project report

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9 5963 7180   *9 3403 1350*

Experiment type 1

Input 5:

Aggregate statistics:

total number of context switches	total number of disk interrupts	total number of TLB misses	% of TLB misses	total number of page faults	% of page faults	total fraction of time in blocked state	total amount of time spent in OS mode	total amount of time spent in user mode
12	13	30	96.77 4194	13	43.33 3333	2698171 80	1300806 78	4832

Explanation:

Per-process statistics:

Process name	number of context switches	number of disk interrupts	number of TLB misses	% of TLB misses	number of page faults	% of page faults	fraction of time in blocked state	amount of time spent in OS mode	amount of time spent in user mode
proces s21	3	0	4	100	2	50	499675 97	40000	604
proces s20	5	0	11	100	4	36.3 6363 6	899356 91	80000	1812
proces s22	4	0	15	93.75 0000	7	46.6 6666 7	129913 892	140000	2416

Explanation:

Input 6:

Aggregate statistics:

total number of context switches	total number of disk interrupts	total number of TLB misses	% of TLB misses	total number of page faults	% of page faults	total fraction of time in blocked state	total amount of time spent in OS mode	total amount of time spent in user mode
354874	359890	1347996	98.976748	359890	26.709722	15255517308994	3598776678241	240252773

Explanation:

Per-process statistics:

Process name	number of context switches	number of disk interrupts	number of TLB misses	% of TLB misses	number of page faults	% of page faults	fraction of time in blocked state	amount of time spent in OS mode	amount of time spent in user mode
process26	36409	0	234189	98.874417	36408	15.546683	1819580912949	728160000	44499223
process23	65934	0	263413	99.017021	65933	25.030371	2999938007218	1318660000	47416527
process24	75683	0	273540	99.042667	75682	27.667718	3292212204581	1513640000	48479622
process27	88424	0	285641	99.078728	88423	30.956532	3546783447722	1768460000	49639121
process25	88424	0	291213	98.861044	93444	32.151115	3597002736524	1868880000	50218280

Explanation:

Aggregate statistics:

total number of context switches	total number of disk interrupts	total number of TLB misses	% of TLB misses	total number of page faults	% of page faults	total fraction of time in blocked state	total amount of time spent in OS mode	total amount of time spent in user mode
98834	98894	492436	98.943130	98894	20.083058	3414583437108	988850246952	91220350

Explanation:

Per-process statistics:

Process name	number of context switches	number of disk interrupts	number of TLB misses	% of TLB misses	number of page faults	% of page faults	fraction of time in blocked state	amount of time spent in OS mode	amount of time spent in user mode
process28	17877	0	115876	98.884651	17876	15.426836	714612588821	357520000	22036138
process29	18193	0	116649	98.862625	18192	15.595638	724095814598	363840000	22162829
process31	31382	0	129959	99.006575	31381	24.147218	987617467833	627620000	23515156
process30	31382	0	129952	99.004259	31445	24.198886	988257565856	628900000	23506227

Explanation:

Aggregate statistics:

total number of context switches	total number of disk interrupts	total number of TLB misses	% of TLB misses	total number of page faults	% of page faults	total fraction of time in blocked state	total amount of time spent in OS mode	total amount of time spent in

								user mode
49939	49940	247200	98.925902	49940	20.202347	1729025602929	499354351400	45764004

Explanation:

Per-process statistics:

Process name	number of context switches	number of disk interrupts	number of TLB misses	% of TLB misses	number of page faults	% of page faults	fraction of time in blocked state	amount of time spent in OS mode	amount of time spent in user mode
process35	9074	0	58392	98.877318	9073	15.5380887	362718358380	181460000	11096428
process32	9259	0	58464	98.868652	9258	15.8353886	368244509974	185160000	11093146
process34	15803	0	65312	98.980071	15802	24.194635	499006341412	316040000	11815291
process33	15803	0	65032	98.966687	15807	24.306869	499056393163	316140000	11759139

Explanation:

