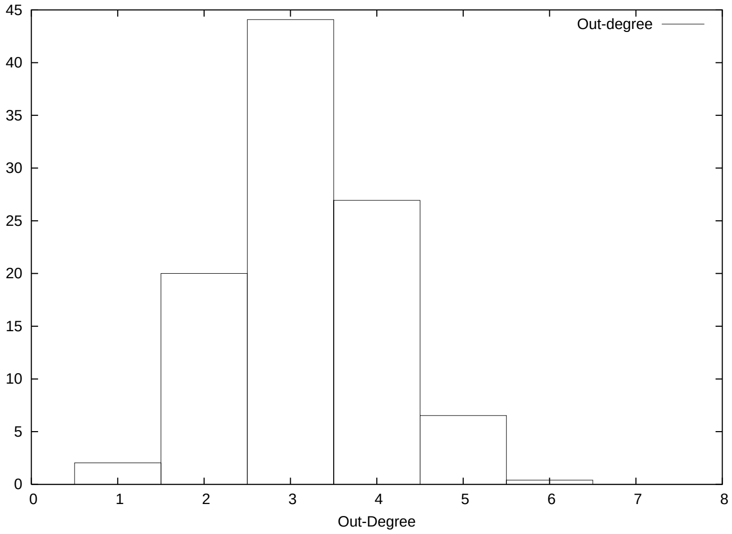
Graph: cadp/overtaking.min

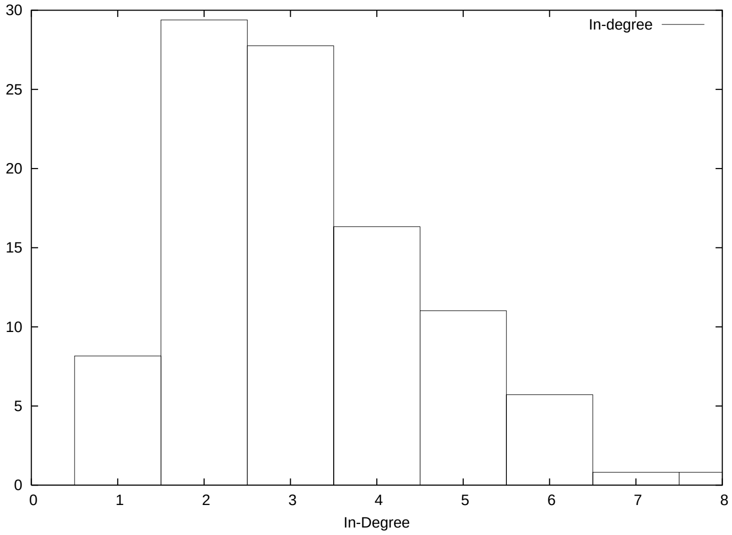
General Info

Example title	Car overtaking protocol
Parameter	
Reduction	MIN
Modification	
States	1,470
Edges	4,662
Average degree	3.1

Out-Degrees distribution:



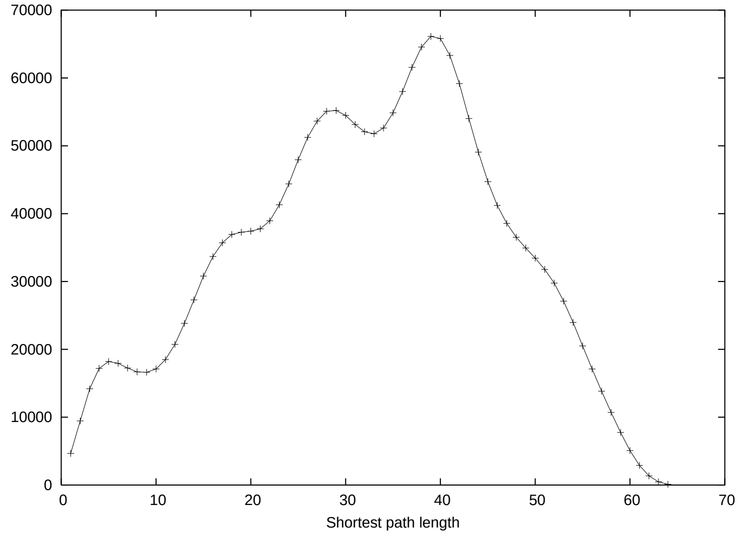
In-Degrees distribution:



