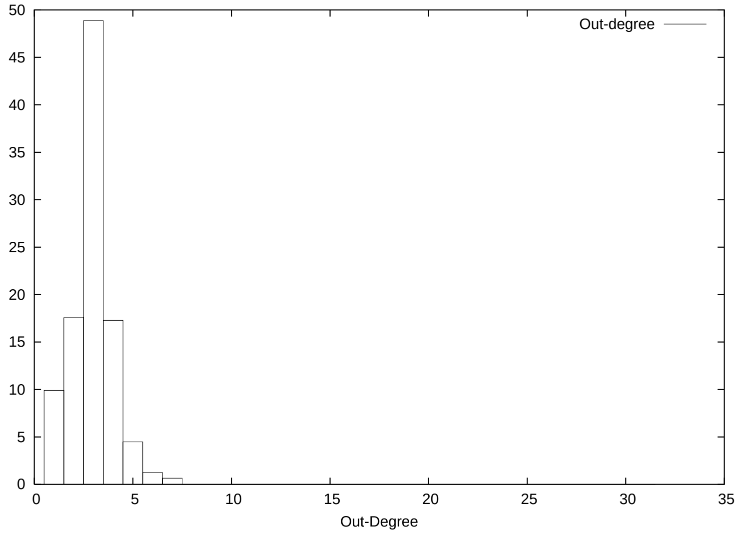
Graph: murphi/cache4

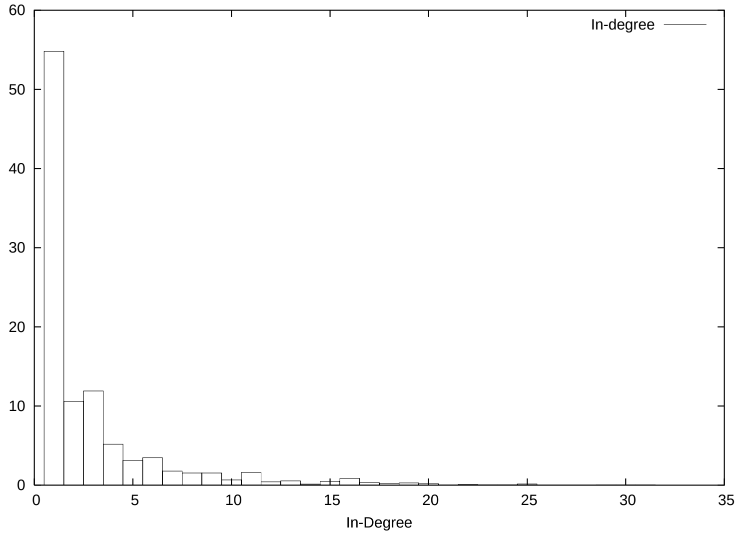
General Info

Example title	Cache coherence protocol
Parameter	3
Reduction	
Modification	
States	15,703
Edges	46,355
Average degree	2.9

Out-Degrees distribution:



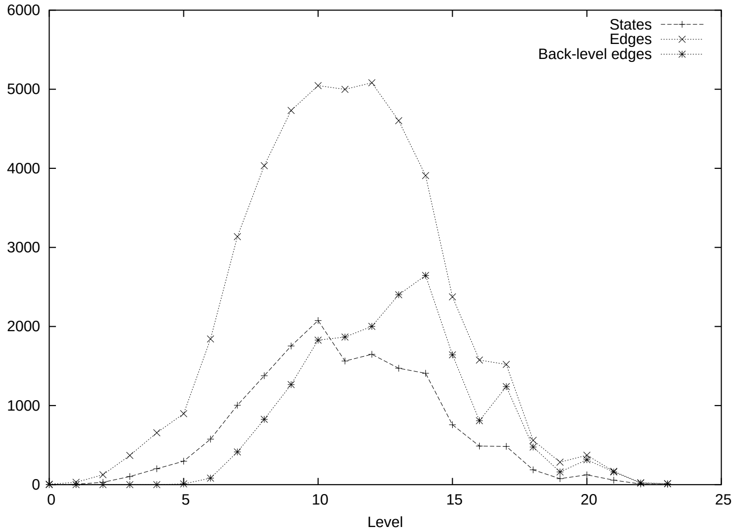
In-Degrees distribution:



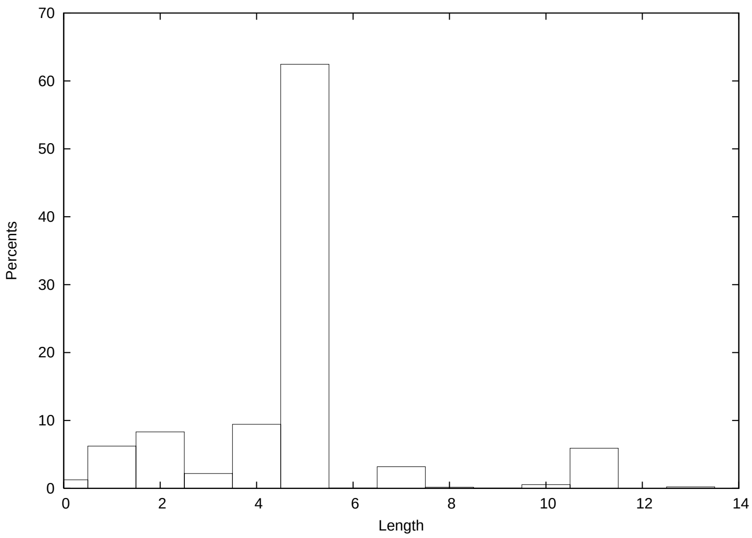
BFS Info

BFS height	23
BFS width	2,076 (13.2%)
Back level edges	18,175 (39.2%)

