

Libpll sequential benchmarks

January 5, 2017

- node : node index (post order traversal)
- depth : node depth from the virtual root
- lsize : recursive number of children under the left child node
- rsize : recursive number of children under the right child node
- psize : number of unique (not repeating) sites on the current node
- lsiz : number of unique (not repeating) sites on the left child node
- rsiz : number of unique (not repeating) sites on the right child node
- repeats : runtime for 500 updatepartials on the node
- TCLV opt : runtime for 500 updatepartials on the node with left and right
TCLV

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node	depth	lsize	rsize	psize	lsiz	rsiz	repeats	repeats tipinner
node0	11	0	0	25	5	5	133ms	132ms
node1	10	0	2	68	5	25	344ms	189ms
node2	10	0	0	24	6	5	126ms	127ms
node3	9	4	2	225	68	24	1122ms	624ms
node4	8	0	8	403	5	225	1984ms	1007ms
node5	7	0	10	508	5	403	2493ms	1257ms
node6	9	0	0	24	5	5	129ms	126ms
node7	9	0	0	24	5	5	125ms	125ms
node8	8	2	2	148	24	24	720ms	723ms
node9	11	0	0	25	5	5	134ms	130ms
node10	11	0	0	23	5	5	130ms	122ms
node11	10	2	2	178	25	23	912ms	885ms
node12	9	0	6	268	5	178	1371ms	672ms
node13	10	0	0	22	5	5	115ms	118ms
node14	10	0	0	25	5	5	130ms	130ms
node15	9	2	2	115	22	25	570ms	569ms
node16	8	8	6	628	268	115	3057ms	1822ms
node17	7	6	16	919	148	628	4482ms	2623ms
node18	6	12	24	1428	508	919	6952ms	6970ms
node19	7	0	0	25	5	5	134ms	132ms

node	depth	lsize	rsize	psrsize	lrsrsize	rsrsize	repeats	repeats tipinner
node20	6	0	2	72	5	25	359ms	198ms
node21	5	38	4	1597	1428	72	7946ms	4077ms
node22	11	0	0	25	5	5	133ms	131ms
node23	15	0	0	25	5	5	136ms	130ms
node24	14	0	2	90	5	25	448ms	238ms
node25	13	0	4	211	5	90	1035ms	531ms
node26	12	0	6	339	5	211	1641ms	849ms
node27	14	0	0	24	5	5	125ms	127ms
node28	13	0	2	62	5	24	311ms	175ms
node29	12	4	0	109	62	5	536ms	287ms
node30	11	8	6	681	339	109	3298ms	1939ms
node31	10	2	16	896	25	681	4357ms	2258ms
node32	9	20	0	932	896	5	4519ms	2291ms
node33	8	0	22	1022	5	932	4989ms	2514ms
node34	8	0	0	30	5	10	160ms	95ms
node35	7	24	2	1267	1022	30	6141ms	3185ms
node36	6	28	0	1329	1267	5	6454ms	3246ms
node37	9	0	0	25	5	5	131ms	131ms
node38	8	2	0	92	25	5	455ms	245ms
node39	7	4	0	188	92	5	926ms	484ms

node	depth	lsize	rsize	psrsize	lrsrsize	rsrsize	repeats	repeats tipinner
node40	8	0	0	30	8	5	158ms	155ms
node41	10	0	0	20	5	5	106ms	107ms
node42	10	0	0	25	5	5	135ms	130ms
node43	9	2	2	124	20	25	631ms	617ms
node44	8	0	6	158	5	124	793ms	407ms
node45	7	2	8	373	30	158	1829ms	994ms
node46	6	6	12	913	188	373	4488ms	4450ms
node47	5	30	20	2118	1329	913	10575ms	10320ms
node48	4	44	52	3230	1597	2118	15812ms	15652ms
node49	4	0	0	22	5	5	116ms	118ms
node50	3	98	2	3230	3230	22	15836ms	7969ms
node51	2	0	102	3230	5	3230	15888ms	7968ms
node52	2	0	0	32	12	5	166ms	101ms
node53	1	104	2	3230	3230	32	15544ms	8043ms
node54	0	0	108	3230	5	3230	15920ms	7986ms
node55	1	0	0	23	5	5	131ms	128ms
node56	0	2	0	62	23	6	324ms	176ms

