

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 Paradox

lightweight 100% Java engine for Corel Paradox version from 3.0, 3.5, 4.x, 5.x, 7.x to 11.x

<http://www.hxtt.com/paradox.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

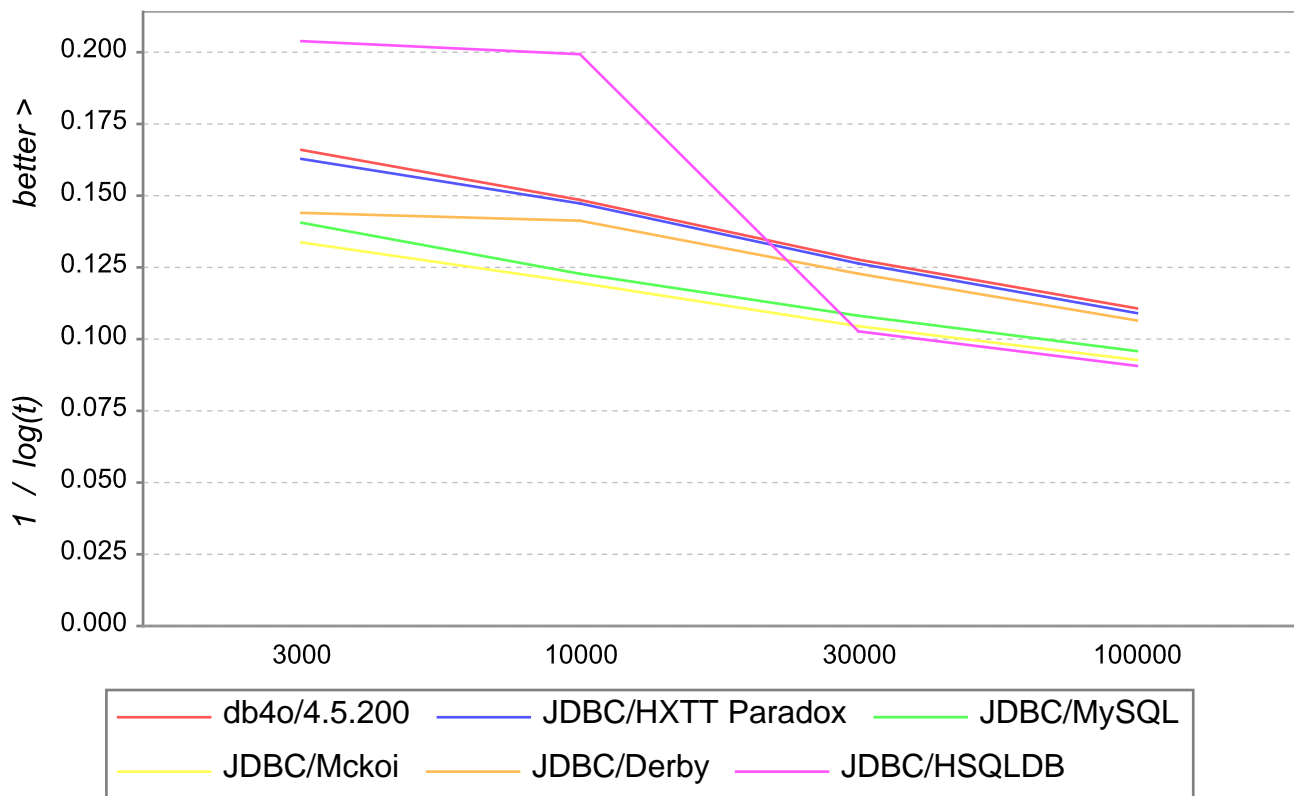
<http://hsqldb.sourceforge.net/>

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	414	840	2517	8361
JDBC/HXTT	465	888	2732	9596
JDBC/MySQL	1229	3446	10352	34065
JDBC/Mckoi	1771	4267	14312	48188
JDBC/Derby	1037	1186	3440	11966
JDBC/HSQldb	135	151	16928	61629

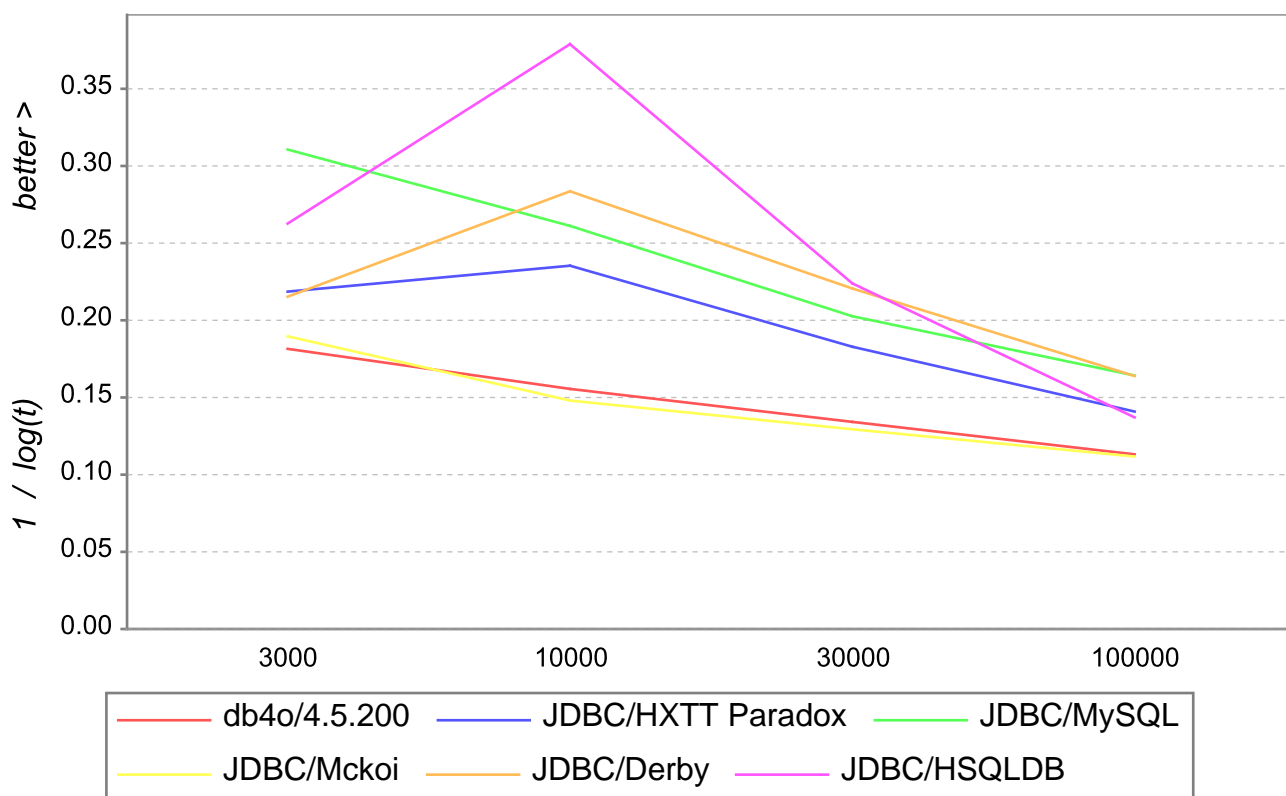


Circuit: Melbourne

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	247	619	1723	6890
JDBC/HXTT	97	70	237	1209
JDBC/MySQL	25	46	139	441
JDBC/Mckoi	195	859	2270	7702
JDBC/Derby	104	34	93	446
JDBC/HSQldb	45	14	87	1471