Shortest Paths Info

Diameter: 64
Average shortest path length: 32.3426

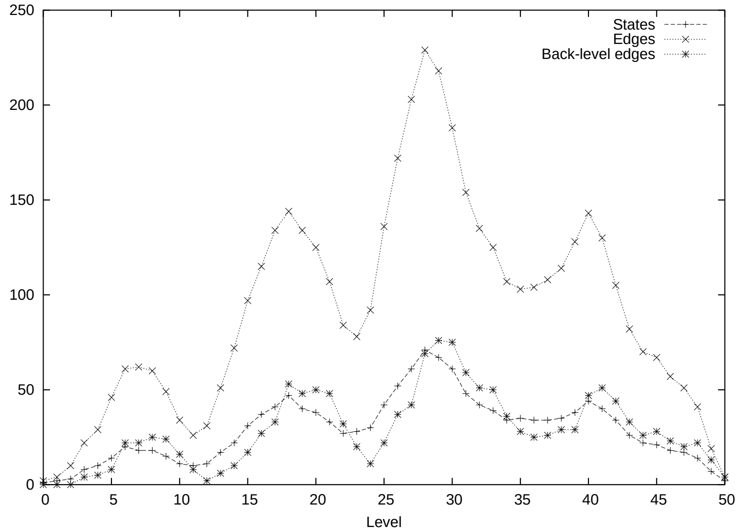
Shortest paths lengths frequencies:



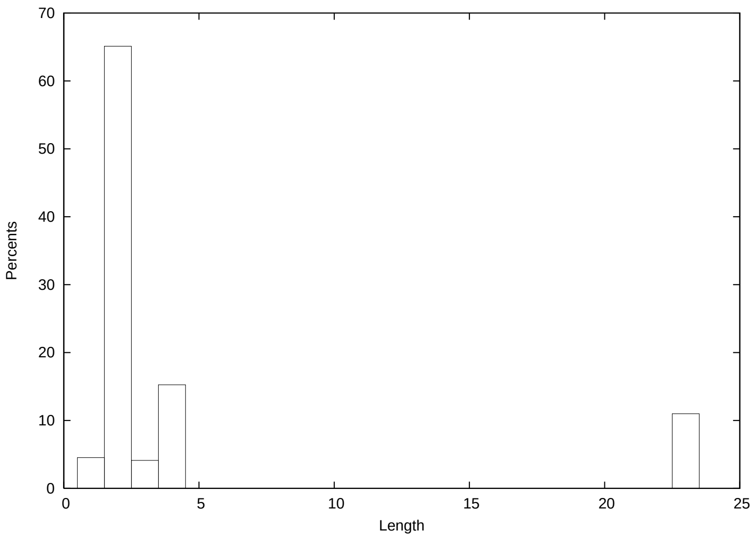
BFS Info

BFS height	50
BFS width	71 (4.8%)
Back level edges	1,456 (31.2%)

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**:

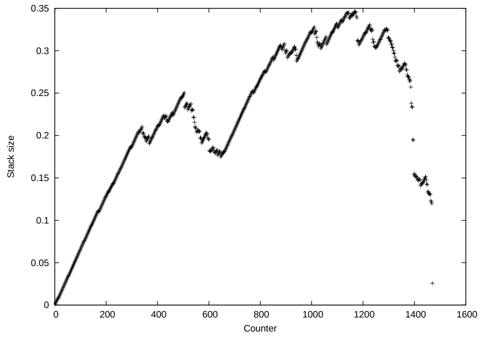
Size	Number of components	Number of states here
1,470	1	100%

SCC component graph (part):

DFS Info

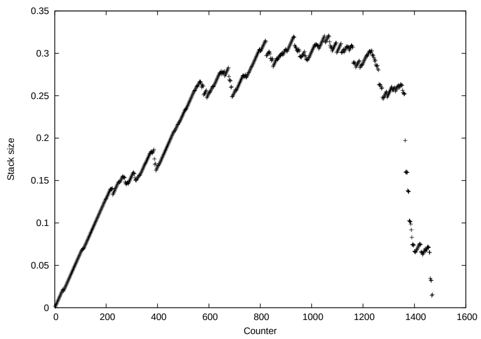
Run 0

front-edges : back-edges : cross-edges = 1,469 : 1,604 : 1,589 = 31.5%:34.4%:34%
Max. stack size: 509 (34.6%)
Shortest cycle detected: 3
Most often detected lengths of cycles: 3 (430), 5 (105), 6 (75), 8 (68), 157 (42)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 1,469 : 1,508 : 1,685 = 31.5%:32.3%:36.1%
Max. stack size: 473 (32.1%)
Shortest cycle detected: 3
Most often detected lengths of cycles: 3 (432), 5 (90), 6 (78), 8 (48), 11 (28)
Stack graph:



Local Structure

Short cycles(up to 6)

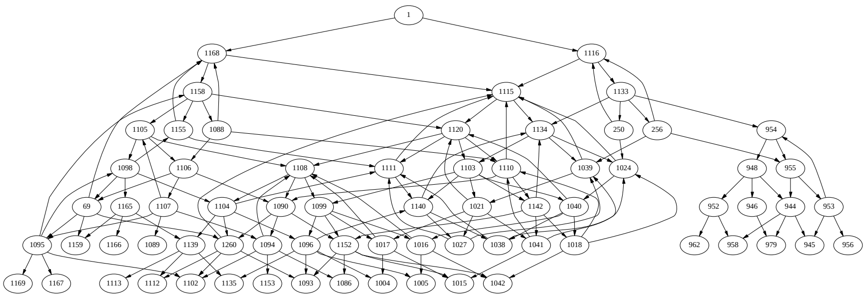
2	0	(0%)
3	1,320	(89.7%)

