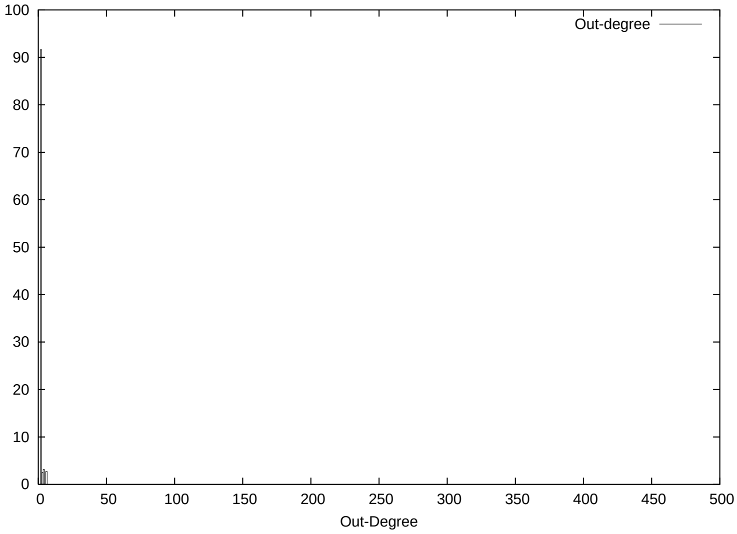
Graph: murphi/sci3

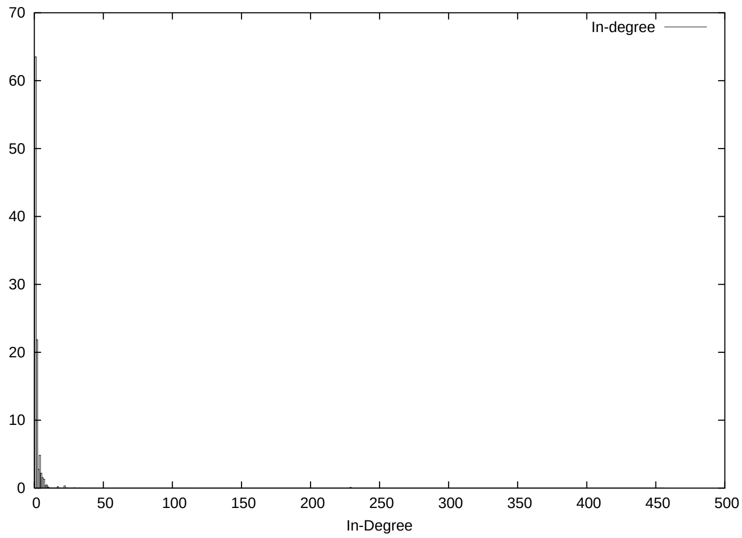
General Info

Example title	Scalable Coherent Interface (SCI)
Parameter	cachesize=1,nummemories=1
Reduction	
Modification	all instructions enabled
States	38,034
Edges	83,588
Average degree	2.1

Out-Degrees distribution:



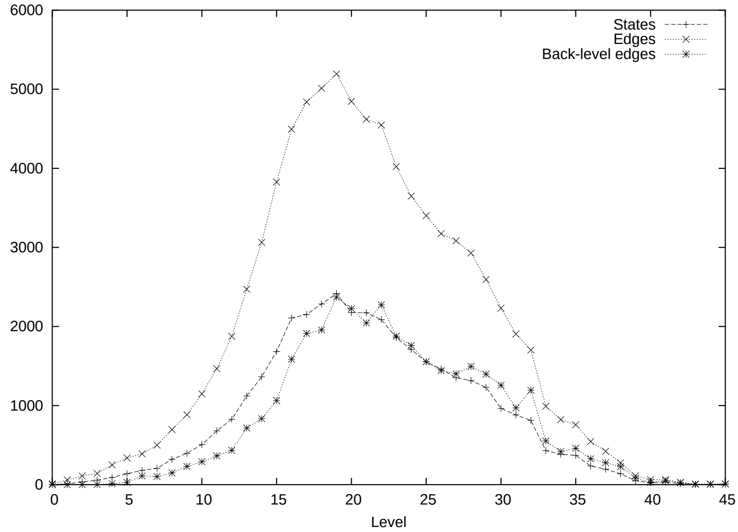
In-Degrees distribution:



