

ANEXO IV

Tiempos obtenidos con la Aplicación basada en TPC-C

Transacción: Nueva Orden
Cantidad de Transacciones: 500

Nota: Los Tiempos están en formato segundos , milisegundos

Threads	Sql Server 2000			Sql Server 2005		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	21,563	21,49	13,128	14,204	14,173	12,33
2	*1	*1	*1	10,61	21,125	17,952
10	9,36	91,376	53,864	10,375	101,249	83,629
50	9,718	463,212	57,844	10,343	487,424	139,902
250	9,125	1726,594	48,713	10,906	2054,606	575,925
500	9,234	2375,734	57,745	10,547	2719,226	256,968

Threads	Sql Server 2005 (Snapshot)			MYSQL		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	15,468	15,423	13,287	41,687	41,595	37,427
2	12,484	24,889	21,677	33,344	66,485	62,327
10	11,688	112,954	94,366	26,78	250,448	240,52
50	11,47	517,99	179,467	25,656	1111	1077,714
250	10,719	2029,153	217,94	21,64	4095,699	1833,153
500	10,812	2722,561	215,658	21,62	5135,41	1725,93

Threads	ORACLE			DB2		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	57,781	57,576	43,953	152,312	152,96	41,245
2	47,328	94,153	68,189	144,344	286,880	73,853
10	46,297	450,479	100,453	146,359	1438,637	75,429
50	45,734	2140,806	102,982	147,563	6976,455	75,387
250	45,922	8627,981	102,706	148,844	27802,495	76,669
500	45,156	11351,622	102,903	148,109	37097,825	75,713

*1

Bug del ODBC de Sql Server 2000, Es un error de código nativo y cierra la base de datos

An unexpected exception has been detected in native code outside the VM.

Unexpected Signal : EXCEPTION_ACCESS_VIOLATION (0xc0000005) occurred at PC=0x7C911010

Function=RtlEnterCriticalSection+0xB

Library=C:\WINDOWS\system32\ntdll.dll

Current Java thread:

```

at sun.jdbc.odbc.JdbcOdbc.numResultCols(Native Method)
at sun.jdbc.odbc.JdbcOdbc.SQLNumResultCols(JdbcOdbc.java:4671)
at sun.jdbc.odbc.JdbcOdbcStatement.getColumnCount(JdbcOdbcStatement.java:1235)
at sun.jdbc.odbc.JdbcOdbcStatement.execute(JdbcOdbcStatement.java:352)
- locked <0x10c20760> (a sun.jdbc.odbc.JdbcOdbcStatement)
at sun.jdbc.odbc.JdbcOdbcStatement.executeUpdate(JdbcOdbcStatement.java:288)
at tpcc.transacciones.NuevaOrden.ejecutar(NuevaOrden.java:207)
at tpcc.transacciones.NuevaOrden.ejecutar(NuevaOrden.java:97)
at tpcc.transacciones.Transaccion.run(Transaccion.java:74)
at java.lang.Thread.run(Thread.java:534)
    
```

Transacción: Nueva Orden

Cantidad de Transacciones: 1000

Nota: Los Tiempos están en formato segundos , milisegundos

Threads	Sql Server 2000			MYSQL		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	30,531	29,638	15,832	80,609	80,302	72,884
2	*1	*1	*1	68,63	135,764	127,68
10	22,609	222,2	138,35	46,734	449,19	429,786
100	18,94	1721,406	99,534	43,468	3702,549	3617,571
500	18,235	6911,821	179,85	60,5	22549,539	5465,26
1000	20,484	11076,76	1486,33	64,172	32497,959	5460,83

Threads	Sql Server 2005			Sql Server 2005 (Snapshot)		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	25,625	25,502	21,912	26,485	26,407	22,796
2	21,203	42,219	36,95	22,75	45,141	39,677
10	20,75	202,784	166,894	20,703	202,625	157,145
100	21,125	1988,386	314,286	23,688	2265,975	727,639
500	22,406	8648,703	1318,697	24,641	9434,546	3449,623
1000	21,516	10964,605	517,97	20,609	10375,556	331,603

Threads	ORACLE			DB2		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	121,797	121,199	93,954	305,578	305,75	84,545
2	92,875	183,954	135,342	295,688	586,842	147,539
10	90,938	893,127	196,721	304,89	2997,21	150,236
100	91,484	8611,948	217,318	299,359	28429,577	150,74
500	89,375	33565,681	204,412	306,422	115836,871	152,455
1000	91,141	46176,196	207,982	306,25	152481,356	153,511