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node	depth	lsize	rsize	psrsize	lsrsize	rsrsize	repeats	repeats tipinner
node0	5	0	0	121	21	21	295ms	350ms
node1	4	0	2	265	21	121	684ms	386ms
node2	4	0	0	59	21	21	153ms	151ms
node3	3	4	2	407	265	59	984ms	634ms
node4	3	0	0	54	21	21	131ms	150ms
node5	2	8	2	520	407	54	1253ms	734ms
node6	1	12	0	627	520	21	1520ms	851ms
node7	8	0	0	150	21	21	361ms	396ms
node8	7	0	2	396	21	150	957ms	577ms
node9	10	0	0	180	21	21	430ms	487ms
node10	9	0	2	411	21	180	994ms	631ms
node11	10	0	0	72	21	21	175ms	208ms
node12	9	0	2	133	21	72	323ms	217ms
node13	8	4	4	587	411	133	1422ms	932ms
node14	10	0	0	165	21	21	400ms	411ms
node15	9	0	2	339	21	165	816ms	451ms
node16	8	0	4	525	21	339	1268ms	735ms
node17	7	10	6	788	587	525	1899ms	2081ms
node18	6	4	18	845	396	788	2113ms	2056ms
node19	9	0	0	136	21	21	331ms	329ms

node	depth	lsize	rsize	psrsize	lsrsize	rsrsize	repeats	repeats tipinner
node20	8	0	2	266	21	136	689ms	365ms
node21	7	0	4	475	21	266	1157ms	651ms
node22	9	0	0	82	21	21	226ms	218ms
node23	13	0	0	84	21	21	238ms	218ms
node24	12	2	0	148	84	21	388ms	212ms
node25	13	0	0	88	21	21	232ms	215ms
node26	12	0	2	154	21	88	399ms	211ms
node27	11	4	4	270	148	154	654ms	661ms
node28	13	0	0	67	21	21	162ms	167ms
node29	12	0	2	113	21	67	277ms	165ms
node30	12	0	0	73	21	21	177ms	179ms
node31	11	4	2	187	113	73	456ms	477ms
node32	10	10	8	369	270	187	894ms	974ms
node33	9	0	20	408	21	369	988ms	525ms
node34	8	2	22	453	82	408	1151ms	656ms
node35	12	0	0	89	21	21	217ms	218ms
node36	11	2	0	188	89	21	443ms	252ms
node37	13	0	0	85	21	21	200ms	207ms
node38	13	0	0	63	21	21	159ms	153ms
node39	12	2	2	173	85	63	407ms	418ms

node	depth	lsize	rsize	psrsize	lrsrsize	rsrsize	repeats	repeats tipinner
node40	11	0	6	242	21	173	566ms	319ms
node41	10	4	8	410	188	242	955ms	994ms
node42	9	0	14	456	21	410	1075ms	583ms
node43	11	0	0	56	21	21	132ms	137ms
node44	10	0	2	117	21	56	272ms	169ms
node45	10	0	0	163	21	21	379ms	392ms
node46	9	4	2	371	117	163	909ms	900ms
node47	8	16	8	581	456	371	1354ms	1412ms
node48	7	26	26	669	453	581	1558ms	1622ms
node49	6	6	54	805	475	669	1987ms	1965ms
node50	5	24	62	935	845	805	2386ms	2275ms
node51	7	0	0	149	21	21	369ms	359ms
node52	7	0	0	160	21	21	397ms	394ms
node53	6	2	2	475	149	160	1161ms	1166ms
node54	11	0	0	101	21	21	260ms	247ms
node55	10	0	2	175	21	101	429ms	238ms
node56	9	4	0	228	175	21	559ms	307ms
node57	8	6	0	344	228	21	889ms	441ms
node58	7	0	8	430	21	344	1089ms	546ms
node59	7	0	0	225	21	21	548ms	548ms

node	depth	lsize	rsize	psrsize	lrsrsize	rsrsize	repeats	repeats tipinner
node60	6	10	2	666	430	225	1624ms	1607ms
node61	5	6	14	782	475	666	1996ms	1896ms
node62	4	88	22	975	935	782	2453ms	2366ms
node63	5	0	0	252	21	21	616ms	618ms
node64	4	0	2	541	21	252	1314ms	685ms
node65	3	112	4	993	975	541	2545ms	2406ms
node66	5	0	0	250	21	21	684ms	603ms
node67	4	2	0	585	250	21	1502ms	733ms
node68	8	0	0	90	21	21	227ms	221ms
node69	8	0	0	102	21	21	274ms	246ms
node70	7	2	2	243	90	102	618ms	590ms
node71	9	0	0	77	21	21	195ms	190ms
node72	8	0	2	149	21	77	372ms	208ms
node73	9	0	0	92	21	21	231ms	223ms
node74	8	0	2	185	21	92	467ms	250ms
node75	7	4	4	334	149	185	822ms	808ms
node76	6	6	10	432	243	334	1132ms	1051ms
node77	8	0	0	85	21	21	219ms	206ms
node78	7	2	0	181	85	21	461ms	248ms
node79	9	0	0	83	21	21	215ms	206ms