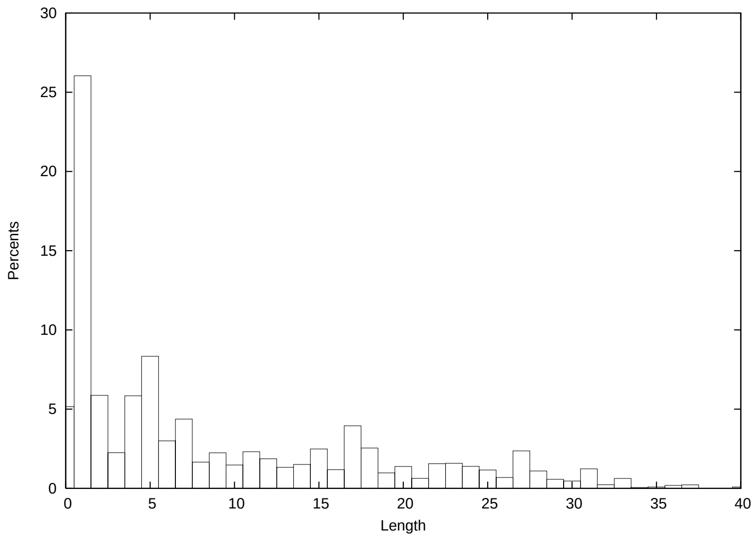
BFS Info

BFS height	45
BFS width	2,416 (6.3%)
Back level edges	35,522 (42.4%)

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**:

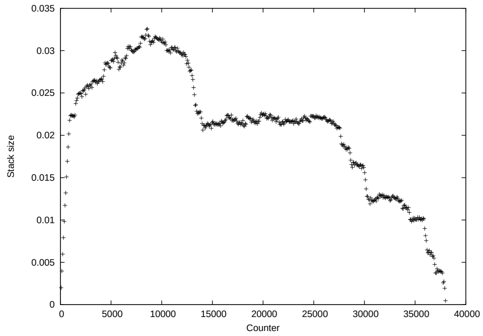
Size	Number of components	Number of states here
38,034	1	100%

SCC component graph (part):

DFS Info

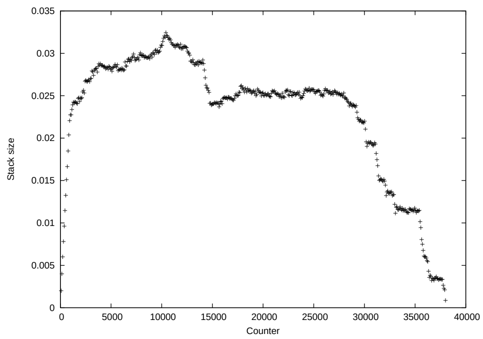
Run 0

front-edges : back-edges : cross-edges = 38,033 : 18,856 : 26,699 = 45.5%:22.5%:31.9%
Max. stack size: 1,251 (3.2%)
Shortest cycle detected: 2
Most often detected lengths of cycles: 2 (3495), 6 (3154), 9 (550), 5 (480), 36 (48)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 38,033 : 19,801 : 25,754 = 45.5%:23.6%:30.8%
Max. stack size: 1,237 (3.2%)
Shortest cycle detected: 2
Most often detected lengths of cycles: 2 (3499), 6 (3202), 9 (549), 5 (495), 831 (43)
Stack graph:



Local Structure

Short cycles(up to 6)

2	7,032	(18.4%)
3	0	(0%)
4	0	(0%)
5	4,091	(10.7%)
6	13,029	(34.2%)

Diamonds

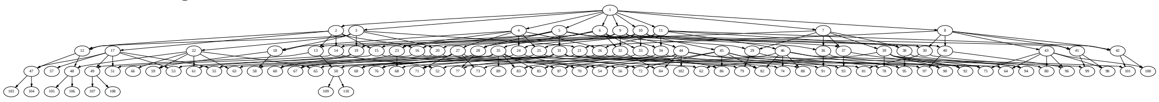
32,913 (86.5%)

