

I. EXPERIMENTAL RESULTS ON 10 SMALLER FILES

Highlighted cells contain the best results for a given data file.

TABLE I
N vs. M - FREE_CLICKTHROUGHS.DAT.CLEANED

$N \backslash M$	25	100	400	1600	6400
500 (0.07)	21.44 5275.94 0.19	23.41 5275.94 0.19	32.69 5275.94 0.19	42.11 5275.94 0.19	42.18 5275.94 0.19
1000 (0.17)	21.37 5275.94 0.19	23.39 5275.94 0.19	32.87 5275.94 0.19	42.42 5275.94 0.19	42.29 5275.94 0.19
2000 (0.44)	20.71 5275.94 0.19	20.71 5275.94 0.19	20.70 5275.94 0.19	20.74 5275.94 0.19	20.73 5275.94 0.19
4000 (1.23)	21.20 5272.57 0.19	21.15 5272.57 0.19	21.18 5272.57 0.19	21.15 5272.57 0.19	21.21 5272.57 0.19
8000 (4.19)	23.81 5272.57 0.19	23.73 5272.57 0.19	23.90 5272.57 0.19	23.79 5272.57 0.19	23.72 5272.57 0.19
16000 (17.41)	36.52 5272.57 0.19	36.47 5272.57 0.19	36.50 5272.57 0.19	36.48 5272.57 0.19	36.50 5272.57 0.19
32000 (87.08)	105.16 5272.57 0.19	105.14 5272.57 0.19	105.27 5272.57 0.19	105.26 5272.57 0.19	105.10 5272.57 0.19
64000 (485.52)	501.44 5272.57 0.19	501.24 5272.57 0.19	502.60 5272.57 0.19	501.60 5272.57 0.19	500.86 5272.57 0.19

TABLE II
N vs. M - THIRDPARTYCONTENT.LOG

$N \backslash M$	25	100	400	1600	6400
500 (0.07)	27.54 9041.41 0.55	28.23 9041.41 0.55	39.19 9041.41 0.55	92.23 9041.40 0.55	276.86 9041.37 0.55
1000 (0.41)	56.99 9560.79 1.20	55.88 9560.79 1.20	63.67 9560.79 1.20	124.97 9560.78 1.20	350.59 9560.75 1.20
2000 (1.31)	28.14 9038.22 0.55	28.11 9038.22 0.55	28.16 9038.22 0.55	28.27 9038.22 0.55	28.10 9038.22 0.55
4000 (4.29)	30.89 9038.22 0.55	30.93 9038.22 0.55	31.00 9038.22 0.55	30.93 9038.22 0.55	30.82 9038.22 0.55
8000 (8.59)	34.97 9038.22 0.55	34.93 9038.22 0.55	34.97 9038.22 0.55	34.85 9038.22 0.55	34.83 9038.22 0.55
16000 (35.92)	61.44 9038.22 0.55	61.39 9038.22 0.55	61.52 9038.22 0.55	61.44 9038.22 0.55	61.49 9038.22 0.55
32000 (255.67)	282.77 9038.22 0.55	279.79 9038.22 0.55	283.30 9038.22 0.55	279.95 9038.22 0.55	297.45 9038.22 0.55
64000 (851.01)	841.00 9038.20 0.55	871.93 9038.20 0.55	825.18 9038.20 0.55	825.74 9038.20 0.55	825.87 9038.20 0.55

TABLE III
N vs. M - EVENTSTREAM.CURRENT

$N \backslash M$	25	100	400	1600	6400
Manual (3600)	3.37 10199.04 442.18	3.00 9763.39 827.66	3.00 9763.39 897.30	3.00 9763.39 910.00	3.00 9742.43 868.01
500 (0.30)	5.05 16119.06 927.84	5.05 15184.53 1286.60	5.05 15184.53 1117.60	5.05 15184.53 1147.43	5.05 15184.53 1118.18
1000 (0.89)	5.05 16118.88 962.74	5.05 15184.35 1088.59	5.05 15184.35 1086.97	5.05 15184.35 1113.33	5.05 15184.35 1115.03
2000 (2.24)	5.05 16118.52 934.40	5.05 15183.99 1117.25	5.05 15183.99 1120.37	5.05 15183.99 1100.55	5.05 15183.99 1114.62
4000 (9.34)	5.37 16577.07 1393.08	5.37 15642.54 1089.47	5.37 15642.54 1198.06	5.37 15642.54 1127.42	5.37 15642.54 1091.39
8000 (36.63)	5.37 16575.84 1404.10	5.37 15641.31 1115.77	5.37 15641.31 1115.64	5.37 15641.31 1186.75	5.37 15641.31 1250.11
16000 (164.38)	5.37 16573.39 1545.75	5.37 15638.87 1457.71	5.37 15638.87 1443.14	5.37 15638.87 1252.26	5.37 15638.87 1331.52

