

(1)tracefile:tr-simpleloop.ref

tr-simpleloop	10520					
memory size						
50		rand	fifo	clock	lru	opt
	hit rate	71.4829	71.673	73.2985	73.5076	74.4962
	hit count	7520	7540	7711	7733	7837
	miss count	3000	2980	2809	2787	2683
	overall eviction count	2950	2930	2759	2737	2633
	clean eviction count	358	321	221	205	121
	dirty eviction count	2592	2609	2538	2532	2512
100		rand	fifo	clock	lru	opt
	hit rate	73.4696	73.7072	74.3251	74.3821	74.8669
	hit count	7729	7754	7819	7825	7876
	miss count	2791	2766	2701	2695	2644
	overall eviction count	2691	2666	2601	2595	2544
	clean eviction count	181	163	124	121	42
	dirty eviction count	2510	2503	2477	2474	2502
150		rand	fifo	clock	lru	opt
	hit rate	74.135	74.097	74.4202	74.4202	74.8669
	hit count	7799	7795	7829	7829	7876
	miss count	2721	2725	2691	2691	2644
	overall eviction count	2571	2575	2541	2541	2494
	clean eviction count	134	134	117	117	2
	dirty eviction count	2437	2441	2424	2424	2492
200		rand	fifo	clock	lru	opt
	hit rate	74.1065	74.173	74.4106	74.4202	74.8669
	hit count	7796	7803	7828	7829	7876
	miss count	2724	2717	2692	2691	2644
	overall eviction count	2524	2517	2492	2491	2444
	clean eviction count	135	130	117	117	2
	dirty eviction count	2389	2387	2375	2374	2442

(2)tracefile:tr-matmul.ref

tr-matmul.ref	2888048					
memory size						
50		rand	fifo	clock	lru	opt
	hit rate	65.5706	60.9679	63.9461	63.9471	79.6587
	hit count	1893709	1760781	1846794	1846822	2300581
	miss count	994339	1127267	1041254	1041226	587467
	overall eviction count	994289	1127217	1041204	1041176	587417
	clean eviction count	955784	1083353	1040220	1040199	586452
	dirty eviction count	38505	43864	984	977	965
100		rand	fifo	clock	lru	opt
	hit rate	88.7744	62.4814	63.9508	65.1508	96.7867
	hit count	2563847	1804493	1846930	1881586	2795245
	miss count	324201	1083555	1041118	1006462	92803
	overall eviction count	324101	1083455	1041018	1006362	92703
	clean eviction count	316605	1061351	1040051	1005399	91740
	dirty eviction count	7496	22104	967	963	963
150		rand	fifo	clock	lru	opt
	hit rate	96.6636	98.8084	98.8499	98.8611	99.0783
	hit count	2791692	2853633	2854832	2853732	2861428
	miss count	96356	34415	33216	32892	26620
	overall eviction count	96206	34265	33066	32742	26470
	clean eviction count	93945	33067	32099	31779	25507
	dirty eviction count	2261	1198	967	963	963
200		rand	fifo	clock	lru	opt
	hit rate	98.0478	98.8264	98.8605	98.8615	99.3328
	hit count	2831667	2854154	2855140	2855168	2868778
	miss count	56381	33894	32908	32880	19270
	overall eviction count	56181	33694	32708	32680	19070
	clean eviction count	54671	32557	31744	31717	18107
	dirty eviction count	1510	1137	964	963	963

(3)tracefile:tr-blocked.ref

tr-blocked.ref	2418144					
memory size						
50		rand	fifo	clock	lru	opt
	hit rate	99.6565	99.7341	99.7858	99.7875	99.8468
	hit count	2409838	2411713	2412965	2413005	2414440
	miss count	8306	6431	5179	5139	3704
	overall eviction count	8256	6381	5129	5089	3654
	clean eviction count	5821	4238	2935	2883	2693
	dirty eviction count	2435	2143	2194	2206	961
100		rand	fifo	clock	lru	opt
	hit rate	99.7836	99.8215	99.8324	99.8432	99.8758
	hit count	2412910	2413828	2414091	2414352	2415140
	miss count	5234	4316	4053	3792	3004
	overall eviction count	5134	4216	3953	3692	2904
	clean eviction count	3516	2856	2732	2729	1958
	dirty eviction count	1618	1360	1221	963	946
150		rand	fifo	clock	lru	opt
	hit rate	99.8199	99.8257	99.8372	99.8439	99.8954
	hit count	2413788	2413929	2414207	2414369	2415615
	miss count	4356	4215	3937	3775	2529
	overall eviction count	4206	4065	3787	3625	2379
	clean eviction count	2862	2761	2694	2682	1422
	dirty eviction count	1344	1304	1093	943	957
200		rand	fifo	clock	lru	opt
	hit rate	99.8403	99.8689	99.8683	99.8469	99.9058
	hit count	2414282	2414975	2414960	2414442	2415865
	miss count	3862	3169	3184	3702	2279
	overall eviction count	3662	2969	2984	3502	2079
	clean eviction count	2421	1990	2040	2559	1134
	dirty eviction count	1241	979	944	943	945

(4)tracefile:tr-mine.ref

tr-mine.ref						
memory size						
50		rand	fifo	clock	lru	opt
	hit rate	93.8082	94.0574	94.8874	94.8835	95.798
	hit count	543247	544690	549497	549474	554770
	miss count	35857	34414	29607	29630	24334
	overall eviction count	35807	34364	29577	29580	24284
	clean eviction count	15352	15015	23902	23918	18657
	dirty eviction count	20455	19349	5655	5662	5627
100		rand	fifo	clock	lru	opt
	hit rate	94.673	94.7825	95.152	95.1487	96.3366
	hit count	548255	548889	551029	551010	557889
	miss count	30849	30215	28075	28094	21215
	overall eviction count	30749	30115	27975	27994	21115
	clean eviction count	24319	23902	22335	22350	15517
	dirty eviction count	6430	6231	5640	5644	5598
150		rand	fifo	clock	lru	opt
	hit rate	95.0463	95.1383	95.3732	95.3742	96.6826
	hit count	550417	550949	552310	552316	559893
	miss count	28687	28155	26794	26788	19211
	overall eviction count	28537	28005	26644	26638	19061
	clean eviction count	22354	22014	21010	21003	13498
	dirty eviction count	6183	5991	5634	5635	5563
200		rand	fifo	clock	lru	opt
	hit rate	95.3266	95.3879	95.5699	95.5623	96.9472
	hit count	5520404	552395	553449	553405	561425
	miss count	27064	26709	25655	25699	17679
	overall eviction count	26864	26509	25455	25499	17479
	clean eviction count	20908	20629	19827	19871	11949
	dirty eviction count	5956	5880	5628	5628	5530

As can be seen from the charts. OPT has the best performance of course. Generally speaking the performance of lru ranked the second. In addition, clock performs a little better than fifo in most of the situation.

For lru, the performance of it increases as the size of the memory increases. That is to say that lru doesn't suffers from Belady's anomaly.