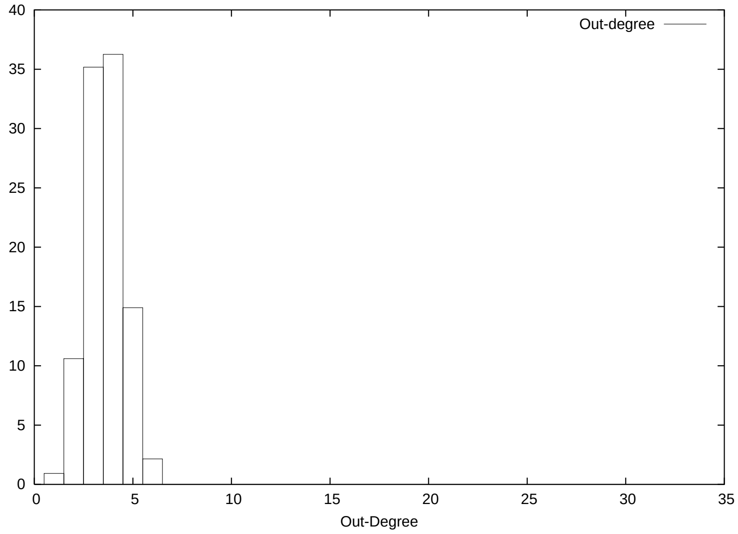
Graph: cadp/cache

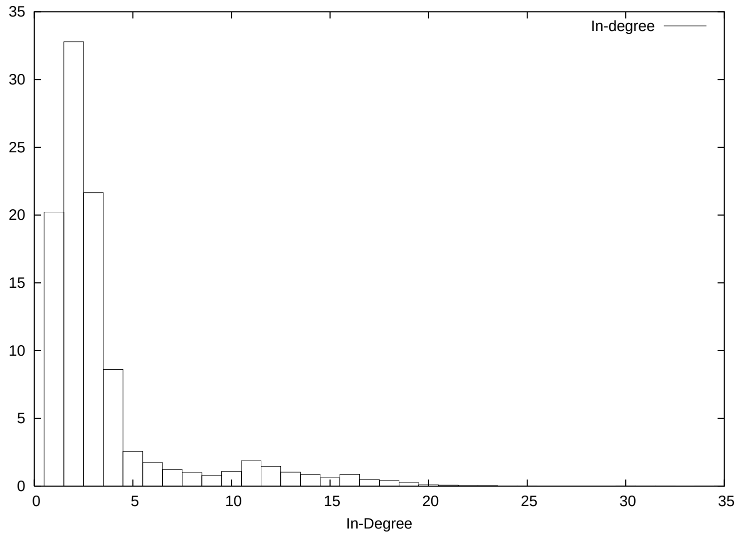
General Info

Example title	Directory-based cache coherency protocol
Parameter	
Reduction	
Modification	
States	70,643
Edges	254,356
Average degree	3.6

Out-Degrees distribution:



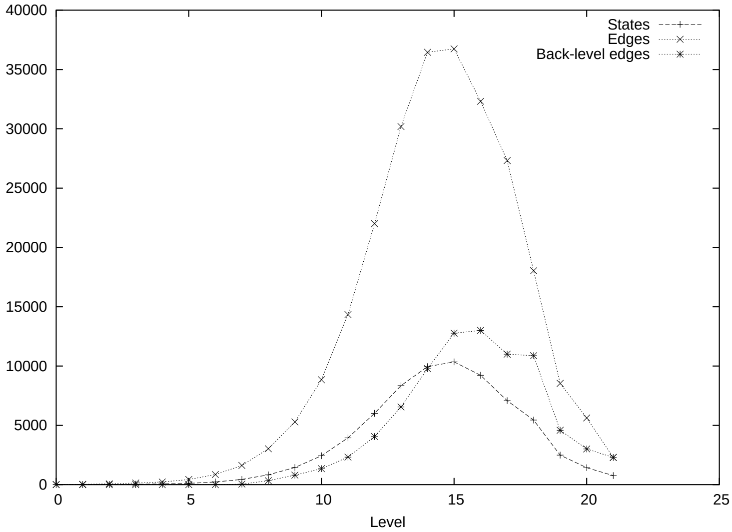
In-Degrees distribution:



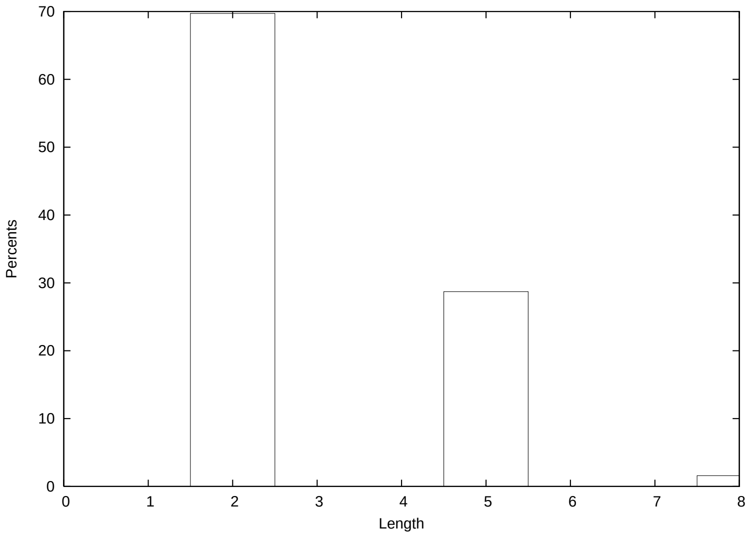
BFS Info

BFS height	21
BFS width	10,352 (14.6%)
Back level edges	82,730 (32.5%)

