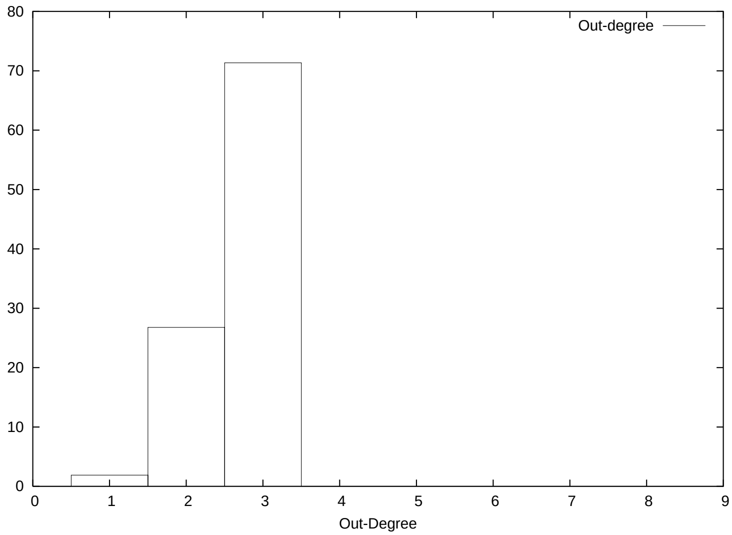
Graph: murphi/mcslock1

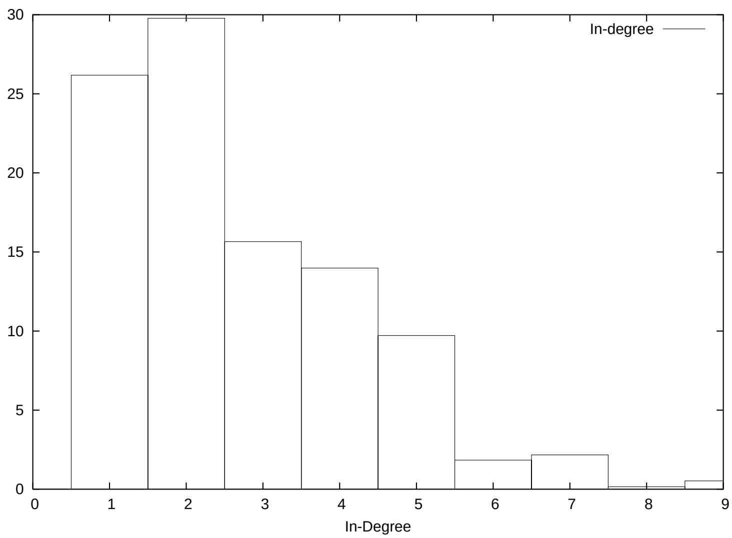
General Info

Example title	Distributed quering lock
Parameter	3
Reduction	
Modification	version1
States	7,597
Edges	20,469
Average degree	2.6

Out-Degrees distribution:



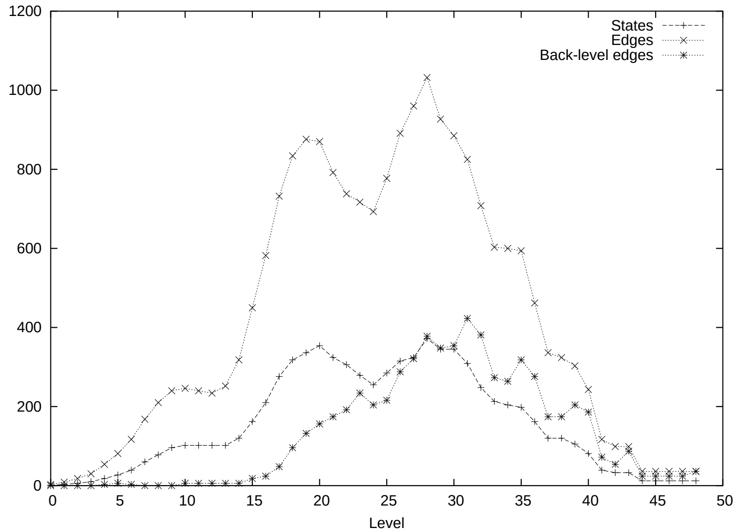
In-Degrees distribution:



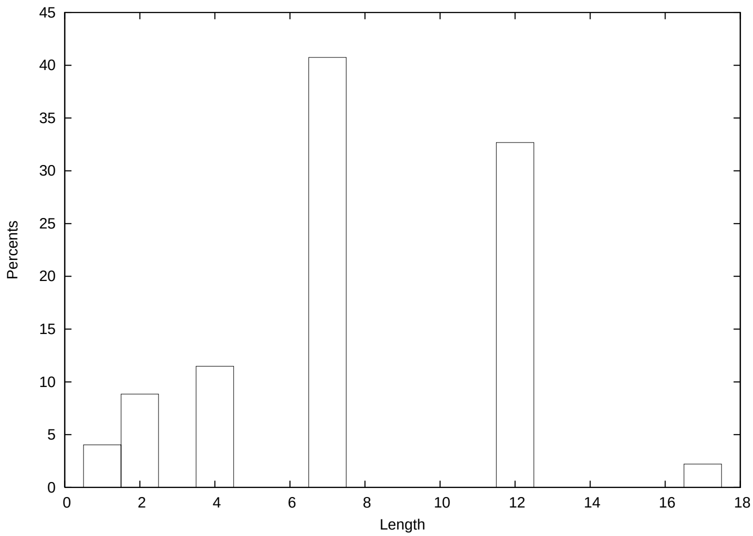
BFS Info

BFS height	48
BFS width	372 (4.8%)
Back level edges	6,243 (30.4%)

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**:

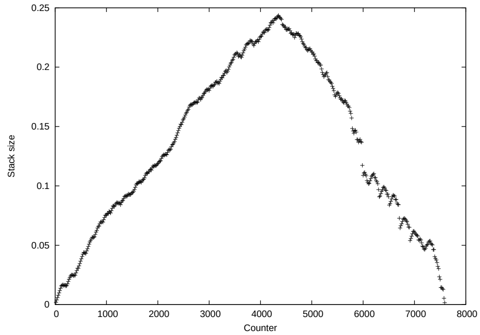
Size	Number of components	Number of states here
7,597	1	100%

SCC component graph (part):

DFS Info

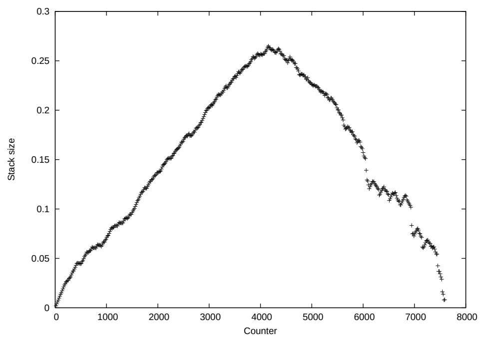
Run 0

front-edges : back-edges : cross-edges = 7,596 : 3,613 : 9,260 = 37.1%:17.6%:45.2%
Max. stack size: 1,853 (24.3%)
Shortest cycle detected: 5
Most often detected lengths of cycles: 5 (252), 20 (84), 15 (54), 25 (42), 30 (42)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 7,596 : 3,875 : 8,998 = 37.1%:18.9%:43.9%
Max. stack size: 2,015 (26.5%)
Shortest cycle detected: 5
Most often detected lengths of cycles: 5 (257), 20 (110), 30 (66), 25 (60), 15 (49)
Stack graph:



Local Structure

Short cycles(up to 6)

2	0	(0%)
3	0	(0%)
4	0	(0%)
5	1,829	(24%)

Diamonds

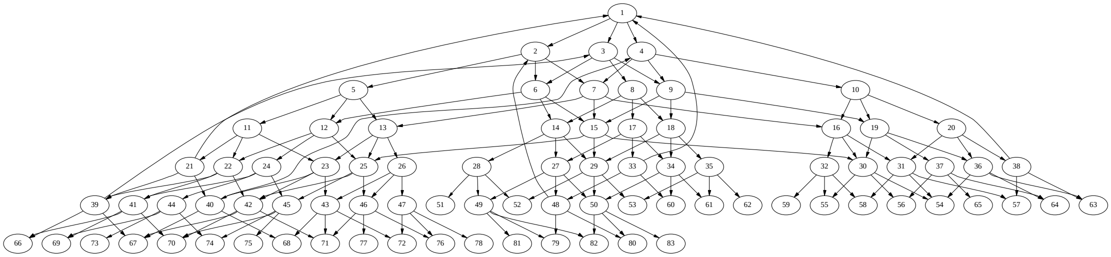
7,327 (96.4%)