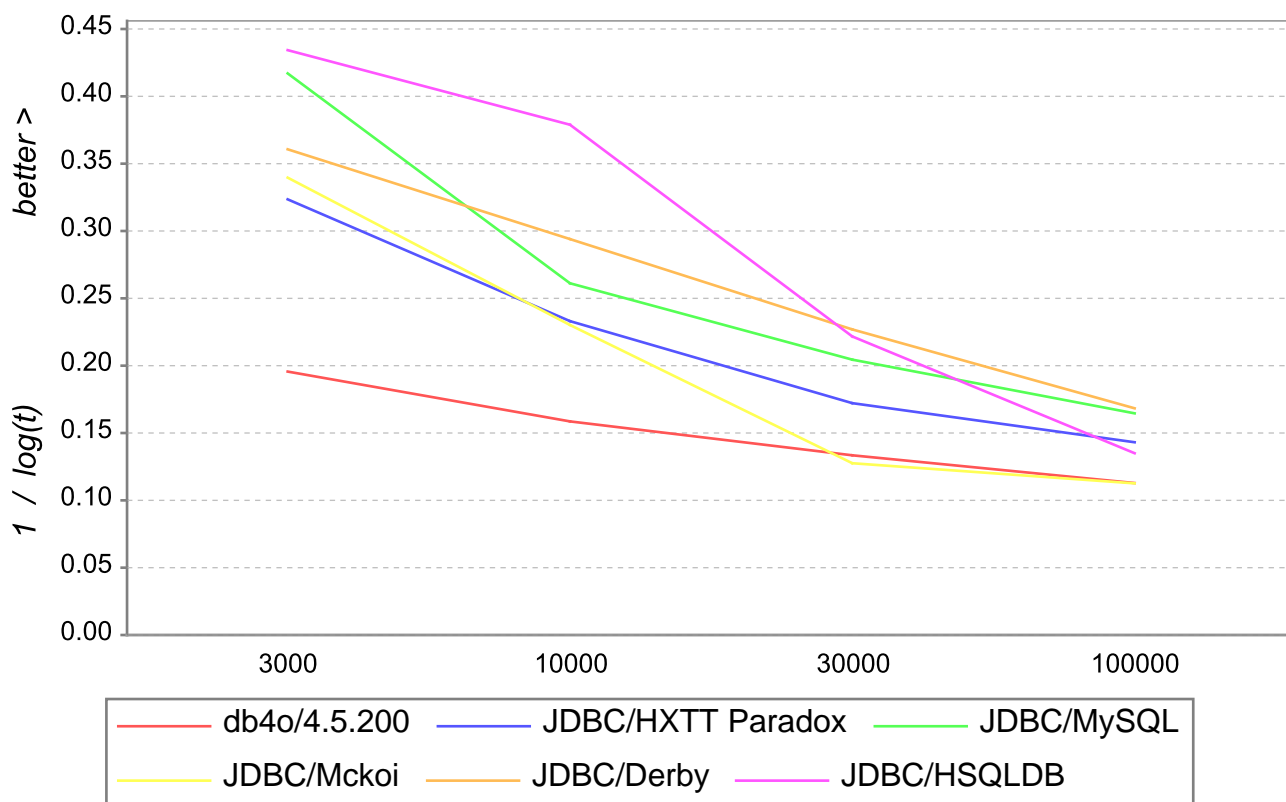


Circuit: Melbourne

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	166	547	1797	7058
JDBC/HXTT	22	73	333	1082
JDBC/MySQL	11	46	133	435
JDBC/Mckoi	19	77	2537	7184
JDBC/Derby	16	30	82	380
JDBC/HSQldb	10	14	91	1649

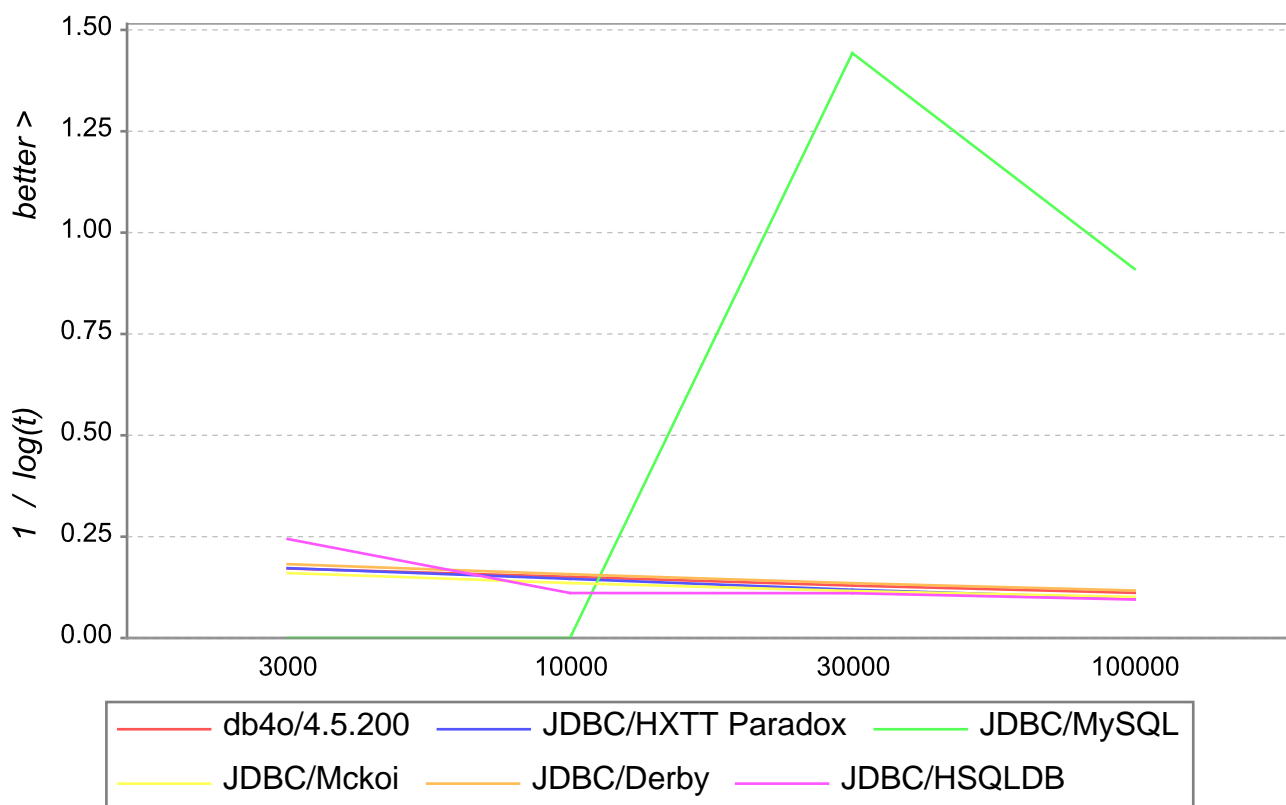


Circuit: Melbourne

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	340	755	2282	7904
JDBC/HXTT	331	946	4452	27997
JDBC/MySQL	1	1	2	3
JDBC/Mckoi	510	1602	5577	19700
JDBC/Derby	242	575	1622	5097
JDBC/HSQldb	60	8174	8489	37975