Diamonds
1,416 (96.3%)

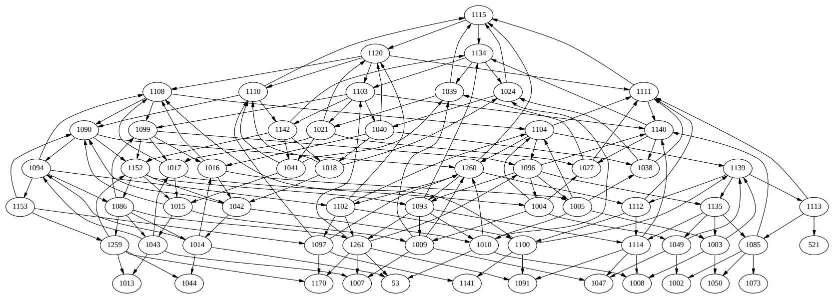
Neighborhoods

k	avg size	avg clustering
1	4.1	1
2	10.6	1.3
3	20.2	1.6
4	31.9	2

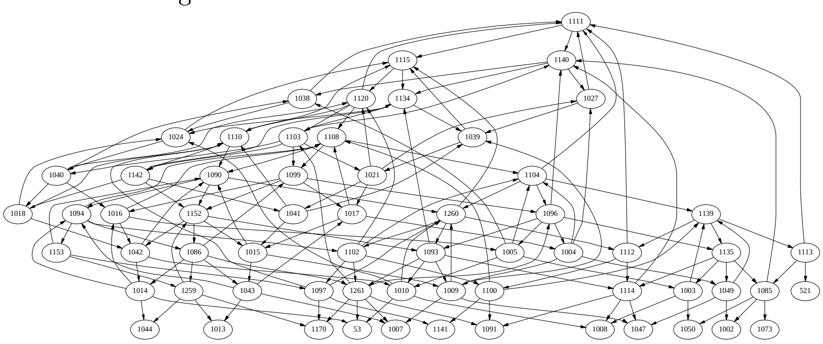
Visualization of some parts of the state state space:
Initial walk length: 0



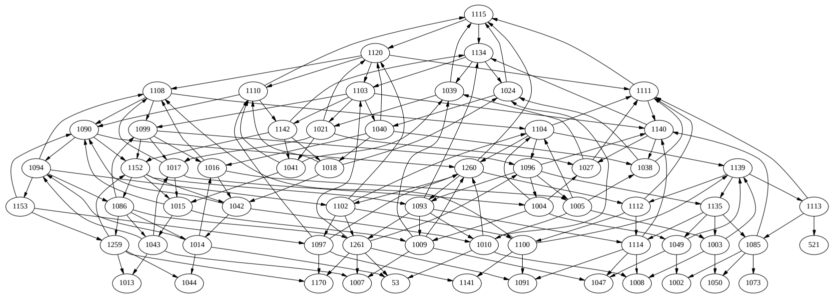
Initial walk length: 20



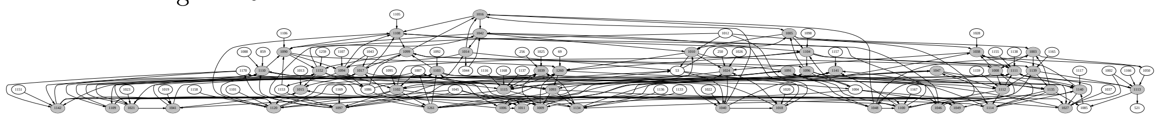
Initial walk length: 40



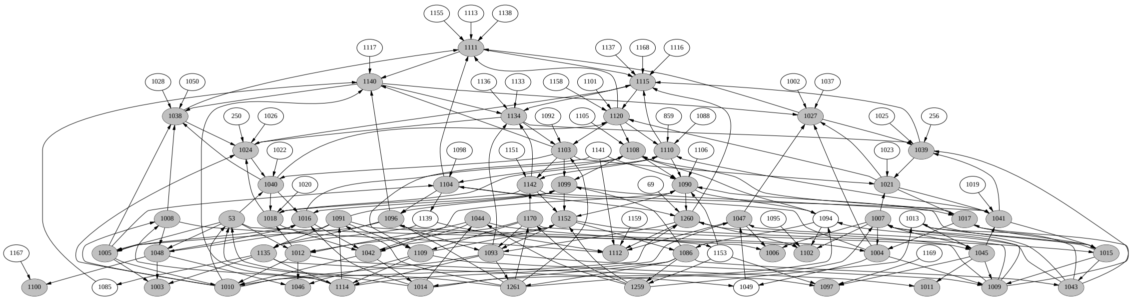
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60