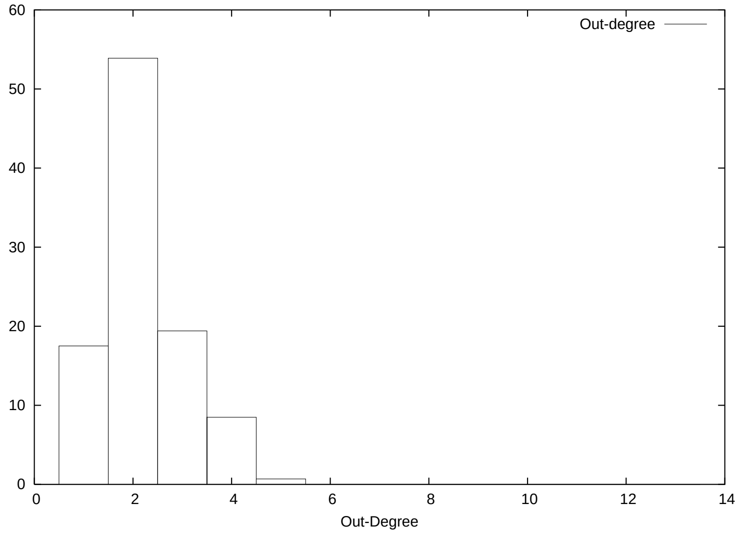
Graph: murphi/cache3

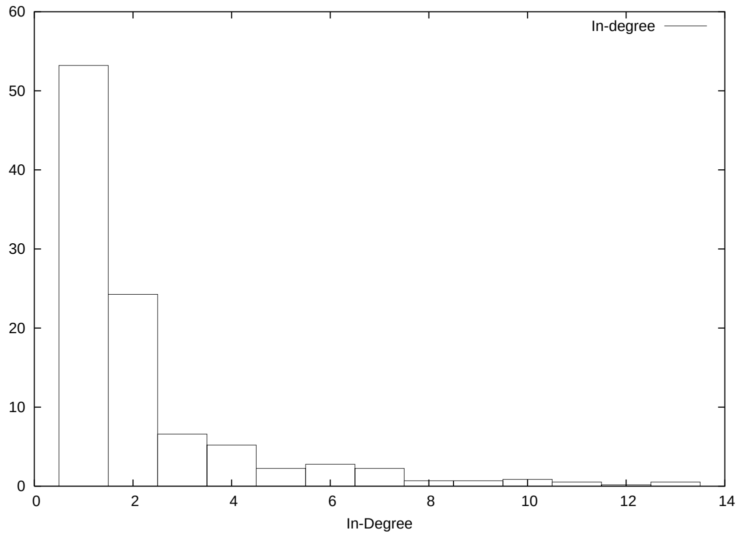
General Info

Example title	Cache coherence protocol
Parameter	2
Reduction	
Modification	
States	577
Edges	1,275
Average degree	2.2

Out-Degrees distribution:



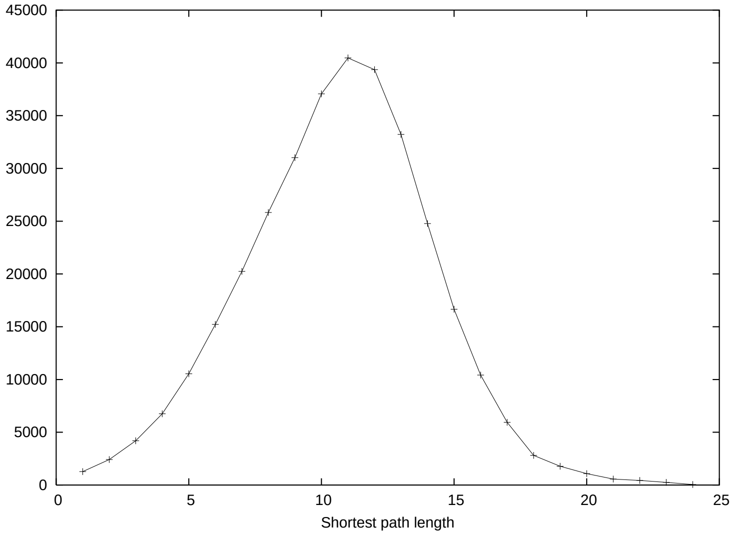
In-Degrees distribution:



Shortest Paths Info

Diameter: 24
Average shortest path length: 10.6395

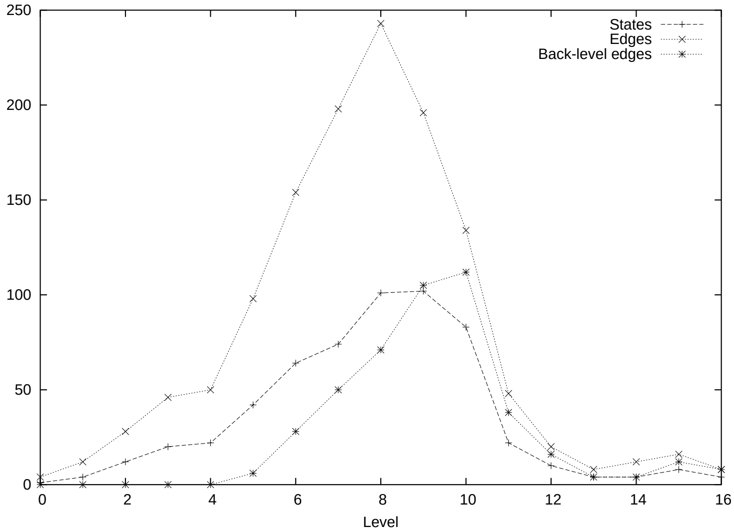
Shortest paths lengths frequencies:



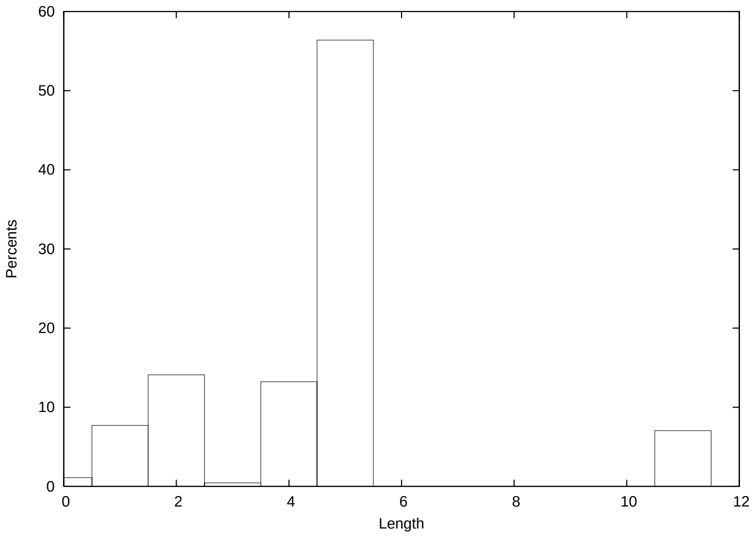
BFS Info

BFS height	16
BFS width	102 (17.6%)
Back level edges	454 (35.6%)

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**:

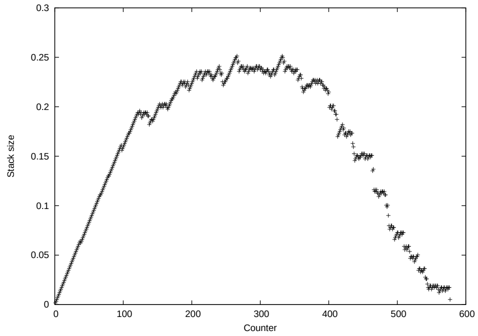
Size	Number of components	Number of states here
577	1	100%

SCC component graph (part):

DFS Info

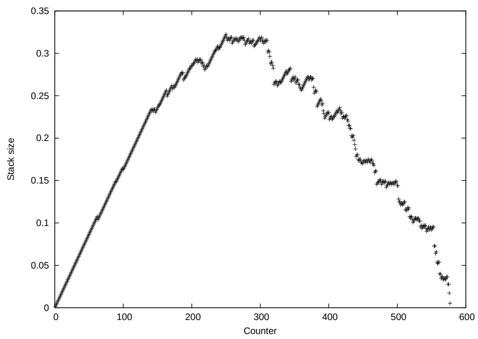
Run 0

front-edges : back-edges : cross-edges = 576 : 228 : 471 = 45.1%:17.8%:36.9%
Max. stack size: 145 (25.1%)
Shortest cycle detected: 6
Most often detected lengths of cycles: 78 (15), 6 (14), 12 (12), 18 (10), 57 (10)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 576 : 323 : 376 = 45.1%:25.3%:29.4%
Max. stack size: 186 (32.2%)
Shortest cycle detected: 6
Most often detected lengths of cycles: 12 (21), 125 (15), 24 (13), 62 (12), 6 (12)
Stack graph:



Local Structure

Short cycles(up to 6)

2	0	(0%)
3	0	(0%)
4	0	(0%)
5	0	(0%)
6	189	(32.7%)

Diamonds

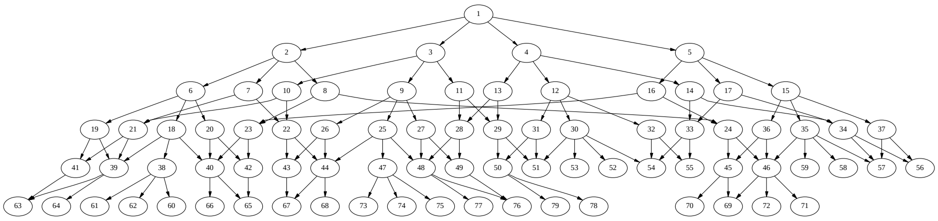
387 (67%)