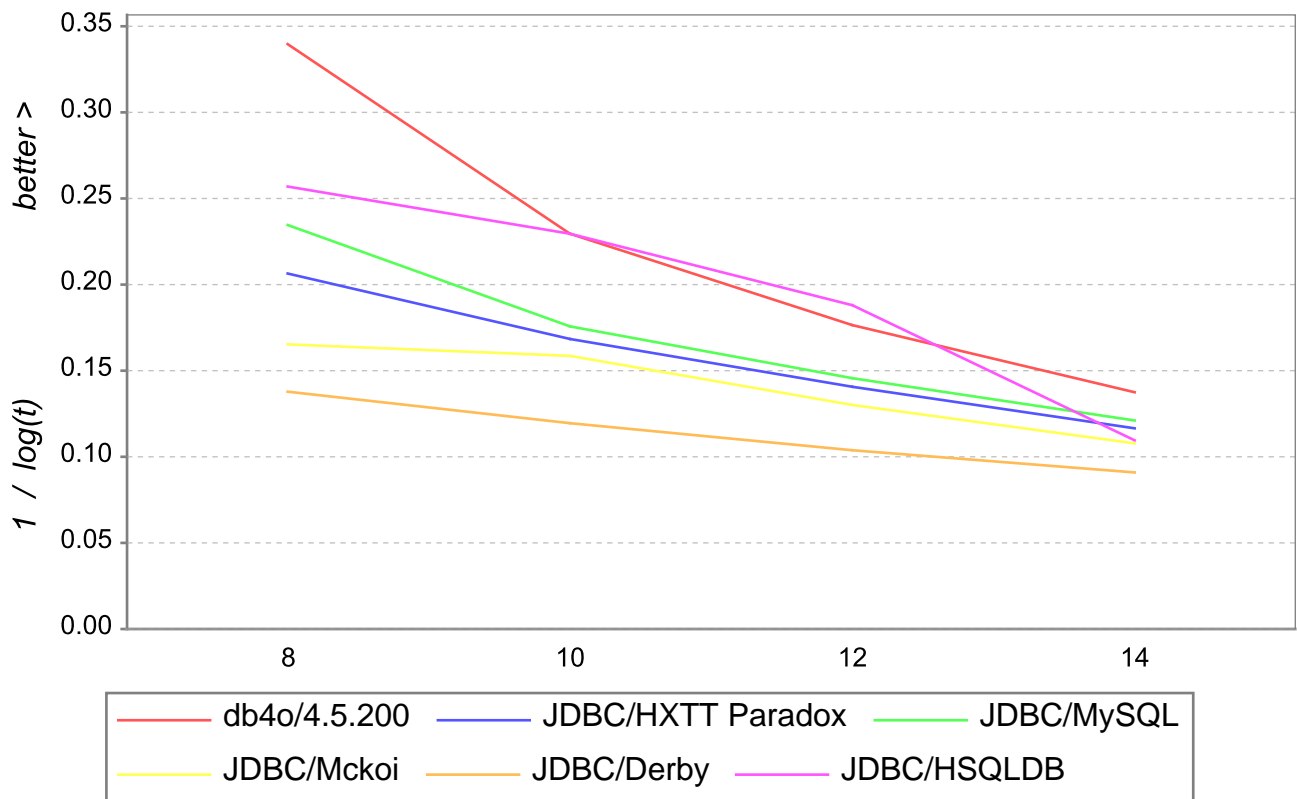


Circuit: Sepang

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	19	78	289	1441
JDBC/HXTT	127	379	1223	5325
JDBC/MySQL	71	296	959	3856
JDBC/Mckoi	424	547	2179	10689
JDBC/Derby	1417	4302	15263	59753
JDBC/HSQldb	49	78	204	9190

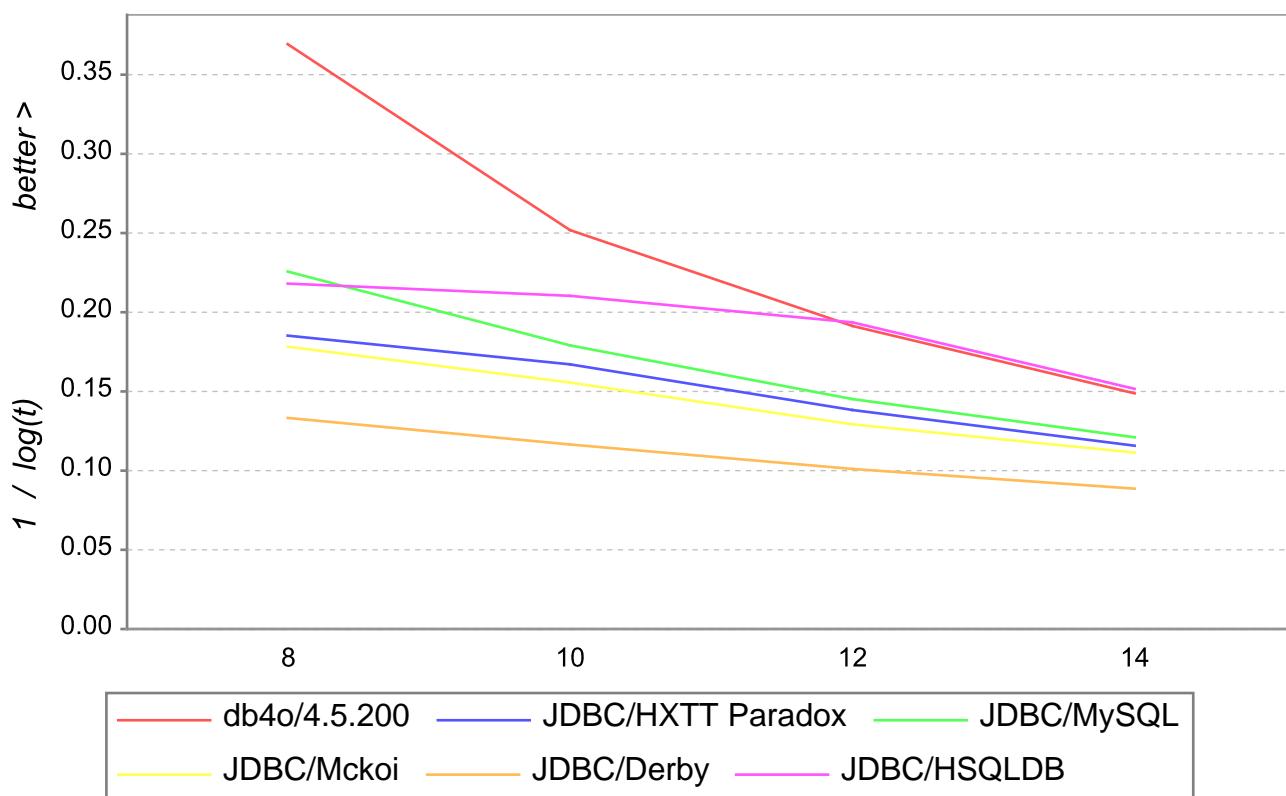


Circuit: Sepang

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	186	830
JDBC/HXTT	221	397	1382	5656
JDBC/MySQL	84	266	980	3876
JDBC/Mckoi	273	618	2294	7914
JDBC/Derby	1813	5337	19796	79478
JDBC/HSQldb	98	116	175	731

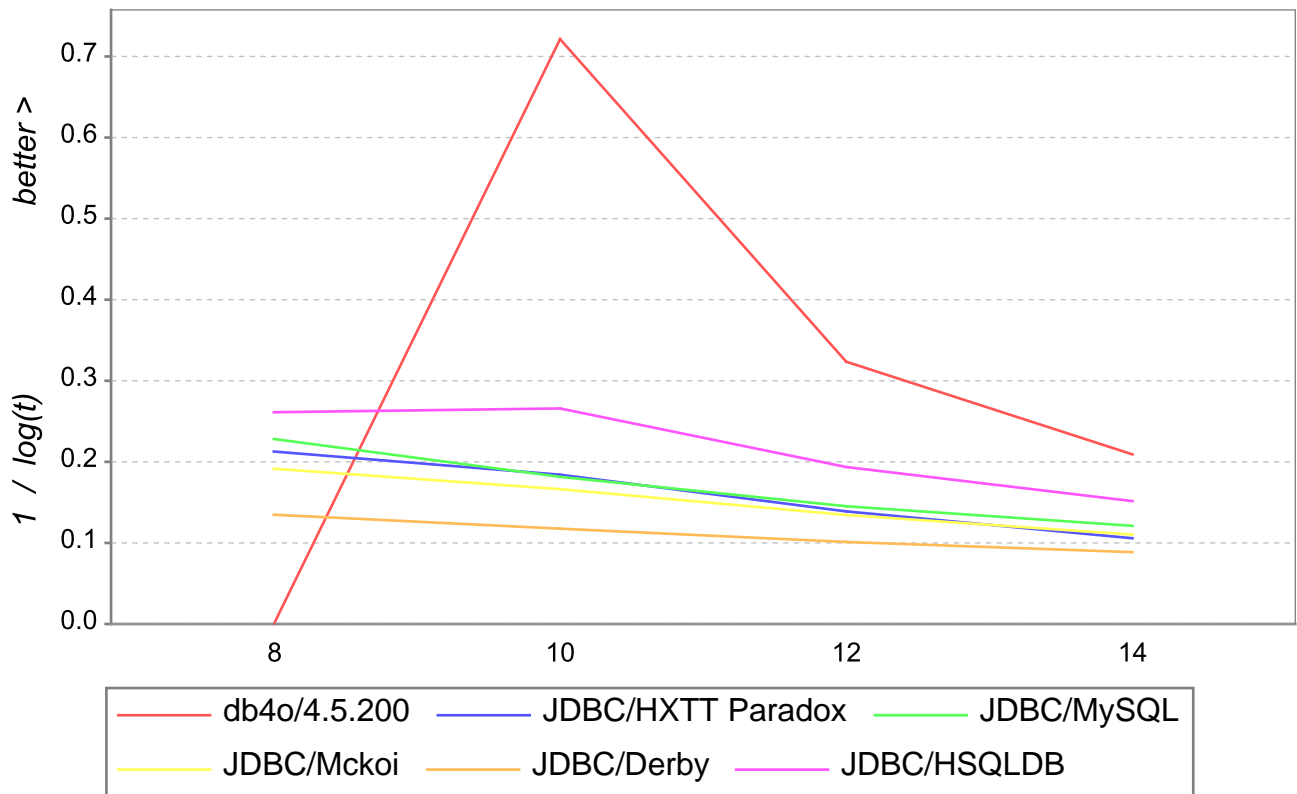


Circuit: Sepang

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	110	228	1339	12758
JDBC/MySQL	80	247	977	3864
JDBC/Mckoi	185	408	1700	8702
JDBC/Derby	1665	4936	19570	79308
JDBC/HSQldb	46	43	175	733

