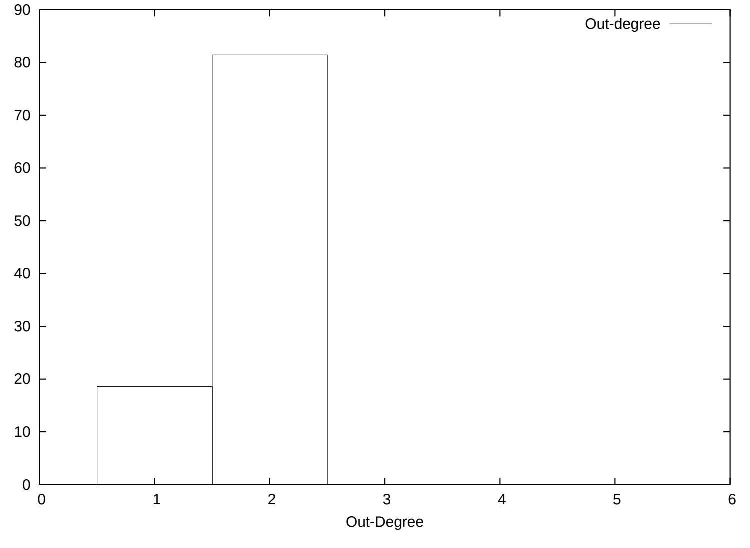
Graph: murphi/mcslock2

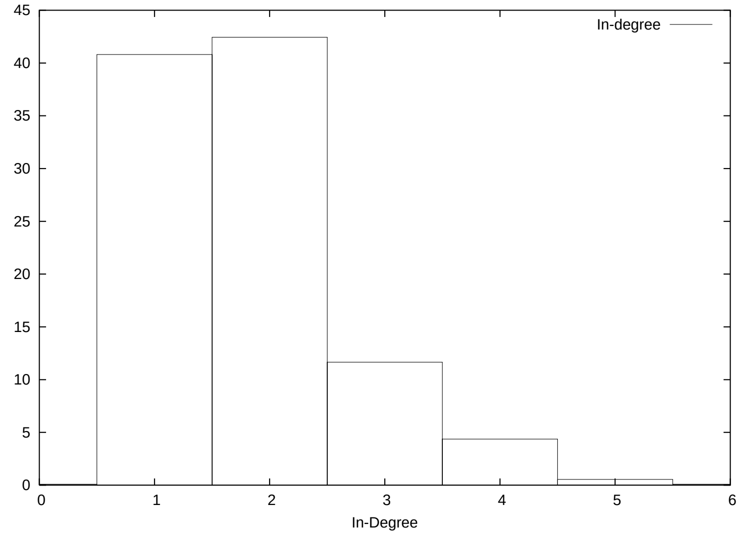
General Info

Example title	Distributed quering lock
Parameter	2
Reduction	
Modification	version2
States	1,098
Edges	1,992
Average degree	1.8

Out-Degrees distribution:



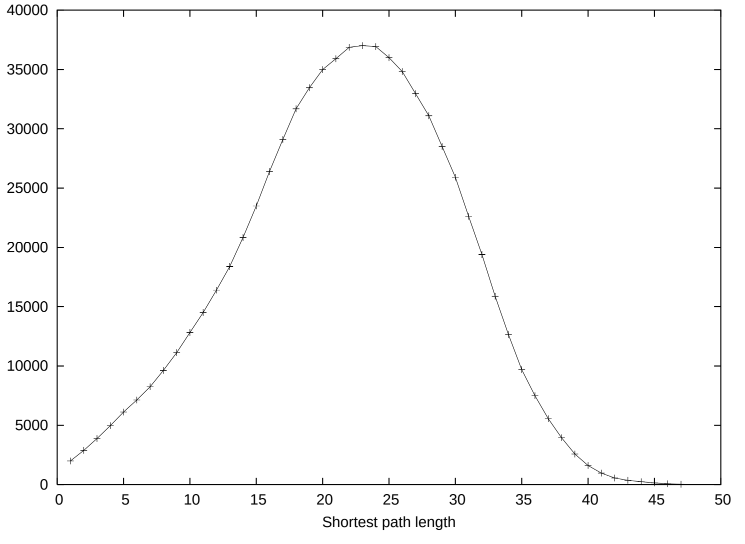
In-Degrees distribution:



Shortest Paths Info

Diameter: 47
Average shortest path length: 21.7944

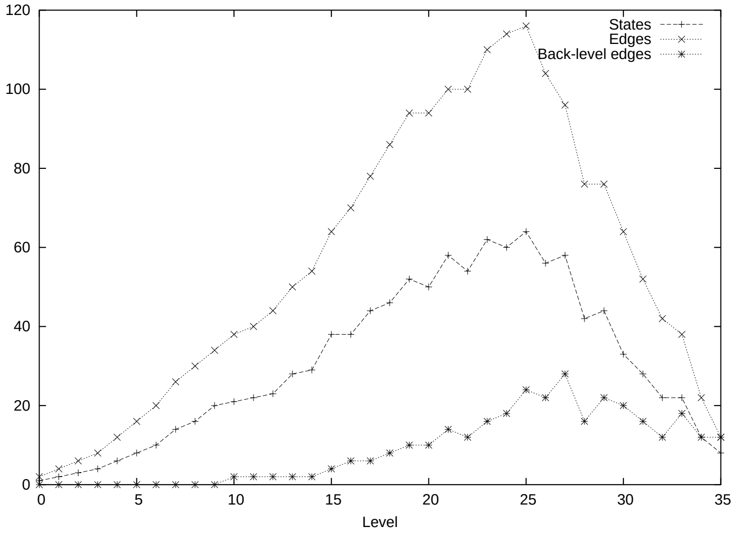
Shortest paths lengths frequencies:



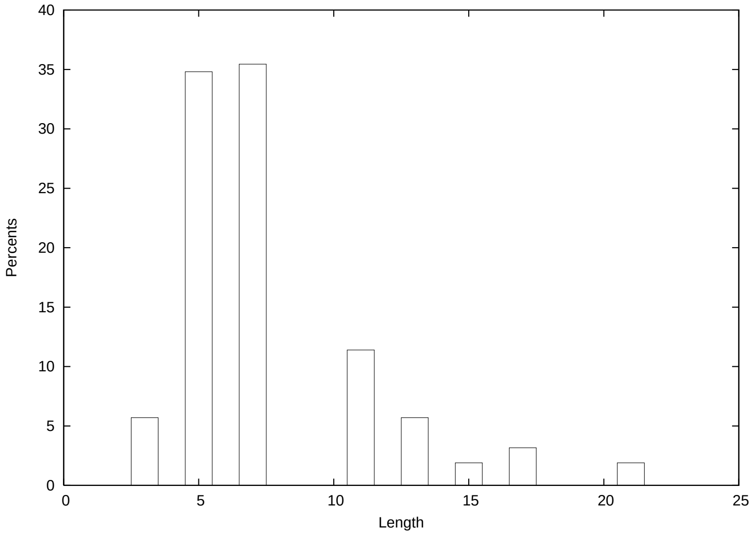
BFS Info

BFS height	35
BFS width	64 (5.8%)
Back level edges	316 (15.8%)

BFS level info:



Back level edges lengths:



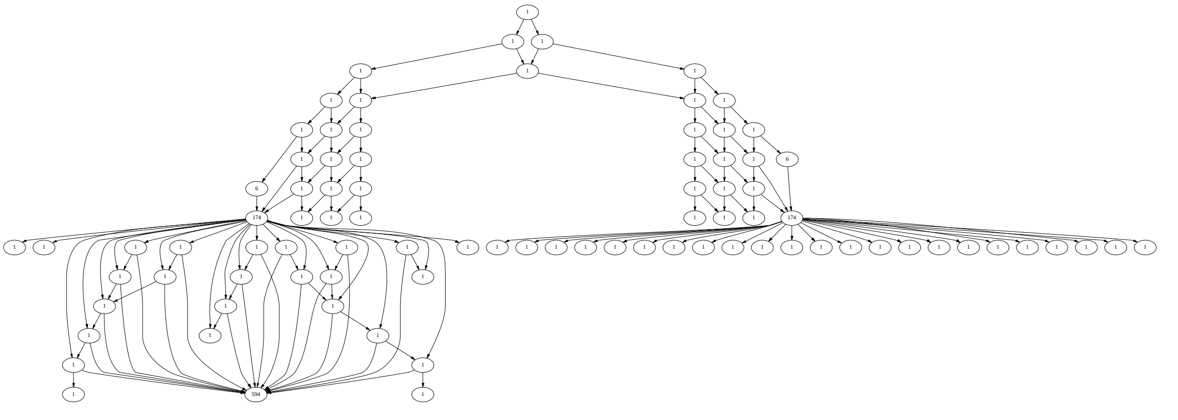
SCC Info

SCC components	124
SCC quetient height	28
SCC quetient nontrivial height	5
Number of terminal components	1
The largest component is	the only terminal