BFS level info:



Back level edges lengths:



SCC Info

SCC components	1
SCC quetient height	0
SCC quetient nontrivial height	0
Number of terminal components	1
The largest component is	initial the only terminal

Statistics according to **sizes**:

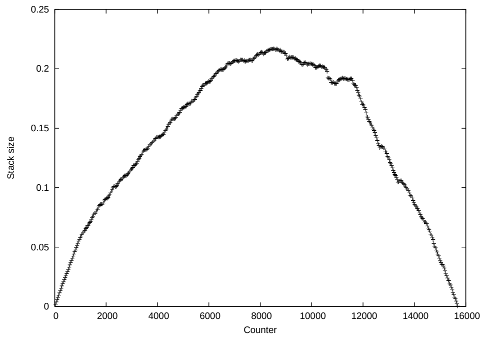
Size	Number of components	Number of states here
15,703	1	100%

SCC component graph (part):

DFS Info

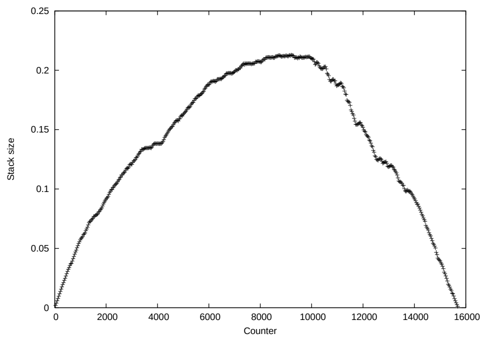
Run 0

front-edges : back-edges : cross-edges = 15,702 : 11,093 : 19,560 = 33.8%:23.9%:42.1%
Max. stack size: 3,407 (21.6%)
Shortest cycle detected: 6
Most often detected lengths of cycles: 6 (313), 12 (137), 18 (57), 24 (41), 9 (26)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 15,702 : 10,990 : 19,663 = 33.8%:23.7%:42.4%
Max. stack size: 3,347 (21.3%)
Shortest cycle detected: 6
Most often detected lengths of cycles: 6 (329), 12 (131), 18 (47), 24 (44), 72 (39)
Stack graph:



Local Structure

Short cycles(up to 6)

2	0	(0%)
3	0	(0%)
4	0	(0%)
5	0	(0%)
6	5,260	(33.4%)

Diamonds

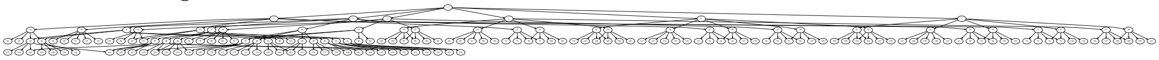
12,553 (79.9%)

Neighborhoods

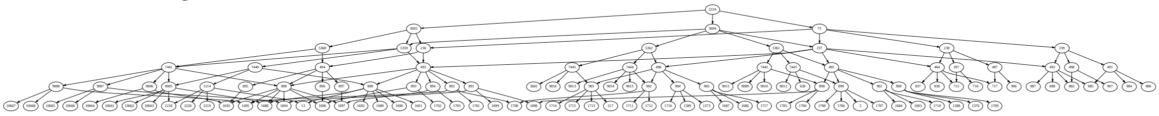
k	avg size	avg clustering
1	3.9	1
2	12	1.2
3	30.4	1.3
4	69.6	1.4

Visualization of some parts of the state state space:

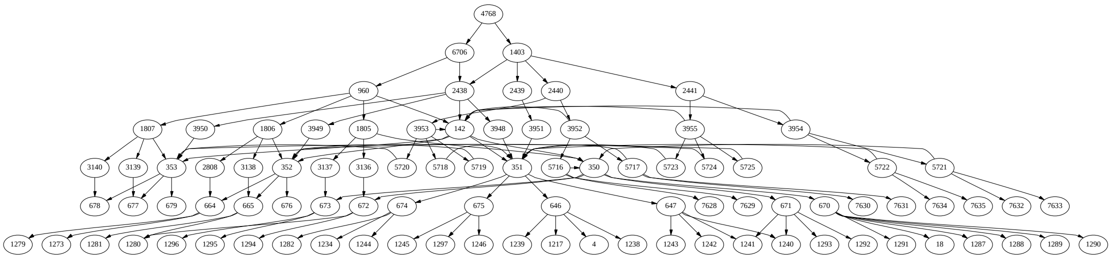
Initial walk length: 0



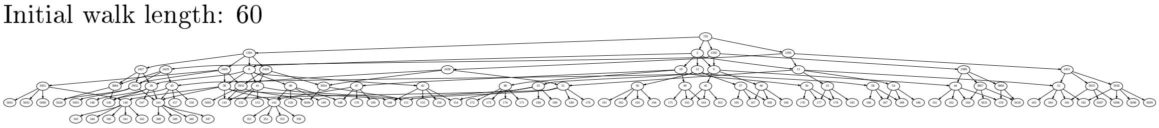
Initial walk length: 20



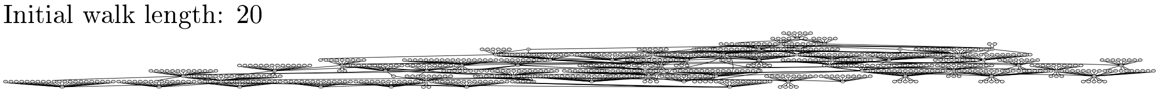
Initial walk length: 40



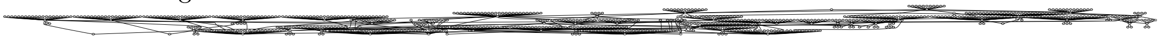
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60