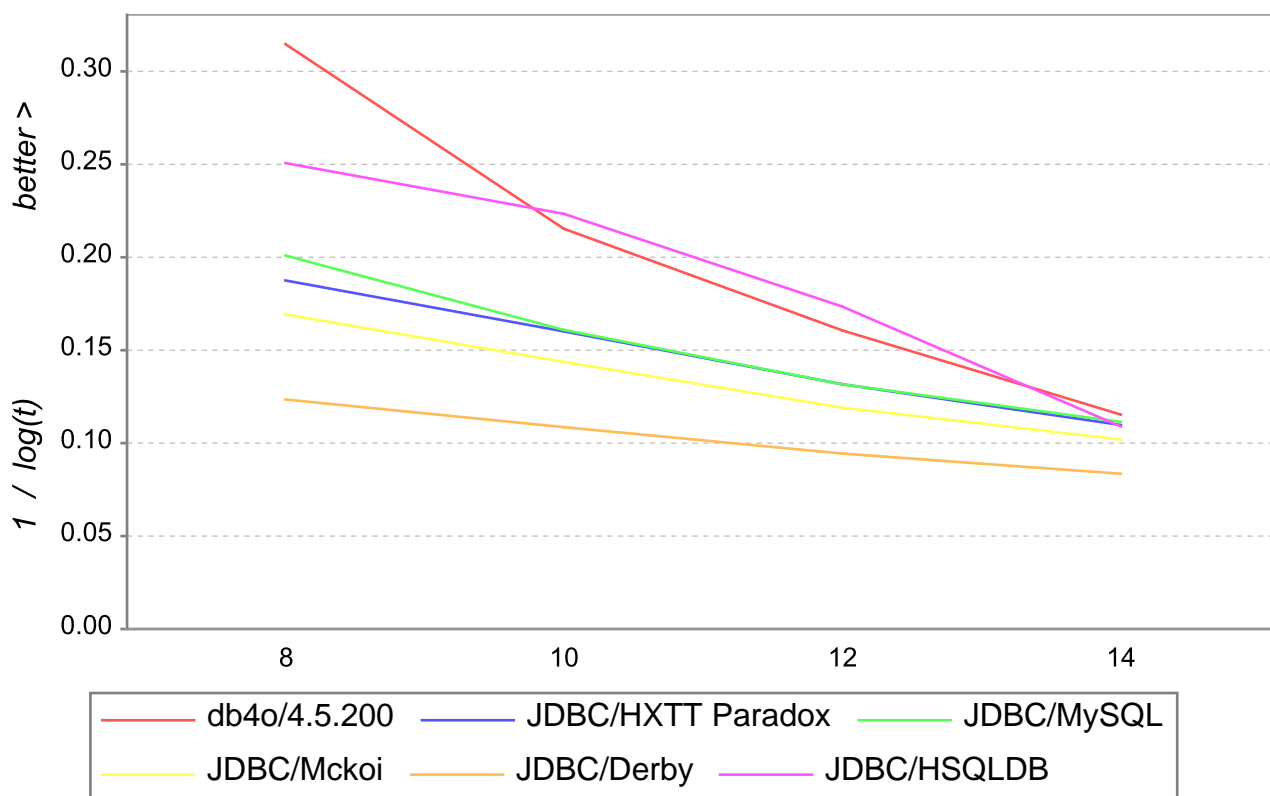


Circuit: Sepang

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	505	5823
JDBC/HXTT	207	516	1986	9052
JDBC/MySQL	145	500	1991	7908
JDBC/Mckoi	368	1052	4425	18237
JDBC/Derby	3286	9981	39938	157977
JDBC/HSQLDB	54	88	319	9688

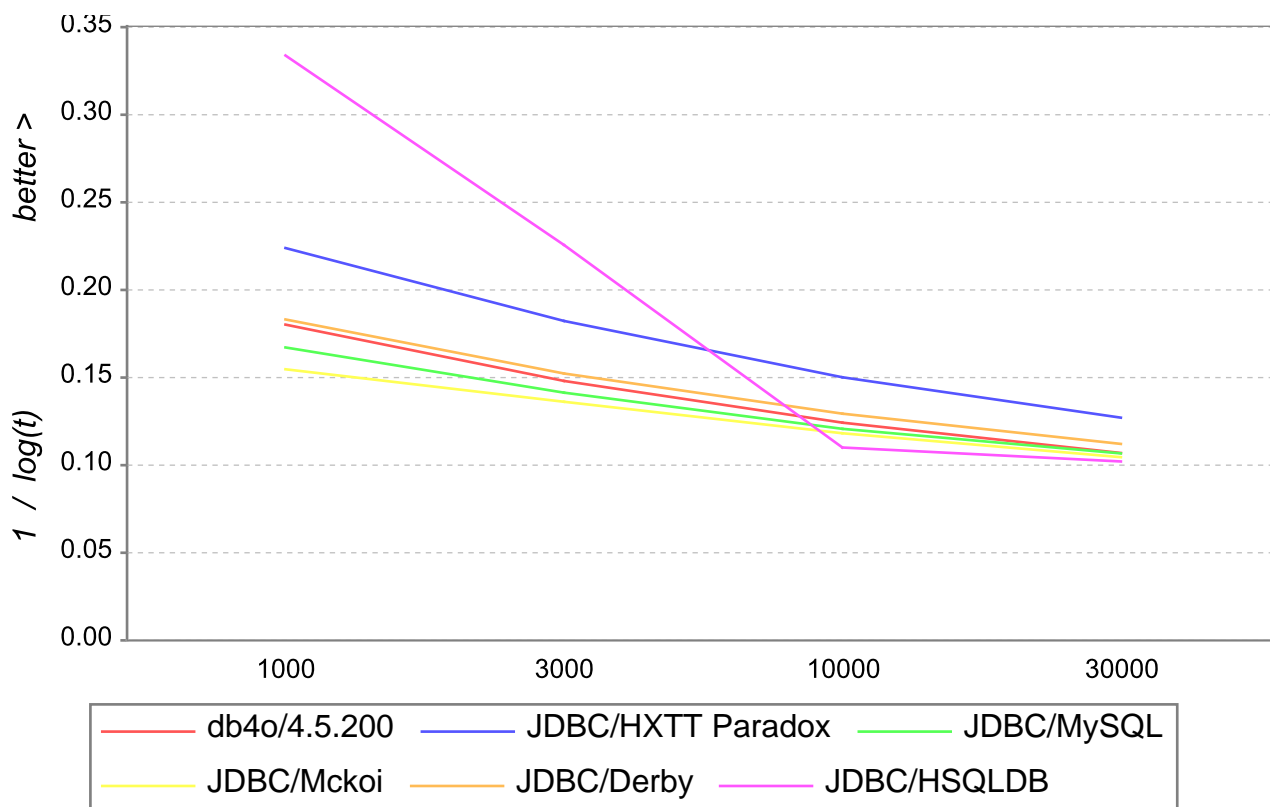


Circuit: Bahrain

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	257	857	3124	11498
JDBC/HXTT	87	241	780	2609
JDBC/MySQL	396	1179	3955	11744
JDBC/Mckoi	641	1545	4721	14229
JDBC/Derby	235	710	2272	7463
JDBC/HSQLDB	20	84	8815	17918