Neighborhoods

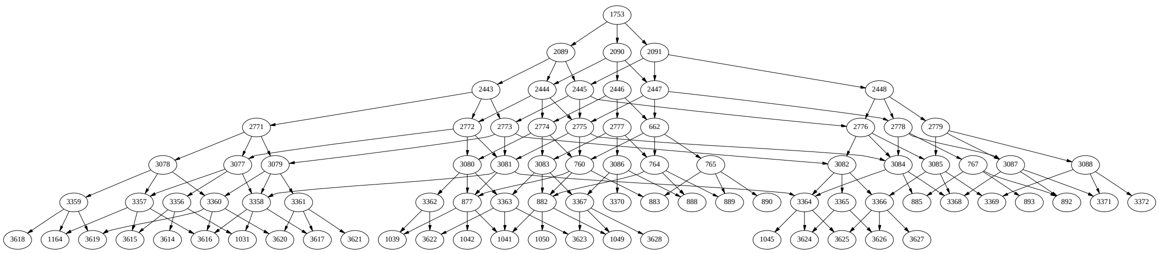
k	avg size	avg clustering
1	3.6	1
2	8.7	1.2
3	17.2	1.4
4	30.6	1.5

Visualization of some parts of the state state space:

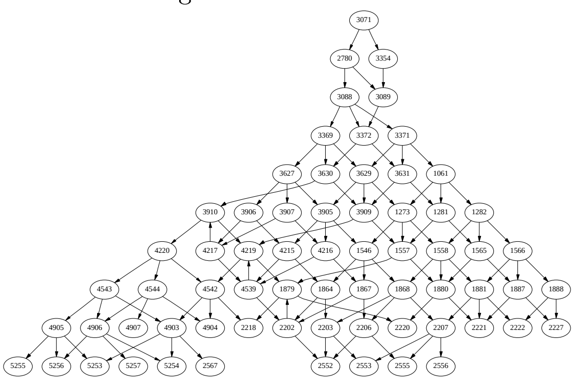
Initial walk length: 0



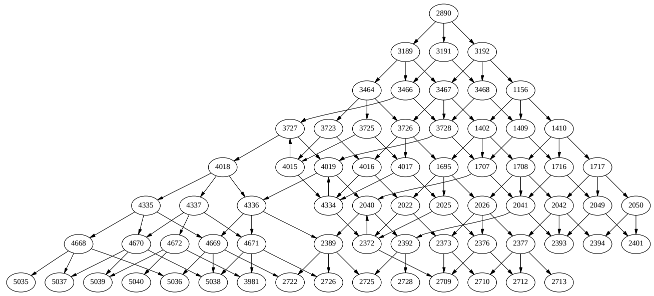
Initial walk length: 20



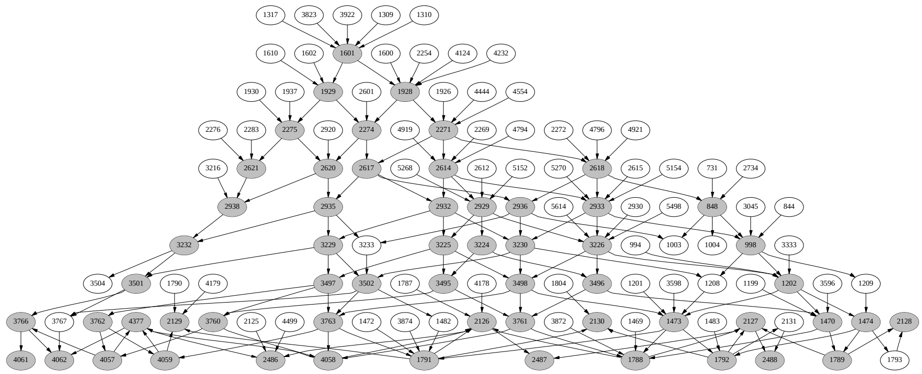
Initial walk length: 40



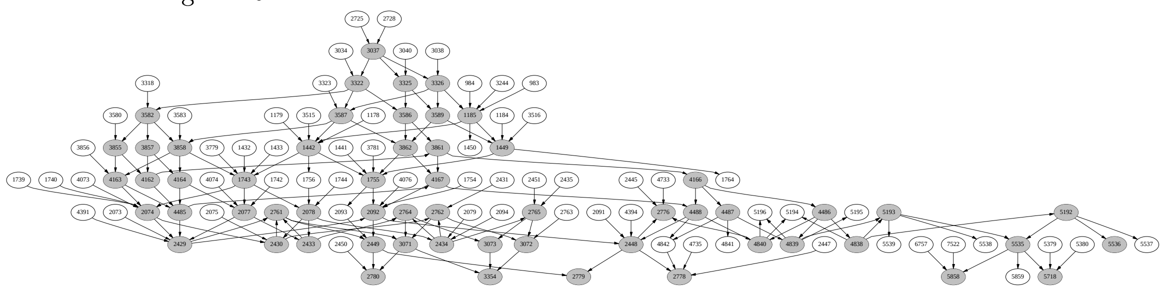
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60