Neighborhoods

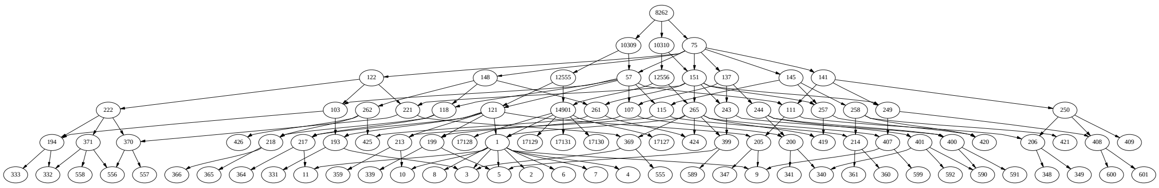
k	avg size	avg clustering
1	3.1	1
2	8.4	1.1
3	18.1	1.3
4	35	1.4

Visualization of some parts of the state state space:

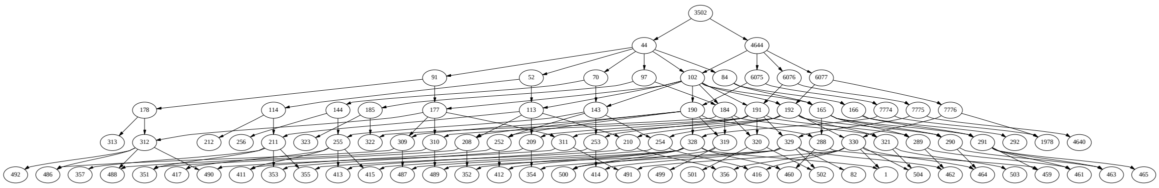
Initial walk length: 0



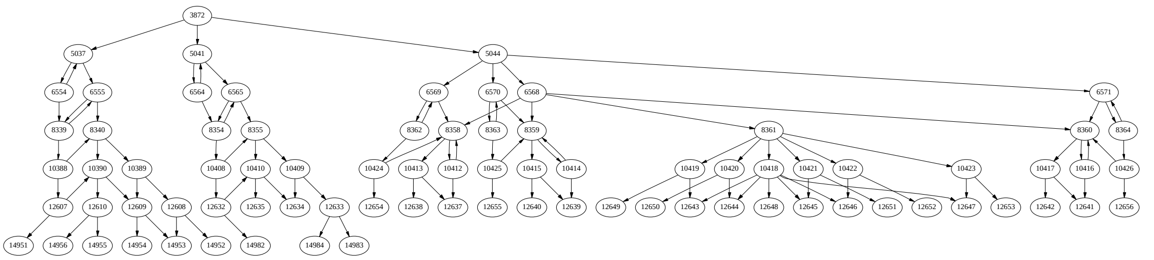
Initial walk length: 20



Initial walk length: 40

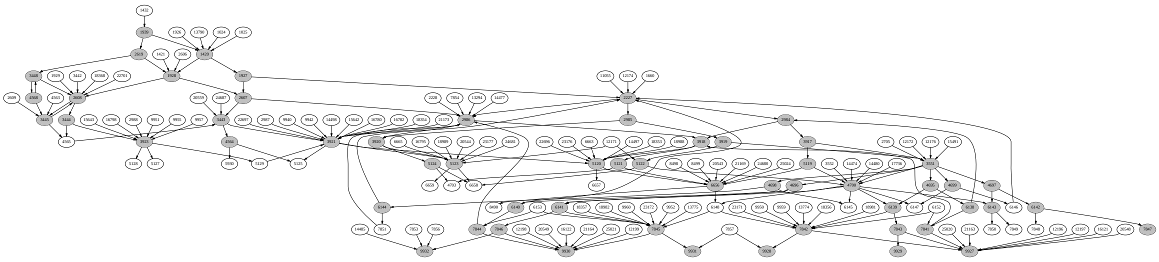


Initial walk length: 60



Initial walk length: 20

Initial walk length: 40



Initial walk length: 60