BFS level info:



Back level edges lengths:



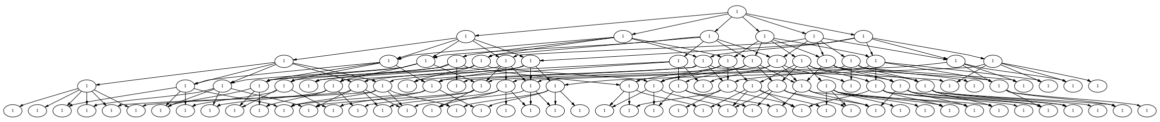
SCC Info

SCC components	39,799
SCC quetient height	99
SCC quetient nontrivial height	32
Number of terminal components	22
The largest component is	intermediate

Statistics according to **sizes**:

Size	Number of components	Number of states here
16,888	1	23.9%
398	28	15.7%
84	6	0.7%
6	247	2%
3	554	2.3%
1	38,963	55.1%

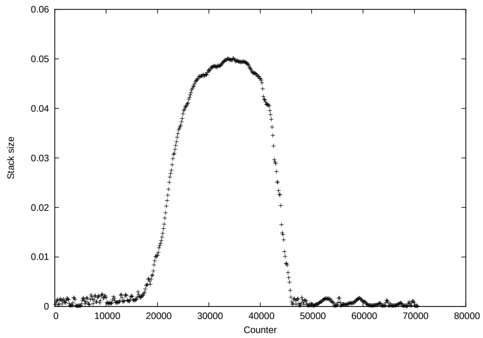
SCC component graph (part):



DFS Info

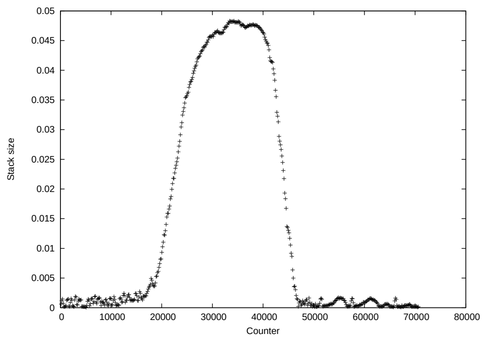
Run 0

front-edges : back-edges : cross-edges = 70,642 : 20,484 : 163,230 = 27.7%:8%:64.1%
Max. stack size: 3,543 (5%)
Shortest cycle detected: 3
Most often detected lengths of cycles: 3 (2731), 6 (603), 9 (312), 12 (245), 15 (244)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 70,642 : 19,971 : 163,743 = 27.7%:7.8%:64.3%
Max. stack size: 3,419 (4.8%)
Shortest cycle detected: 3
Most often detected lengths of cycles: 3 (2749), 6 (577), 9 (384), 12 (246), 18 (237)
Stack graph:



Local Structure

Short cycles(up to 6)

2	0	(0%)
3	10,026	(14.1%)
4	0	(0%)
5	0	(0%)
6	4,898	(6.9%)

Diamonds

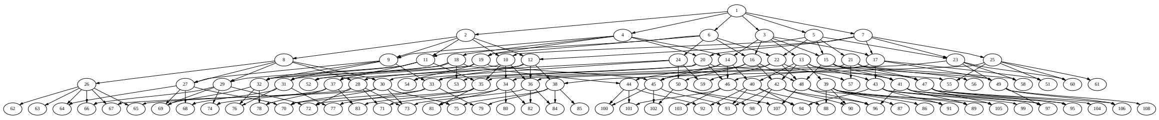
64,604 (91.4%)

Neighborhoods

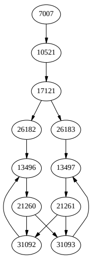
k	avg size	avg clustering
1	4.6	1
2	12.9	1.2
3	30.7	1.4
4	68.6	1.5

Visualization of some parts of the state state space:

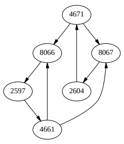
Initial walk length: 0



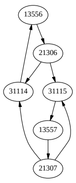
Initial walk length: 20



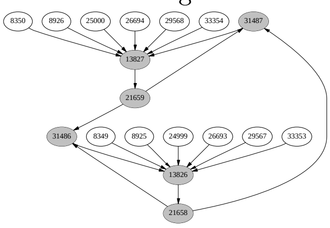
Initial walk length: 40



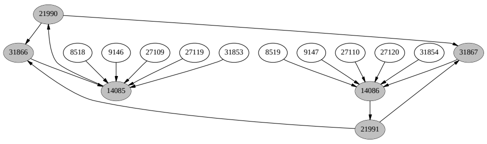
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60