node	depth	lsize	rsize	psrsize	lrsrsize	rsrsize	repeats	repeats tipinner
node80	10	0	0	85	21	21	219ms	206ms
node81	10	0	0	56	21	21	147ms	138ms
node82	9	2	2	168	85	56	432ms	407ms
node83	8	2	6	241	83	168	617ms	393ms
node84	9	0	0	59	21	21	154ms	143ms
node85	8	0	2	100	21	59	254ms	149ms
node86	7	10	4	375	241	100	973ms	582ms
node87	6	4	16	500	181	375	1284ms	832ms
node88	5	18	22	641	432	500	1633ms	1558ms
node89	8	0	0	93	21	21	238ms	227ms
node90	10	0	0	76	21	21	196ms	186ms
node91	11	0	0	87	21	21	225ms	212ms
node92	12	0	0	74	21	21	191ms	178ms
node93	11	2	0	133	74	21	338ms	185ms
node94	10	2	4	239	87	133	613ms	577ms
node95	9	2	8	313	76	239	800ms	475ms
node96	10	0	0	78	21	21	202ms	191ms
node97	10	0	0	94	21	21	248ms	227ms
node98	9	2	2	243	78	94	631ms	589ms
node99	8	12	6	515	313	243	1331ms	1244ms

node	depth	lsize	rsize	psrsize	lrsrsize	rsrsize	repeats	repeats tipinner
node100	7	2	20	586	93	515	1482ms	834ms
node101	6	0	24	629	21	586	1600ms	792ms
node102	10	0	0	100	21	21	259ms	242ms
node103	10	0	0	84	21	21	220ms	204ms
node104	9	2	2	270	100	84	685ms	649ms
node105	10	0	0	83	21	21	212ms	200ms
node106	10	0	0	101	21	21	256ms	244ms
node107	9	2	2	238	83	101	620ms	579ms
node108	8	6	6	499	270	238	1289ms	1209ms
node109	10	0	0	105	21	21	266ms	255ms
node110	9	0	2	189	21	105	490ms	256ms
node111	12	0	0	91	21	21	234ms	221ms
node112	11	0	2	159	21	91	406ms	220ms
node113	10	4	0	286	159	21	733ms	372ms
node114	9	6	0	355	286	21	907ms	452ms
node115	8	4	8	460	189	355	1188ms	1110ms
node116	7	14	14	654	499	460	1691ms	1580ms
node117	11	0	0	32	21	21	85ms	79ms
node118	12	0	0	24	21	21	64ms	60ms
node119	11	2	0	28	24	21	71ms	68ms

node	depth	lsize	rsize	psrsize	lrsrsize	rsrsize	repeats	repeats tipinner
node120	10	2	4	44	32	28	108ms	108ms
node121	10	0	0	145	21	21	354ms	355ms
node122	9	8	2	252	44	145	614ms	362ms
node123	11	0	0	95	21	21	249ms	229ms
node124	10	0	2	200	21	95	520ms	268ms
node125	9	4	0	283	200	21	719ms	364ms
node126	8	12	6	485	252	283	1250ms	1177ms
node127	9	0	0	94	21	21	233ms	227ms
node128	8	2	0	255	94	21	623ms	337ms
node129	7	20	4	598	485	255	1469ms	1452ms
node130	6	30	26	764	654	598	1928ms	1847ms
node131	5	26	58	822	629	764	2087ms	1988ms
node132	4	42	86	874	641	822	2285ms	2116ms
node133	3	4	130	950	585	874	2484ms	2301ms
node134	2	118	136	1029	993	950	2754ms	2509ms
node135	1	0	256	1029	21	1029	2657ms	1284ms
node136	0	14	258	1035	627	1029	2629ms	2522ms
node137	0	0	0	248	21	21	627ms	601ms