TABLE IV
N vs. M - STRACE_IACCN.DAT

$N \backslash M$	25	100	400	1600	6400
500 (2.20)	228.29 7381.82 0.26	232.27 7381.82 0.26	231.27 7381.82 0.26	228.70 7381.82 0.26	227.62 7381.82 0.26
1000 (5.11)	263.56 7381.36 0.26	230.79 7381.36 0.26	263.50 7381.36 0.26	231.50 7381.36 0.26	230.99 7381.36 0.26
2000 (40.71)	73.36 7246.68 0.12	83.70 7246.68 0.12	73.20 7246.68 0.12	73.48 7246.68 0.12	83.09 7246.68 0.12
4000 (25.02)	52.72 7286.68 0.15	52.76 7286.68 0.15	52.39 7286.68 0.15	60.03 7286.68 0.15	52.72 7286.68 0.15
8000 (103.65)	118.68 7278.93 0.15	135.00 7278.93 0.15	135.43 7278.93 0.15	119.17 7278.93 0.15	118.57 7278.93 0.15
16000 (418.28)	435.21 6052.63 0.13	433.18 6052.63 0.13	433.99 6052.63 0.13	433.26 6052.63 0.13	434.40 6052.63 0.13

TABLE VII
 N vs. M - HALO_HAVE2IMPRESSION.LOG.1

$N \backslash M$	25	100	400	1600	6400
500 (1.13)	121.27 25051.52 1.59	121.75 25051.52 1.59	72.20 22492.36 1.00	83.70 22492.36 1.00	217.59 22478.79 0.97
1000 (3.49)	369.50 118131.33 4.06	116.94 33519.25 1.12	381.37 34205.86 4.32	68.13 32943.53 0.82	141.53 32703.57 0.82
2000 (9.18)	31.41 32056.85 0.76	36.58 32056.84 0.76	175.78 31351.37 9.24	31.40 32058.39 0.76	271.90 30935.61 10.29
4000 (22.75)	74.87 27464.99 0.65	73.62 27464.99 0.65	73.44 27464.99 0.65	75.15 27464.99 0.65	73.72 27464.99 0.65
8000 (66.14)	116.17 27460.96 0.65	114.09 27460.96 0.65	116.08 27460.96 0.65	114.14 27460.96 0.65	114.09 27460.96 0.65
16000 (220.04)	280.28 28208.58 1.15	284.98 28208.58 1.15	285.39 28208.58 1.15	284.90 28208.58 1.15	284.43 28208.58 1.15
32000 (1116.66)	1170.82 27944.86 1.15				

TABLE VIII
 N vs. M - LA-UR-NODE-NOZ.TXT

$N \backslash M$	25	100	400	1600	6400
500 (0.55)	1281.71 10572.83 0.59	1185.79 10572.83 0.59	1224.63 10572.83 0.59	1162.16 10572.83 0.59	1165.66 10572.83 0.59
1000 (3.18)	159.04 13649.76 0.67	187.25 13649.76 0.67	124.42 13977.36 0.65	146.40 13977.36 0.65	313.34 13977.36 0.65
2000 (3.20)	785.99 10652.03 0.71	804.44 13059.59 0.73	795.74 10954.10 0.78	795.10 10954.10 0.78	807.12 10954.10 0.78
4000 (8.12)	1474.60 10422.70 0.76	1477.00 12035.14 0.78	44382.14 9277.02 0.80		