Transacción: Estado Orden
Cantidad de Transacciones: 500

Nota: Los Tiempos están en formato segundos , milisegundos

Threads	Sql Server 2000			MYSQL		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	21,578	21,99	14,565	22,562	22,328	17,634
2	*1	*1	*1	15,484	30,59	25,988
10	13,688	133,263	48,534	11,125	105,468	97,769
50	13,281	629,679	48,831	12,719	548,37	467,313
250	12,516	2334,306	42,201	11,14	1918,573	1181,298
500	12,11	3135,356	41,368	11,75	3009,377	1599,776

Threads	Sql Server 2005			Sql Server 2005 (Snapshot)		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	20,391	20,311	18,13	28,625	28,593	27,12
2	17,531	34,656	30,627	22,828	45,578	41,762
10	17	167,613	42,934	24,125	238,451	78,32
50	16,422	778,957	41,626	22,812	1083,594	70,594
250	15,93	2781,976	35,771	21,156	3944,379	58,705
500	15,188	3886,497	37,549	18,375	4604,973	51,997

Threads	ORACLE			DB2		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	32,297	32,48	18,717	136,969	136,845	49,292
2	23,922	47,108	27,377	93,719	187,126	55,436
10	21,969	212,257	29,708	93,344	906,596	55,8
50	22,150	1034,277	30,365	92,406	4367,209	53,594
250	21,219	3955,671	29,156	93,797	17692,713	48,387
500	20,313	5226,92	23,562	91,234	22833,69	44,919

Transacción: Estado Orden
Cantidad de Transacciones: 1000

Nota: Los Tiempos están en formato segundos , milisegundos

Threads	Sql Server 2000			MYSQL		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	40,829	39,695	26,571	38,703	38,58	31,833
2	*1	*1	*1	29,906	59,281	51,279
10	26,106	258,59	93,728	22,891	219,362	208,988
100	25,578	2420,784	85,295	23,328	1854,276	1740,305
500	24,812	9180,175	80,487	24,469	9151,316	2177,684
1000	24,78	12124,527	78,864	23,812	12670,292	2043,871

Threads	Sql Server 2005			Sql Server 2005 (Snapshot)		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	39,734	39,655	35,975	58	57,921	53,385
2	33,453	66,828	60,299	45,578	90,438	82,821
10	32,375	320,438	81,948	44,859	445,494	130,575
100	32,375	3089,964	79,169	43,953	4176,542	136,586
500	29,453	10902,772	68,786	39,234	14354,239	116,16
1000	32,969	15529,433	74,61	36,875	18537,8	103,116

Threads	ORACLE			DB2		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	61,969	61,359	35,999	277,125	276,617	91,405
2	47,15	93,112	53,17	190,11	379,780	106,56
10	43,468	423,44	58,985	192,141	1888,881	107,173
100	43,265	4092,781	60,25	191,406	18177,706	101,504
500	40,953	15163,812	50,532	190,453	71516,876	90,784
1000	39,391	19691,308	43,846	188,859	95186,473	86,699

Transacción: Pago

Cantidad de Transacciones: 500

Nota: Los Tiempos están en formato segundos , milisegundos

Threads	Sql Server 2000			MYSQL		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	14,766	14,126	7,79	26,188	26,31	21,965
2	10	19,796	13,578	21,796	43,216	37,809
10	9,328	90,589	32,845	9,78	88,207	67,847
50	9,922	472,305	36,201	7,281	343,62	214,65
250	9,25	1746,73	29,366	6,907	1269,637	332,87
500	9,468	2432,522	35,65	6,204	1469,368	210,587

Threads	Sql Server 2005			Sql Server 2005 (Snapshot)		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	9,984	9,937	7,653	9,5	9,453	7,738
2	9,906	17,469	13,522	8,187	16,92	12,62
10	9,547	94,172	31,181	8,579	84,428	31,358
50	9,859	468,446	33,372	8,172	387,372	25,543
250	9,703	1876,341	24,981	8,625	1639,468	23,87
500	8,984	2294,623	23,613	8,359	2074,509	21,45

Threads	ORACLE			DB2		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	21,547	21,283	8,711	127,281	127,49	17,829
2	18,78	35,73	10,259	111,344	222,610	39,95
10	17,969	176,456	10,885	111,78	1074,608	37,337
50	17,781	837,91	10,45	111,438	5253,33	37,273
250	17,203	3204,413	9,163	107,406	20028,69	32,378
500	16,89	4251,811	8,605	107,828	27029,836	30,884

