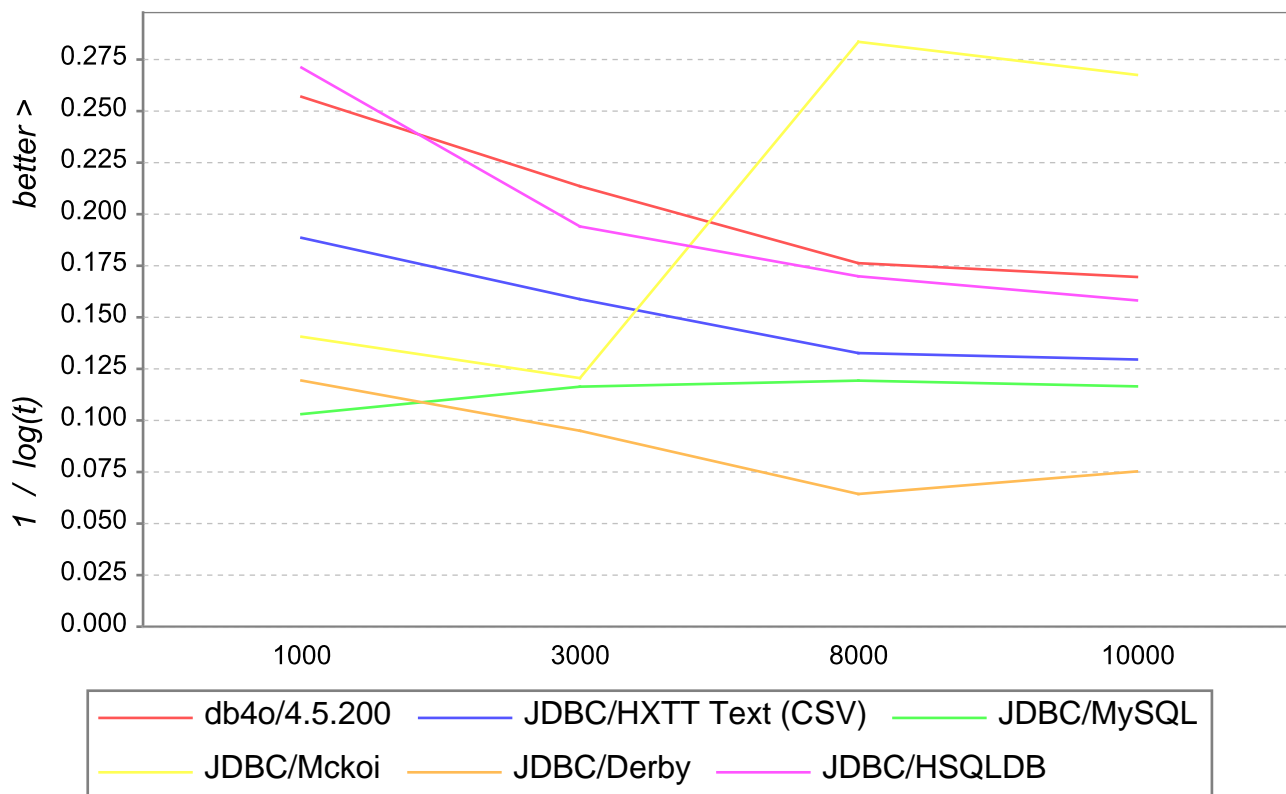


Circuit: Barcelona

writes, reads, queries and deletes objects with a 5 level inheritance structure

Lap: read

t [time in ms]	selects:100 objects:1000	selects:100 objects:3000	selects:100 objects:8000	selects:100 objects:10000
db4o/4.5.200	49	108	291	364
JDBC/HXTT Text	201	543	1878	2251
JDBC/MySQL	16352	5392	4364	5336
JDBC/Mckoi	1227	4010	34	42
JDBC/Derby	4352	37295	5608781	586539
JDBC/HSQldb	40	173	360	556