Neighborhoods

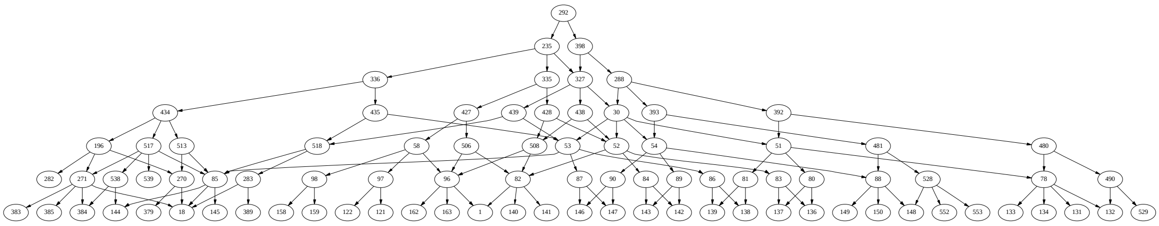
k	avg size	avg clustering
1	3.2	1
2	7.3	1.1
3	14.6	1.2
4	26.3	1.3

Visualization of some parts of the state state space:

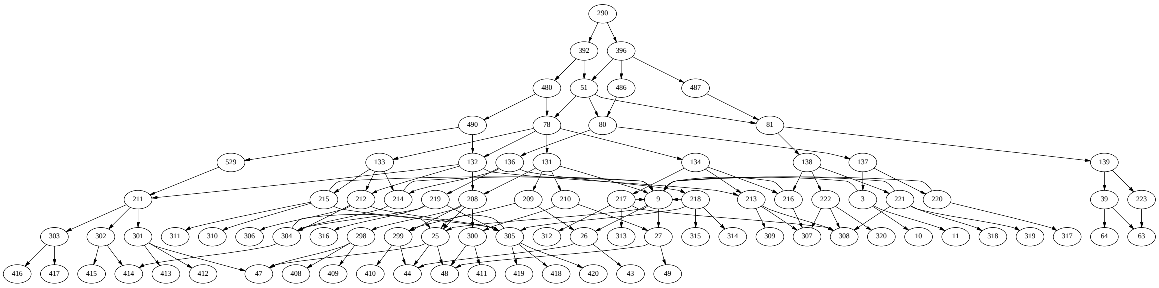
Initial walk length: 0



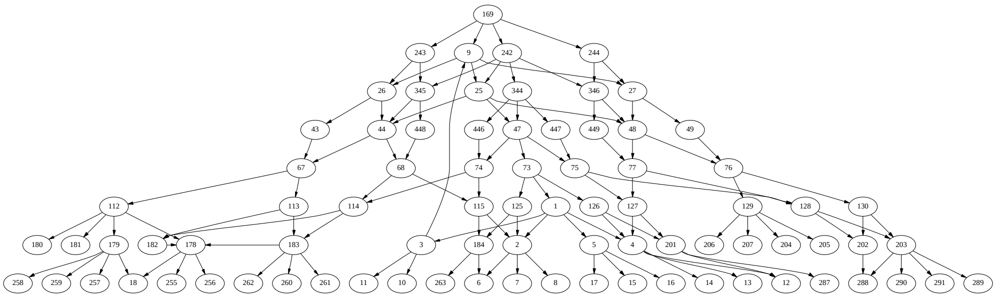
Initial walk length: 20



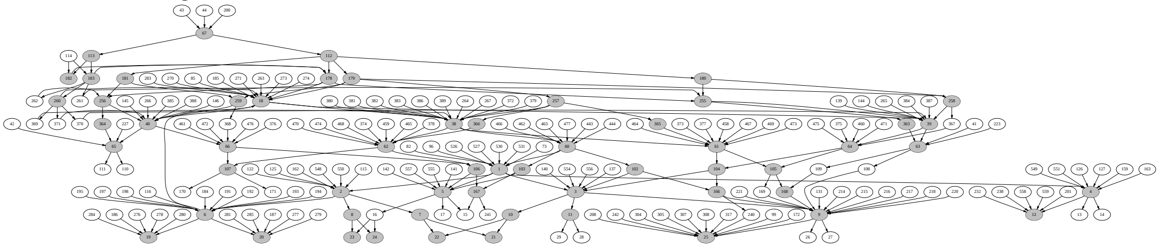
Initial walk length: 40



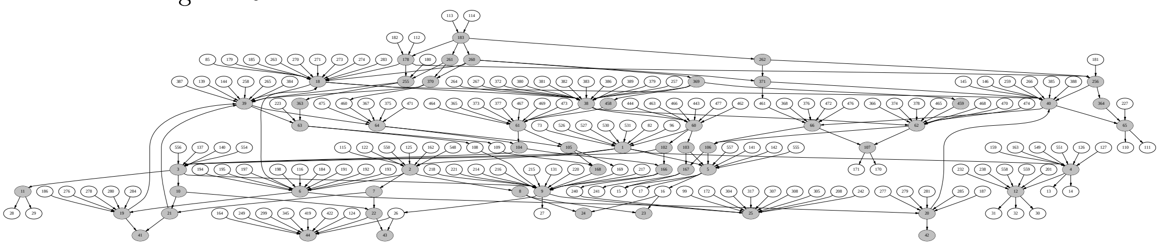
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60