Transacción: Pago

Cantidad de Transacciones: 1000

Nota: Los Tiempos están en formato segundos , milisegundos

Threads	Sql Server 2000			MYSQL		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	29,406	28,296	15,59	36,64	36,389	29,967
2	20,562	40,342	27,75	31,109	61,733	53,746
10	18,891	184,933	63,462	21,235	207,913	176,161
100	18,344	1743,304	57,833	23,63	2123,625	2011
500	18,922	7051,475	64,699	22,515	8798,583	2040,384
1000	18,687	9474,362	56,598	20,61	10484,578	1536,688

Threads	Sql Server 2005			Sql Server 2005 (Snapshot)		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	21,125	20,999	16,189	19,219	19,127	15,489
2	20,16	39,812	31,993	17,969	35,766	28,582
10	18,312	181,408	60,32	17,781	176,528	53,738
100	18,31	1711,811	53,26	18,125	1723,77	69,806
500	17,985	6663,509	58,205	17,578	6624,562	52,33
1000	18,5	9394,588	51,381	18,656	9571,101	45,152

Threads	ORACLE			DB2		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	40,734	40,307	15,527	258,203	257,733	35,559
2	37,969	74,89	23,818	223,984	446,935	77,466
10	36,25	355,674	20,405	225,594	2223,159	78,339
100	35,610	3380,512	20,73	223,969	21258,665	76,781
500	34,453	12827,433	17,741	218,203	81396,326	65,837
1000	33,844	17080,624	16,73	214,25	107658,35	58,483

Transacción: Combinada (Nueva Orden + Estado Orden + Pago)
Cantidad de Transacciones: 1500

Nota: Los Tiempos están en formato segundos , milisegundos

Threads	Sql Server 2000			MYSQL		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	*1	*1	*1	103,469	263,723	252,53
2	35,453	192,18	130,417	88	439,931	425,502
10	31,984	928,446	170,822	72,61	1754,707	1715,54
50	31,672	4507,784	431,866	78,63	10152,1	5452,26
250	31,641	17954,656	169,868	91,406	52813,248	8975,551
500	35,906	27775,52	2413,433	93,922	71513,381	8933,747

Threads	Sql Server 2005			Sql Server 2005 (Snapshot)		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	37,687	90,357	74,341	49,797	132,567	114,971
2	38,656	195,673	146,999	42,47	235,877	153,923
10	35,937	1058,758	340,691	41,688	1218,874	203,764
50	35,25	5032,807	250,275	42,406	6070,56	215,23
250	34,94	19026,165	262,269	39,593	21860,246	167,979
500	38,25	29097,726	242,475	39,891	30295,389	191,78

Threads	ORACLE			DB2		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	96,86	239,104	136,884	402,32	1099,858	176,388
2	85,953	459,691	129,321	404,343	2385,150	185,765
10	81,697	2301,145	311,619	391,422	11535,149	184,330
50	81,831	11499,929	289,877	389,328	55480,64	180,589
250	82,509	46298,43	306,153	387,75	216699,369	169,477
500	76,24	57533,254	264,104	397,828	299242,586	168,592

Transacción: Combinada (Nueva Orden + Estado Orden + Pago)
Cantidad de Transacciones: 3000

Nota: Los Tiempos están en formato segundos , milisegundos

Threads	Sql Server 2000			MYSQL		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	*1	*1	*1	225,11	577,147	555,432
2	75,172	405,769	284,478	201,843	1023,698	996,709
10	66,281	1941,191	342,546	165,407	3953,323	3853,66
100	65,563	18711,623	370,37	182,8	99255,9	7445,85
500	70,14	79190,651	3457,487	185,526	105896,56	19659,4
1000	65,172	99156,464	316,271	186,693	106964,1	20256,4

Threads	Sql Server 2005			Sql Server 2005 (Snapshot)		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	84,329	203,379	168,173	88,75	210,84	175,482
2	77,406	401,112	288,697	87,656	495,299	333,719
10	76,812	2280,33	637,717	89,781	2664,975	489,117
100	80,219	23455,27	2718,914	87,531	24958,254	424,493
500	90,813	100362,497	1251,158	86,563	93774,256	406,43
1000	97,297	149331,97	2260,89	88,485	136767,453	444,694

Threads	ORACLE			DB2		
	Total	Tot. CC	Tot. SC	Total	Tot. CC	Tot. SC
1	181,4	400,442	277,556	733,547	2174,137	259,78
2	162,174	801,456	435,67	1361,641	7584,625	311,15
10	165,268	4690,893	692,985	1252,813	36857,571	256,268
100	170,702	48555,569	657,339	1263,844	359460,352	252,971
500	174,734	197755,41	622,803	1258,721	1404000,23	237,405
1000	160,155	243831,694	584,195	1561,463	1937520,32	236,165