Statistics according to **sizes**:

Size	Number of components	Number of states here
594	1	54%
174	2	31.6%
26	1	2.3%
6	2	1%
1	118	10.7%

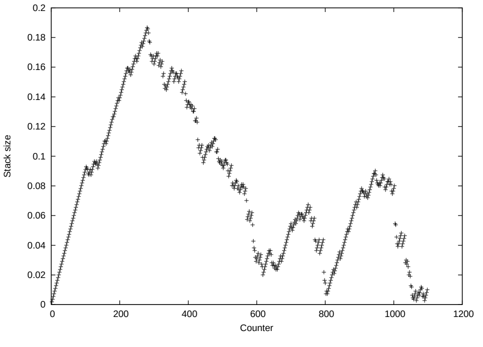
SCC component graph (part):



DFS Info

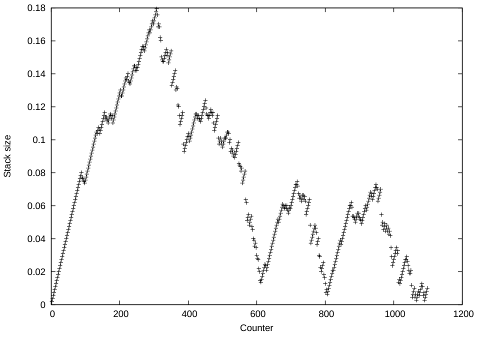
Run 0

front-edges : back-edges : cross-edges = 1,097 : 182 : 713 = 55%:9.1%:35.7%
Max. stack size: 206 (18.7%)
Shortest cycle detected: 6
Most often detected lengths of cycles: 6 (25), 16 (14), 20 (14), 42 (13), 22 (10)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 1,097 : 201 : 694 = 55%:10%:34.8%
Max. stack size: 197 (17.9%)
Shortest cycle detected: 6
Most often detected lengths of cycles: 6 (28), 16 (20), 20 (18), 42 (17), 70 (14)
Stack graph:



Local Structure

Short cycles(up to 6)

2	0	(0%)
3	0	(0%)
4	0	(0%)
5	0	(0%)
6	195	(17.7%)

Diamonds

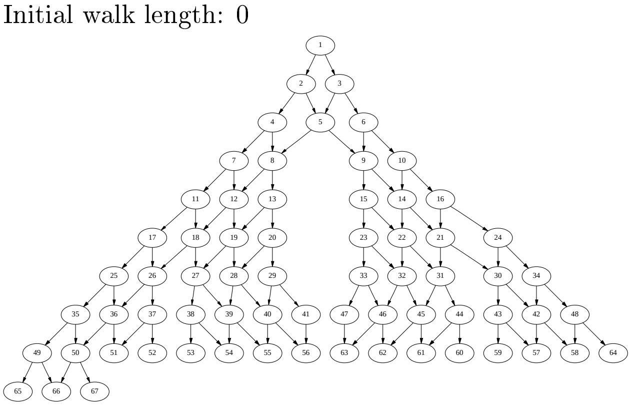
787 (71.6%)

Neighborhoods

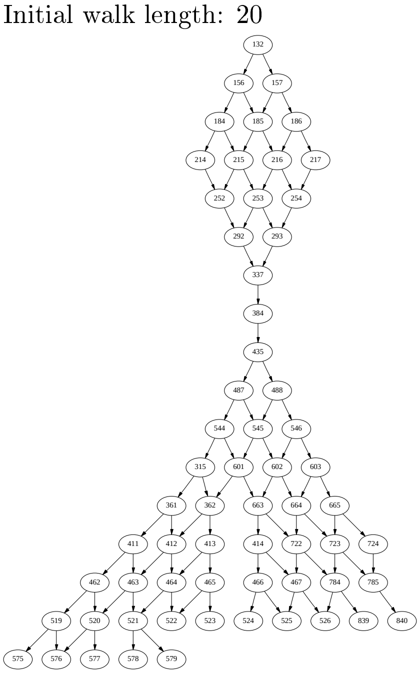
k	avg size	avg clustering
1	2.8	1
2	5.4	1.1
3	8.9	1.2
4	13.5	1.3