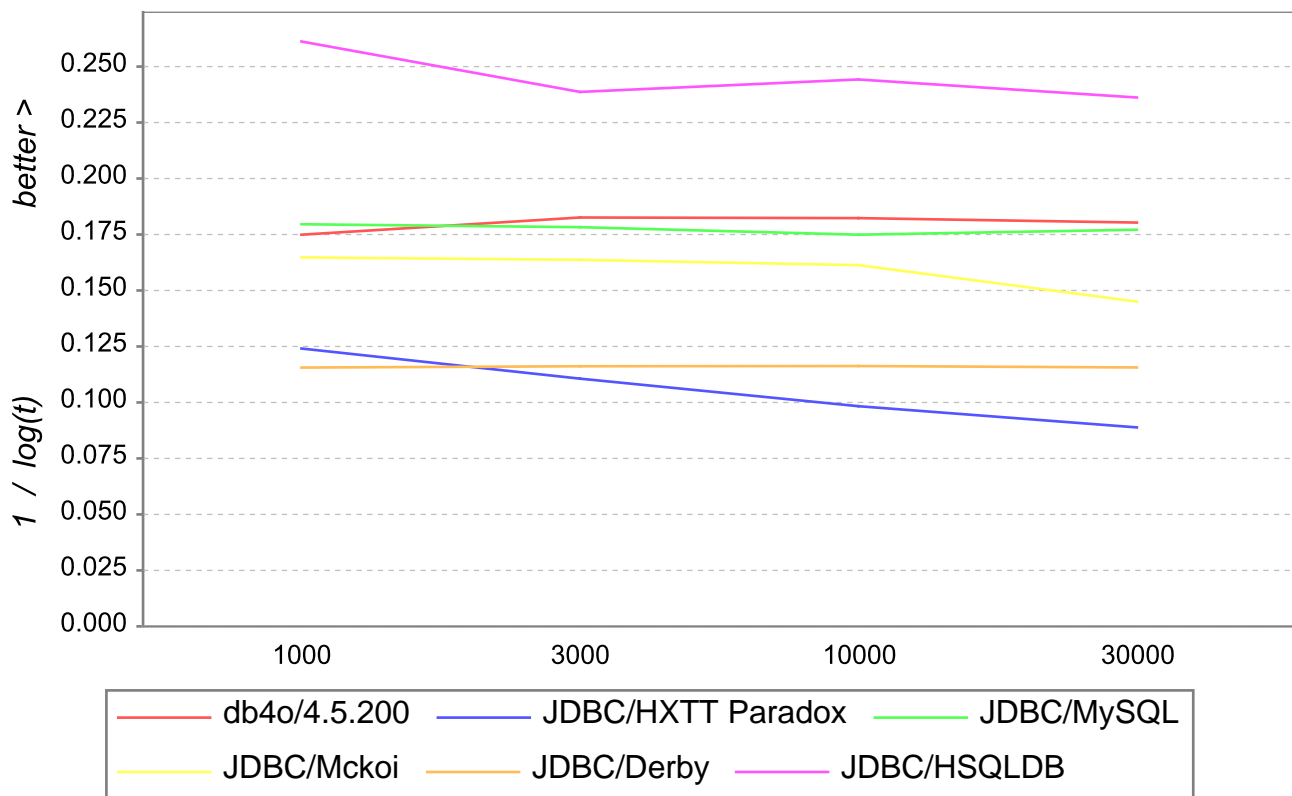


Circuit: Bahrain

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	304	239	241	256
JDBC/HXTT	3163	8427	26114	77138
JDBC/MySQL	262	273	304	283
JDBC/Mckoi	432	450	492	986
JDBC/Derby	5722	5482	5434	5705
JDBC/HSQLDB	46	66	60	69

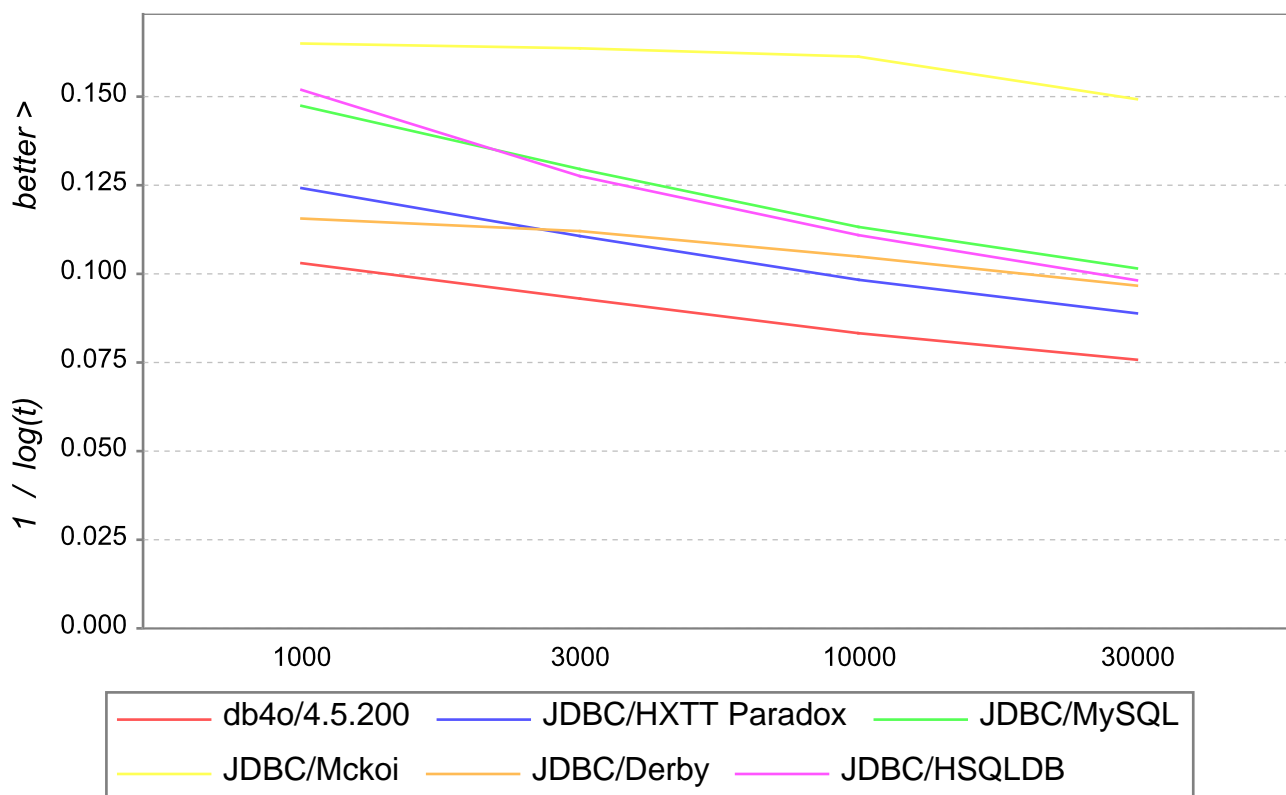


Circuit: Bahrain

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	16433	46616	164421	538062
JDBC/HXTT	3141	8404	26114	77100
JDBC/MySQL	884	2249	6839	18924
JDBC/Mckoi	429	451	493	812
JDBC/Derby	5711	7506	13814	31065
JDBC/HSQldb	723	2538	8219	26524

