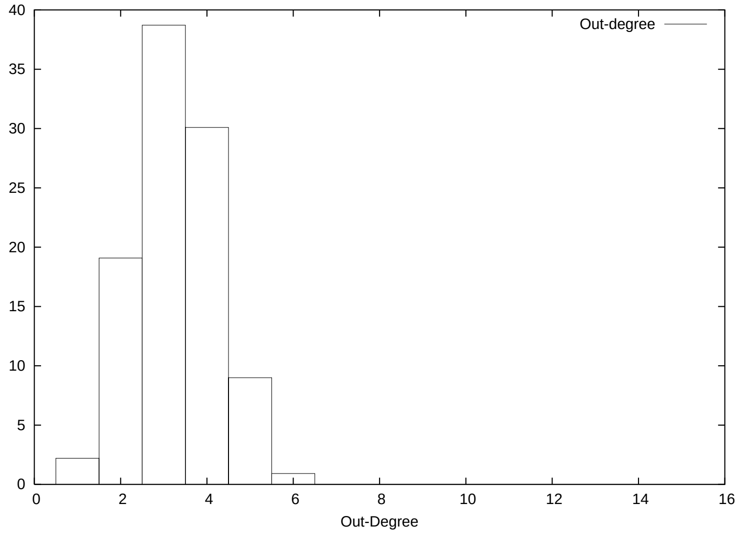
Graph: cadp/cache.min

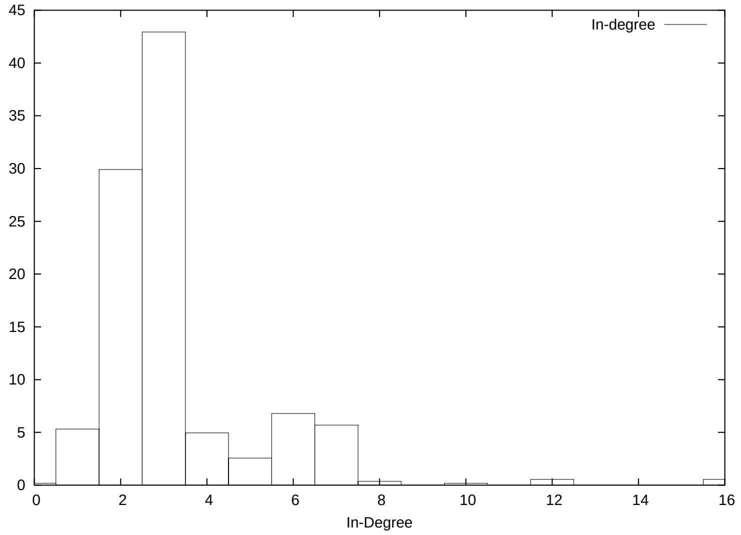
General Info

Example title	Directory-based cache coherency protocol
Parameter	
Reduction	MIN
Modification	
States	545
Edges	1,784
Average degree	3.2

Out-Degrees distribution:



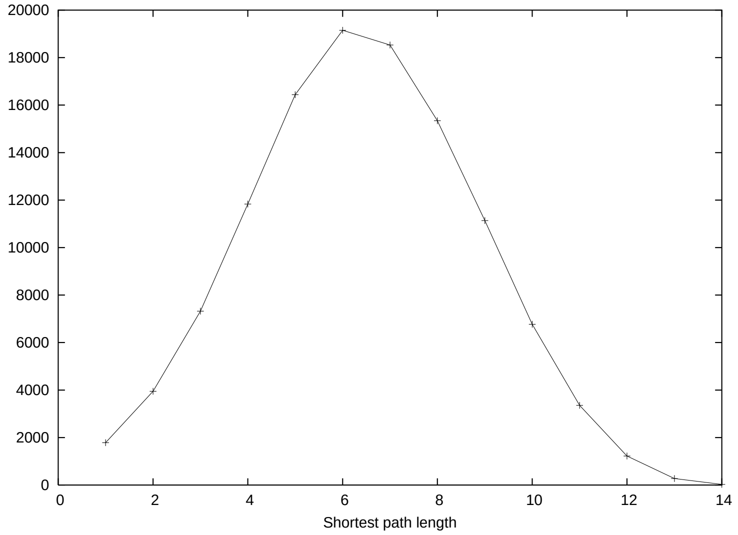
In-Degrees distribution:



Shortest Paths Info

Diameter: 14
Average shortest path length: 6.41982

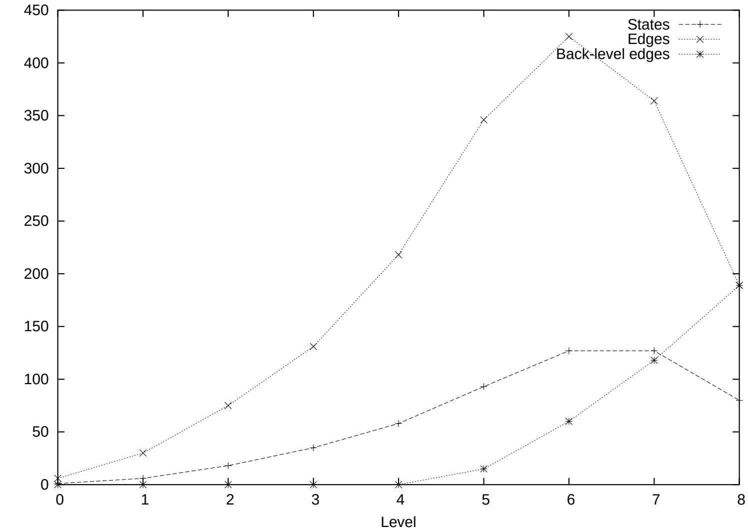
Shortest paths lengths frequencies:



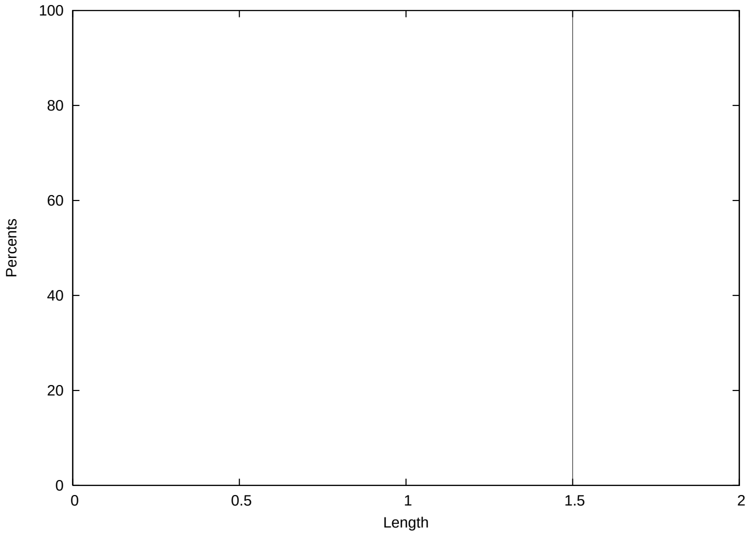
BFS Info

BFS height	8
BFS width	127 (23.3%)
Back level edges	382 (21.4%)

BFS level info:



Back level edges lengths:



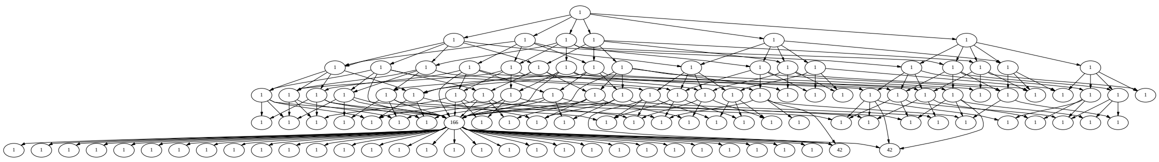
SCC Info

SCC components	210
SCC quetient height	21
SCC quetient nontrivial height	9
Number of terminal components	1
The largest component is	intermediate

Statistics according to **sizes**:

Size	Number of components	Number of states here
166	1	30.4%
42	2	15.4%
39	2	14.3%
3	6	3.3%
1	199	36.5%

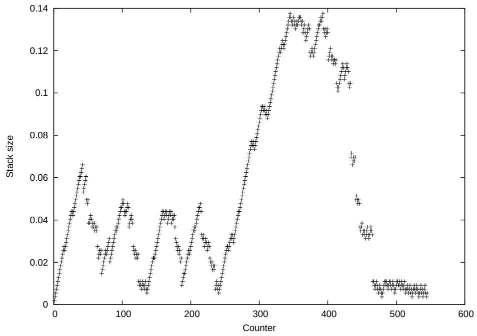
SCC component graph (part):



DFS Info

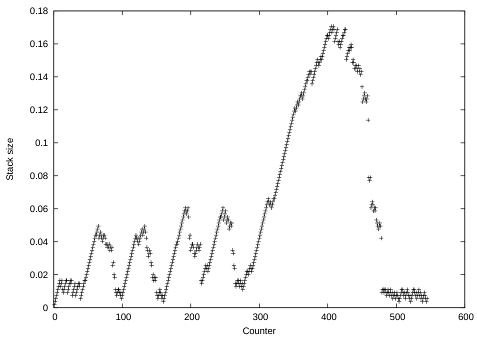
Run 0

front-edges : back-edges : cross-edges = 544 : 265 : 975 = 30.4%:14.8%:54.6%
Max. stack size: 75 (13.7%)
Shortest cycle detected: 3
Most often detected lengths of cycles: 3 (65), 6 (44), 18 (23), 9 (23), 15 (19)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 544 : 285 : 955 = 30.4%:15.9%:53.5%
Max. stack size: 93 (17%)
Shortest cycle detected: 3
Most often detected lengths of cycles: 3 (55), 6 (41), 12 (32), 15 (26), 9 (19)
Stack graph:



Local Structure

Short cycles(up to 6)

2	0	(0%)
3	307	(56.3%)

Diamonds

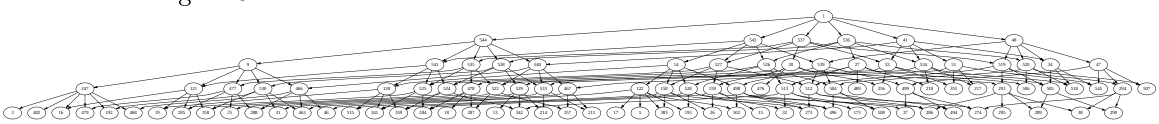
520 (95.4%)

Neighborhoods

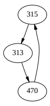
k	avg size	avg clustering
1	4.2	1
2	11.5	1.2
3	24.9	1.5
4	46.6	1.7

Visualization of some parts of the state state space:

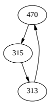
Initial walk length: 0



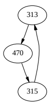
Initial walk length: 20



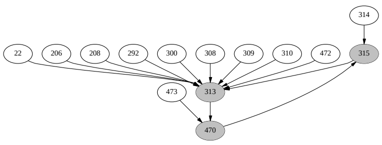
Initial walk length: 40



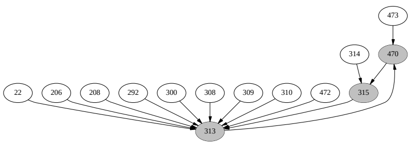
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60