TABLE IX
 N vs. M - SEARCHEVENTS.DAT.CLEANED

$N \backslash M$	25	100	400	1600	6400
500 (1.04)	9226.15 17864.64 2.70	6890.45 16529.90 2.39			
1000					
2000 (35.09)	130.84 12779.72 0.84	118.82 12779.72 0.84	120.73 12779.72 0.84	120.17 12779.72 0.84	118.84 12779.72 0.84
4000 (57.46)	134.77 12778.65 0.84	132.15 12778.65 0.84	131.94 12778.65 0.84	134.39 12778.65 0.84	134.70 12778.65 0.84

TABLE V
 N vs. M - LA-UR-EVENTS.CSV

$N \backslash M$	25	100	400	1600	6400
500 (0.44)	76.18 6137.54 2.13	66.58 6065.06 1.27	66.42 6065.06 1.27	73.59 6065.06 1.27	206.11 5772.12 0.67
1000 (0.76)	66.05 6122.50 1.13	64.64 6122.50 1.13	65.45 6122.50 1.13	74.62 6122.50 1.13	158.54 5772.10 0.67
2000 (1.52)	25.32 5773.51 0.67	24.32 5773.51 0.67	25.22 5773.51 0.67	32.41 5773.51 0.67	155.69 5773.51 0.67
4000 (5.66)	20.10 5773.51 0.67	20.01 5773.51 0.67	20.47 5773.51 0.67	22.86 5773.51 0.67	263.92 8231.02 6.93
8000 (15.32)	28.15 5773.51 0.67	28.29 5773.51 0.67	28.66 5773.51 0.67	31.20 5773.51 0.67	274.85 8231.02 6.93
16000 (59.04)	68.78 5773.51 0.67	68.97 5773.51 0.67	69.54 5773.51 0.67	71.90 5773.51 0.67	319.46 8231.02 6.93
32000 (154.43)	205.29 6121.86 1.13	203.49 6121.86 1.13	204.49 6121.86 1.13	203.94 6121.86 1.13	193.12 6156.75 1.13
64000 (1188.09)	1222.82 5778.32 0.73				

TABLE VI
 N vs. M - MESSAGES.SDB

$N \backslash M$	25	100	400	1600	6400
Manual (3600)	0.62 8316.77 337.44	0.62 8355.71 438.29	0.62 8313.52 292.88	0.52 8297.47 295.68	0.52 8297.04 292.05
500 (2.13)	0.67 8098.46 123.88	0.67 8098.46 127.76	0.67 8098.46 130.17	0.67 8098.46 125.52	0.67 8098.46 124.45
1000 (5.75)	1.10 9346.35 432.61	1.10 8443.28 418.64	1.24 8549.67 425.35	1.24 8544.63 442.23	1.24 8541.95 444.56
2000 (6.55)	2.48 10881.17 3935.54	2.48 10881.17 3640.04	2.48 10881.17 3983.46	2.48 10881.17 3695.27	2.48 10881.17 3643.84
4000 (16.26)	0.57 7936.66 868.20	0.57 7936.66 881.52	0.57 7936.66 885.64	0.57 7936.66 910.99	0.57 7936.66 925.19
8000 (74.20)	0.48 7932.71 245.05	0.48 7932.71 242.79	0.48 7932.71 249.90	0.48 7932.71 244.78	0.48 7932.71 248.62
16000 (585.03)	0.57 7995.88 717.57	0.48 7932.65 758.57	0.48 7932.65 696.82	0.48 7932.65 760.00	0.48 7932.65 698.15

TABLE X
 N vs. M - 4046.xls

$N \backslash M$	25	100	400	1600	6400
500 (13.13)	13.69 22549.14 0.99	13.57 22549.14 0.99	13.57 22549.14 0.99	13.46 22549.14 0.99	13.51 22549.14 0.99
1000 (104.76)	125.68 22550.81 1.00	214.68 22143.57 1.00	483.99 20990.58 1.00	1443.91 18300.71 1.00	1462.13 18300.71 1.00
2000 (97.235)	104.54 22403.55 0.98	150.36 22338.03 0.98	449.77 22107.26 0.98		
4000					
8000 (483.32)	594.60 22829.02 0.97		597.12 22829.02 0.97	591.70 22829.02 0.97	