Aggregate statistics:

total number of context switches	total number of disk interrupts	total number of TLB misses	% of TLB misses	total number of page faults	% of page faults	total fraction of time in blocked state	total amount of time spent in OS mode	total amount of time spent in user mode
19247	19666	98637	98.877272	19666	19.947863	689968434703	196651562973	18283459

Explanation:

Per-process statistics:

Process name	number of context switches	number of disk interrupts	number of TLB misses	% of TLB misses	number of page faults	% of page faults	fraction of time in blocked state	amount of time spent in OS mode	amount of time spent in user mode
process36	3700	0	23254	98.84 3832	3699	15.9 0694 1	147847 929557	739800 00	441175 0
process37	3881	0	23766	98.90 1373	3880	16.3 2584 4	153284 034355	776000 00	449546 1
process39	5833	0	25654	98.93 9411	5832	22.7 3506 9	192302 833134	116640 000	468067 7
process38	5833	0	25963	98.82 3843	6255	24.1 3660 0	196533 637657	125100 000	469557 1

Explanation:

Experiment type 2

Aggregate statistics:

average process completion time	total number of TLB misses	% of TLB misses	total number of page faults	% of page faults	DRAM internal fragmentation
	98637	98.87 7272	19666	19.9 4786 3	

Explanation:

Per-process statistics:

Process name	number of TLB misses	% of TLB misses	number of page faults	% of page faults
proces s36	23254	98.84 3832	3699	15.9 0694 1
proces s37	23766	98.90 1373	3880	16.3 2584 4
proces s39	25654	98.93 9411	5832	22.7 3506 9
proces s38	25963	98.82 3843	6255	24.1 3660 0

Explanation:

Aggregate statistics:

average process completion time	total number of TLB misses	% of TLB misses	total number of page faults	% of page faults	DRAM internal fragmentation
	72198	65.12 8321	30855	42.7 3723 3	

Explanation:

Per-process statistics:

Process name	number of TLB misses	% of TLB misses	number of page faults	% of page faults

Explanation:

Aggregate statistics:

average process completion time	total number of TLB misses	% of TLB misses	total number of page faults	% of page faults	DRAM internal fragmentation

Explanation:

Per-process statistics:

Process name	number of TLB misses	% of TLB misses	number of page faults	% of page faults

Explanation:

Aggregate statistics:

average process completion time	total number of TLB misses	% of TLB misses	total number of page faults	% of page faults	DRAM internal fragmentation

Explanation:

Per-process statistics:

Process name	number of TLB misses	% of TLB misses	number of page faults	% of page faults

Explanation:

Aggregate statistics:

average process completion time	total number of TLB misses	% of TLB misses	total number of page faults	% of page faults	DRAM internal fragmentation
	55359	51.40 5887	27677	50	

Explanation:

Per-process statistics:

Process name	number of TLB misses	% of TLB misses	number of page faults	% of page faults
proces s36	13614	51.11 7035	6807	50

proces s38	13742	51.27 6119	6871	50
proces s39				

Explanation:

Aggregate statistics:

average process completion time

Explanation:

Per-process statistics:

Process name	page table size

Explanation:

Aggregate statistics:

average process completion time

Explanation:

Per-process statistics:

Process name	page table size

Explanation:

Aggregate statistics:

average process completion time

Explanation:

Per-process statistics:

Process name	page table size

Explanation:

(Bonus)

Experiment type 1

Input 1:

Aggregate statistics:

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Explanation:

Per-process statistics:

Process name	number of context switches	number of disk interrupts	number of TLB misses	% of TLB misses	number of page faults	% of page faults	fraction of time in blocked state	amount of time spent in OS mode	amount of time spent in user mode

Explanation:

Aggregate statistics:

total number of context switches	total number of disk interrupts	total number of TLB misses	% of TLB misses	total number of page faults	% of page faults	total fraction of time in blocked state	total amount of time spent in OS mode	total amount of time spent in user mode

Explanation:

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