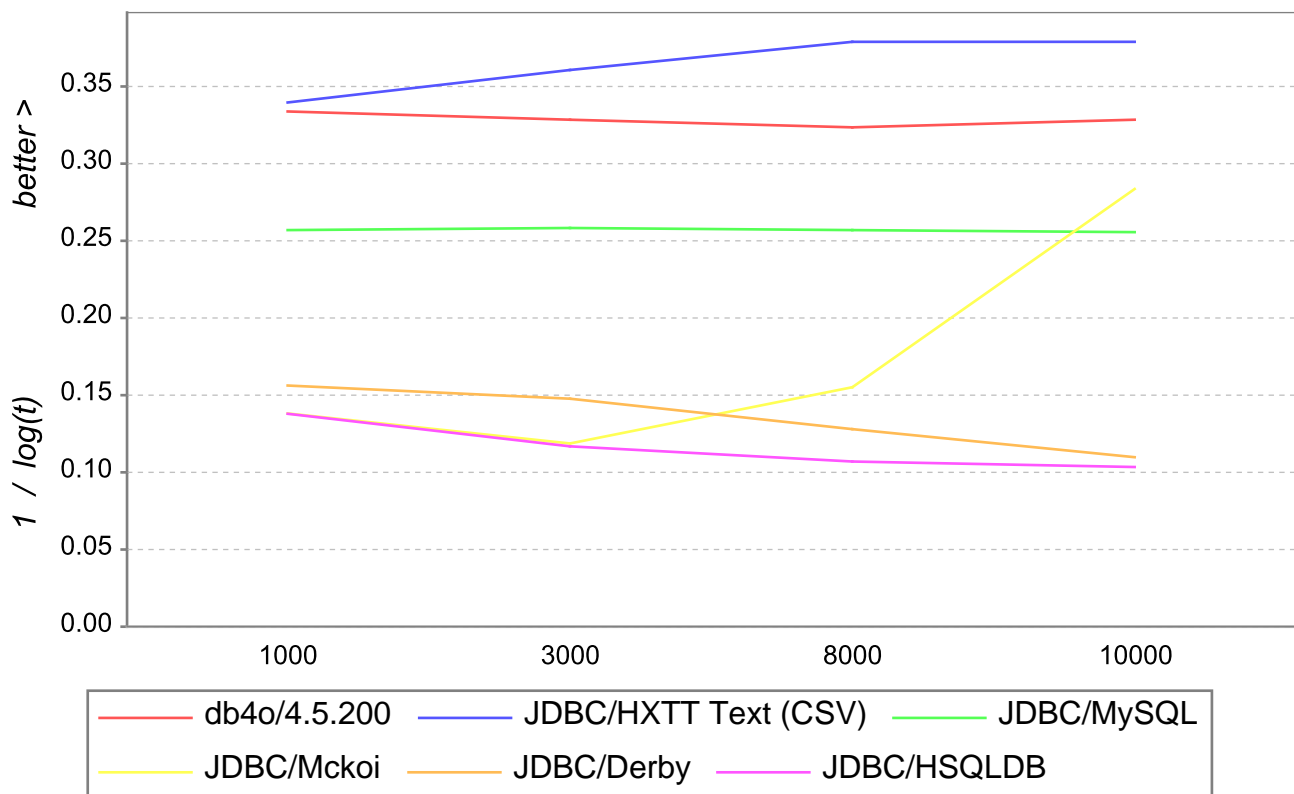


Circuit: Barcelona

writes, reads, queries and deletes objects with a 5 level inheritance structure

Lap: query

t [time in ms]	selects:100 objects:1000	selects:100 objects:3000	selects:100 objects:8000	selects:100 objects:10000
db4o/4.5.200	20	21	22	21
JDBC/HXTT Text	19	16	14	14
JDBC/MySQL	49	48	49	50
JDBC/Mckoi	1391	4556	630	34
JDBC/Derby	602	871	2471	9007
JDBC/HSQldb	1407	5206	11440	15785



Circuit: Barcelona

writes, reads, queries and deletes objects with a 5 level inheritance structure

Lap: delete

t [time in ms]	selects:100 objects:1000	selects:100 objects:3000	selects:100 objects:8000	selects:100 objects:10000
db4o/4.5.200	172	489	1411	2335
JDBC/HXTT Text	369	1088	2996	3720
JDBC/MySQL	1742	5419	13532	17241
JDBC/Mckoi	2453	6660	12627	13176
JDBC/Derby	1184	3603	8698	11034
JDBC/HSQldb	9970	10369	10526	20684