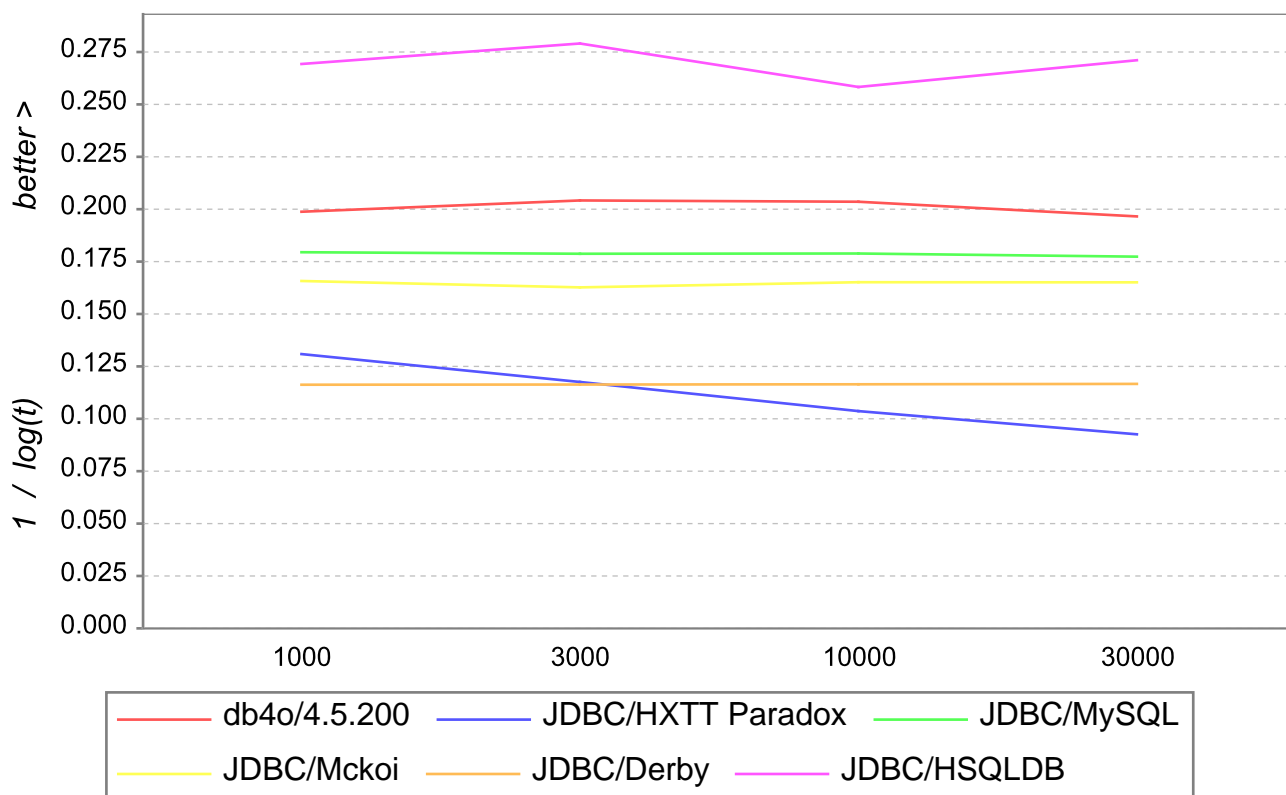


Circuit: Bahrain

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	153	134	136	162
JDBC/HXTT	2082	4944	15474	48989
JDBC/MySQL	263	269	268	281
JDBC/Mckoi	417	467	426	427
JDBC/Derby	5443	5407	5363	5285
JDBC/HSQLDB	41	36	48	40

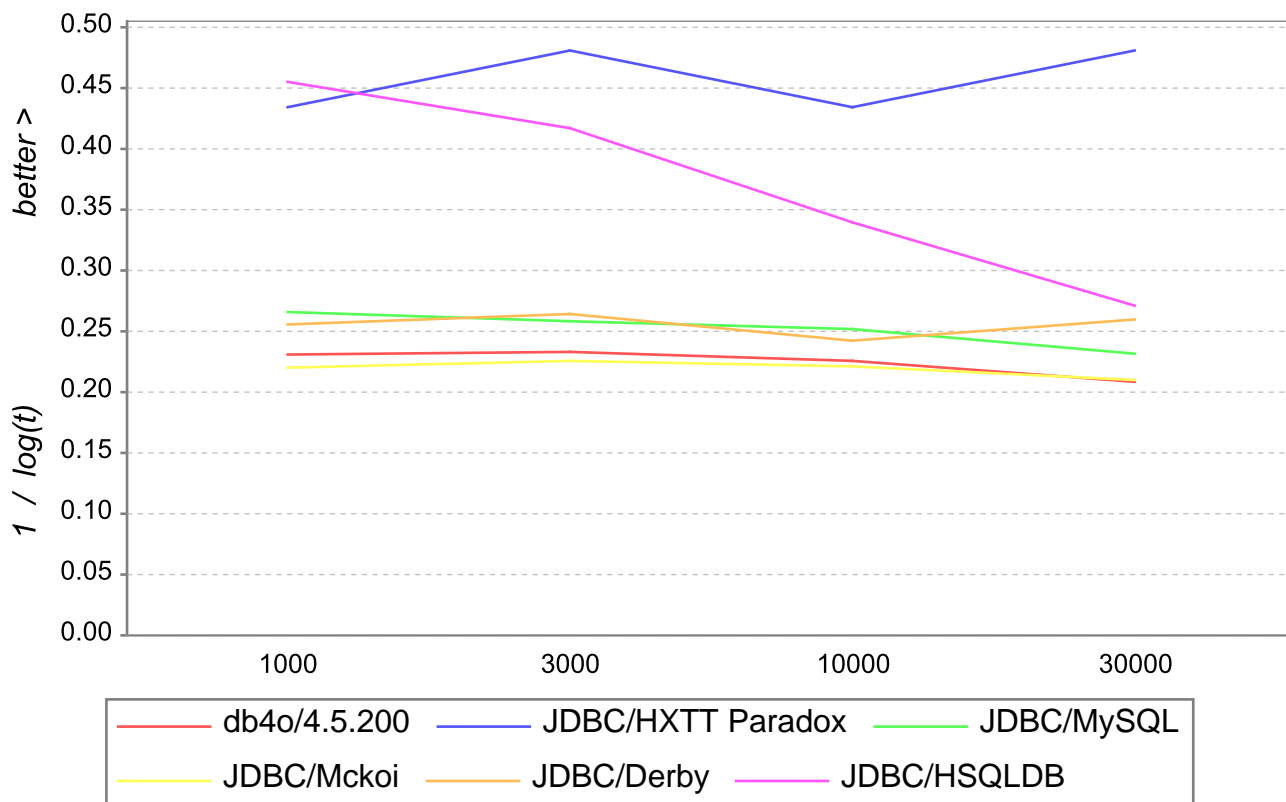


Circuit: Bahrain

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	76	73	84	121
JDBC/HXTT	10	8	10	8
JDBC/MySQL	43	48	53	75
JDBC/Mckoi	94	84	92	117
JDBC/Derby	50	44	62	47
JDBC/HSQLDB	9	11	19	40