Visualization of some parts of the state state space:

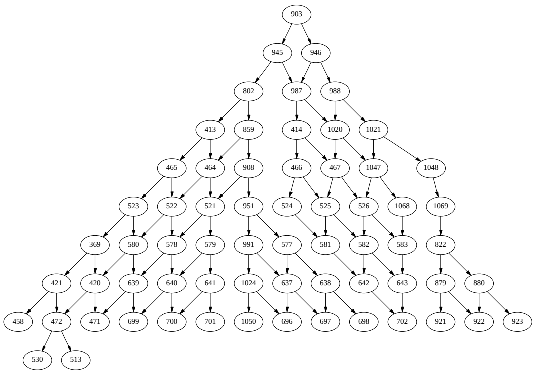
Initial walk length: 0



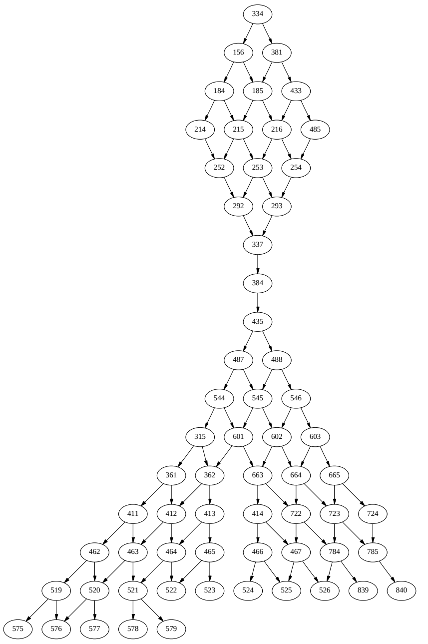
Initial walk length: 20



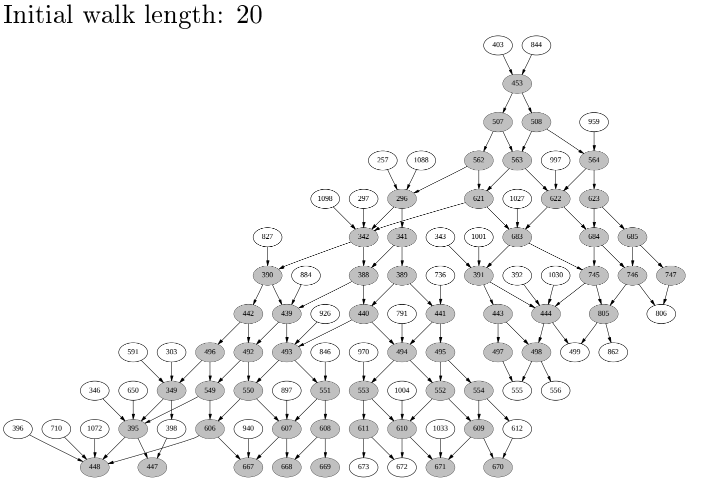
Initial walk length: 40



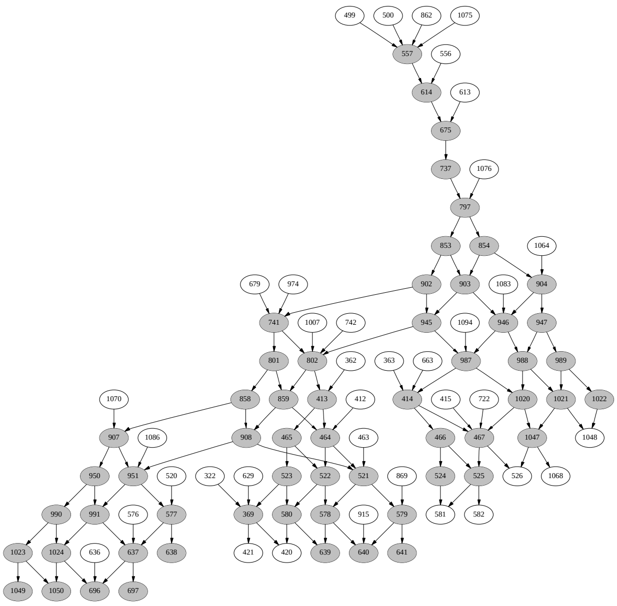
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60