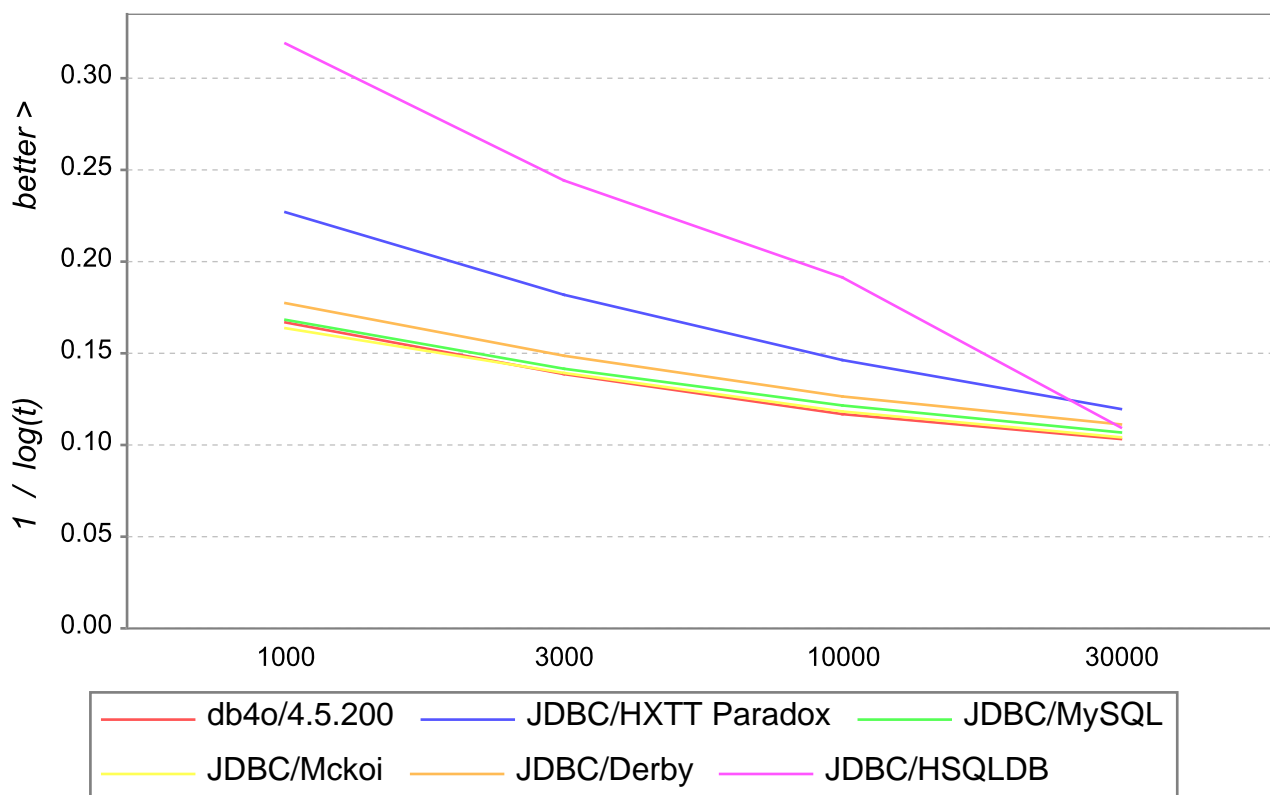


Circuit: Bahrain

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	401	1356	5215	16082
JDBC/HXTT	82	244	930	4274
JDBC/MySQL	381	1168	3738	11606
JDBC/Mckoi	450	1313	4698	14739
JDBC/Derby	281	834	2717	8030
JDBC/HSQLDB	23	60	186	9227

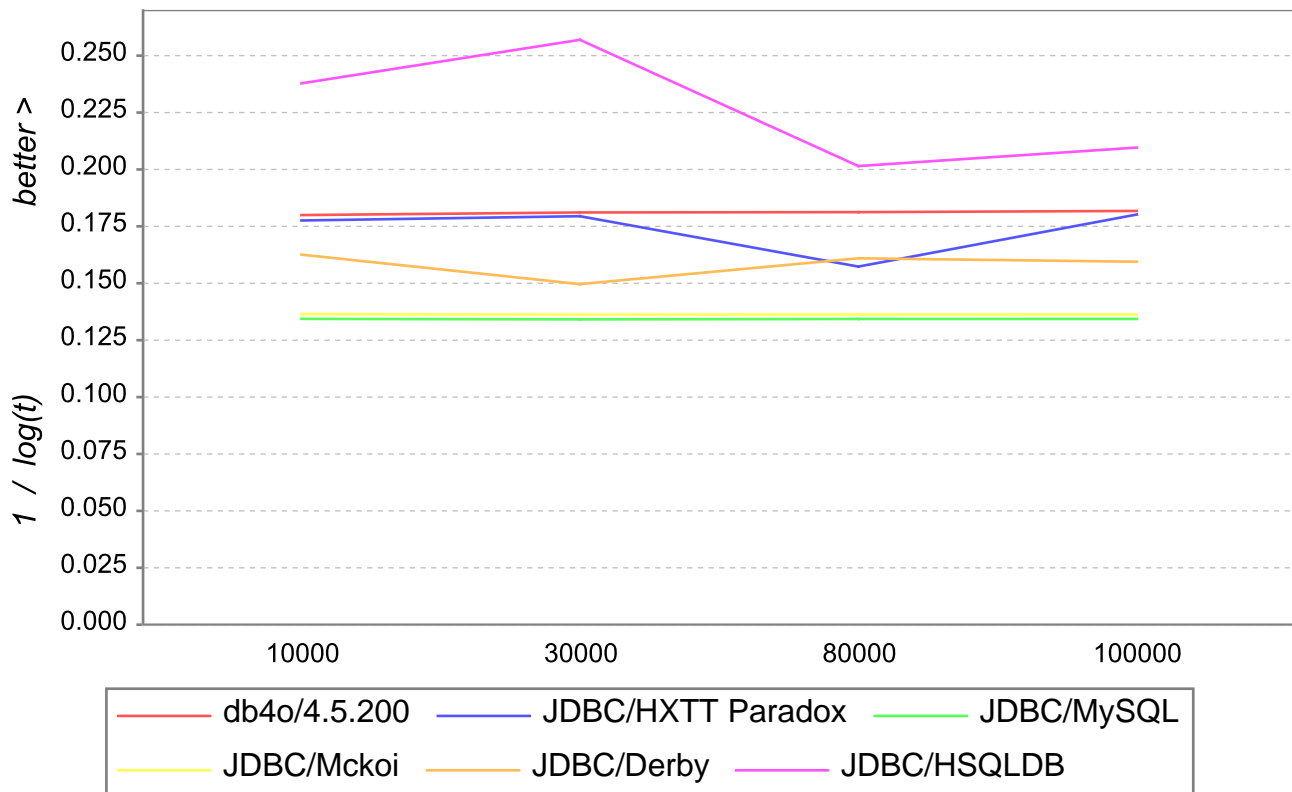


Circuit: Imola

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	250	249	245
JDBC/HXTT	279	263	576	257
JDBC/MySQL	1707	1729	1711	1711
JDBC/Mckoi	1524	1542	1540	1538
JDBC/Derby	469	799	499	529
JDBC/HSQldb	67	49	143	118

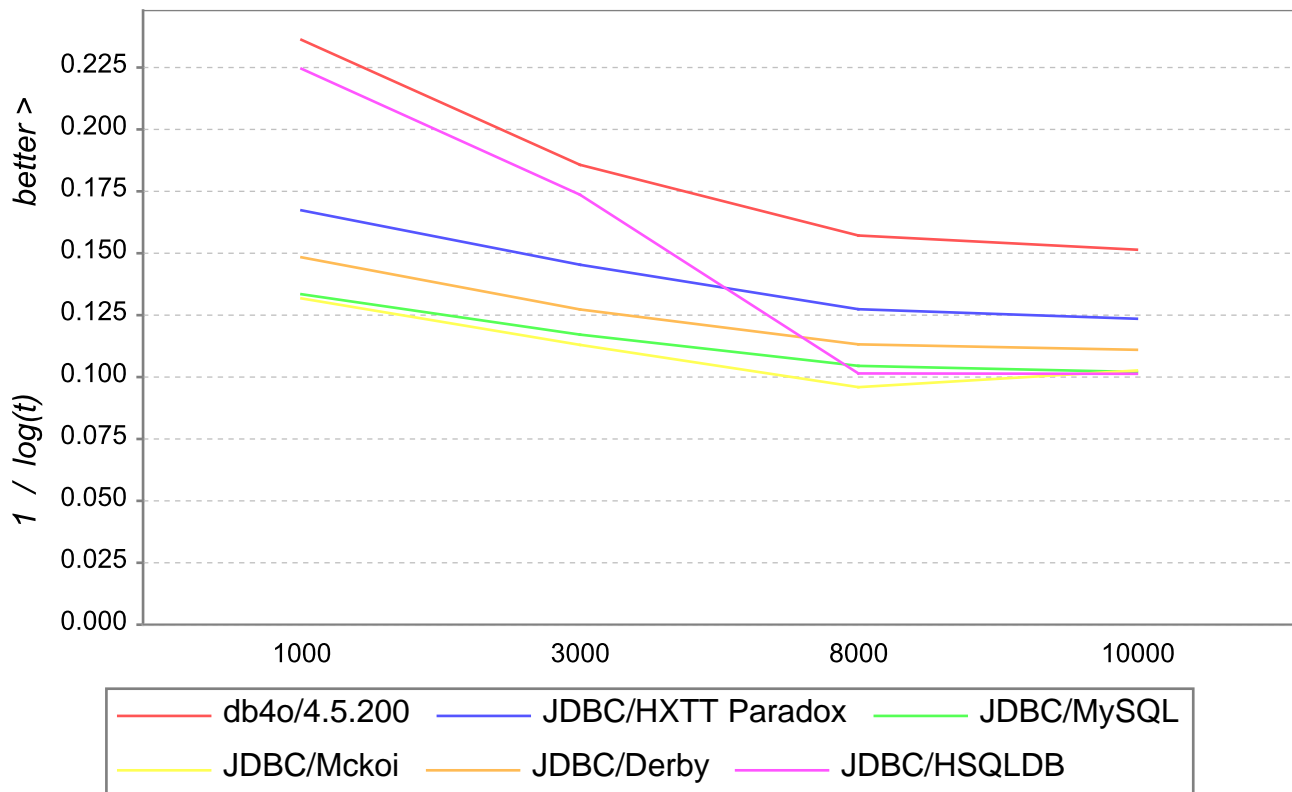


Circuit: Barcelona

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	218	580	738
JDBC/HXTT	394	972	2564	3276
JDBC/MySQL	1796	5098	14291	18012
JDBC/Mckoi	1977	6971	33687	17007
JDBC/Derby	846	2579	6865	8176
JDBC/HSQldb	86	317	19074	19349

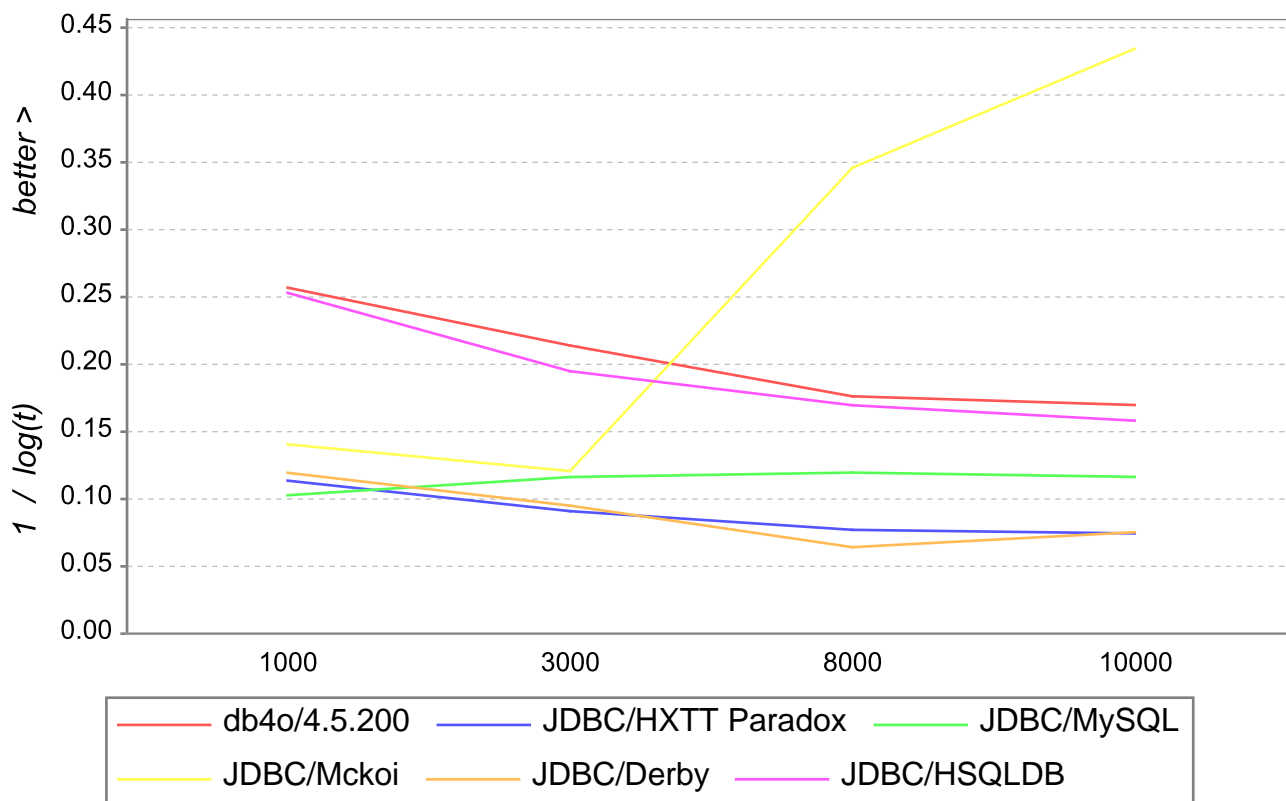


Circuit: Barcelona

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	107	291	361
JDBC/HXTT	6636	59255	428793	676941
JDBC/MySQL	16792	5420	4265	5369
JDBC/Mckoi	1226	3951	18	10
JDBC/Derby	4316	36969	5759652	580670
JDBC/HSQLDB	52	169	363	557

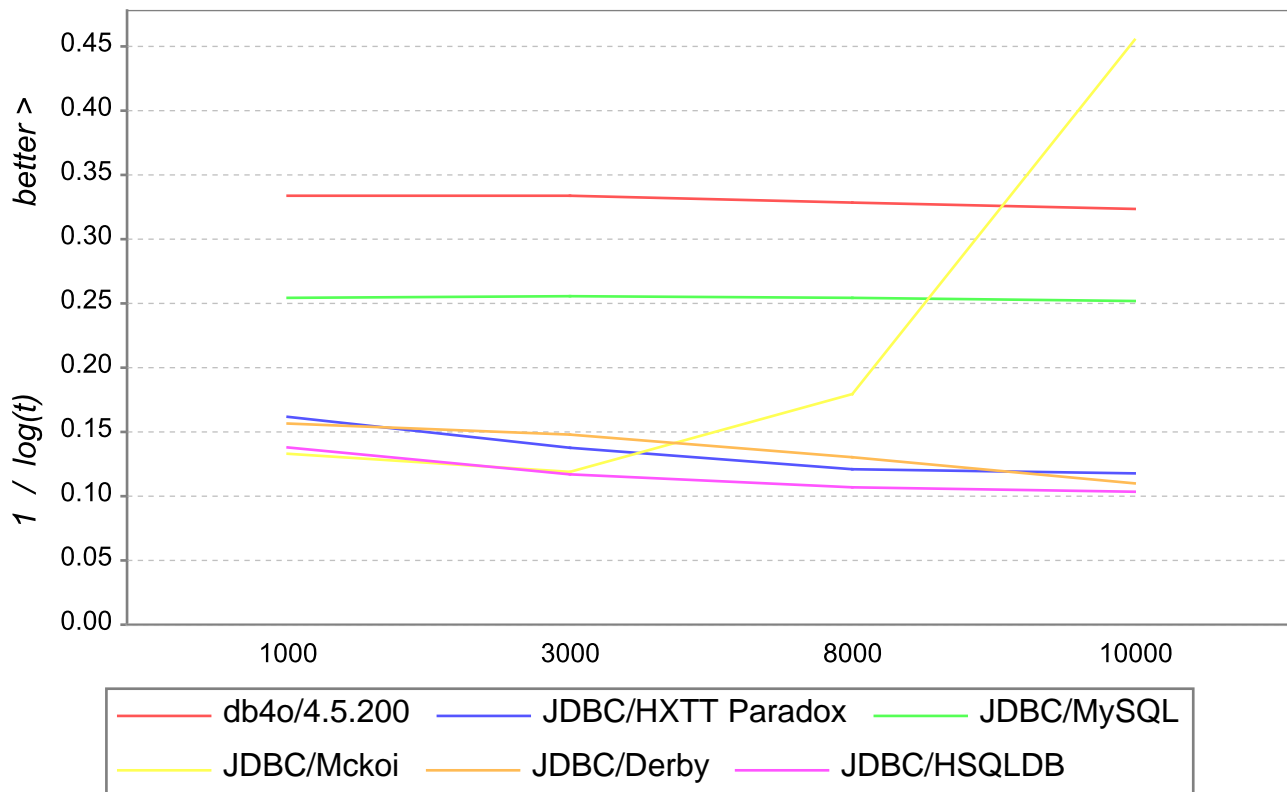


Circuit: Barcelona

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	20	21	22
JDBC/HXTT	484	1428	3888	4878
JDBC/MySQL	51	50	51	53
JDBC/Mckoi	1841	4477	263	9
JDBC/Derby	595	863	2151	8890
JDBC/HSQLDB	1407	5152	11546	15759



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	160	497	1425	2307
JDBC/HXTT	309	938	3036	3478
JDBC/MySQL	1688	5162	13459	17073
JDBC/Mckoi	2031	6536	13037	12843
JDBC/Derby	1161	3564	8974	10547
JDBC/HSQLDB	9061	9295	9725	18707

