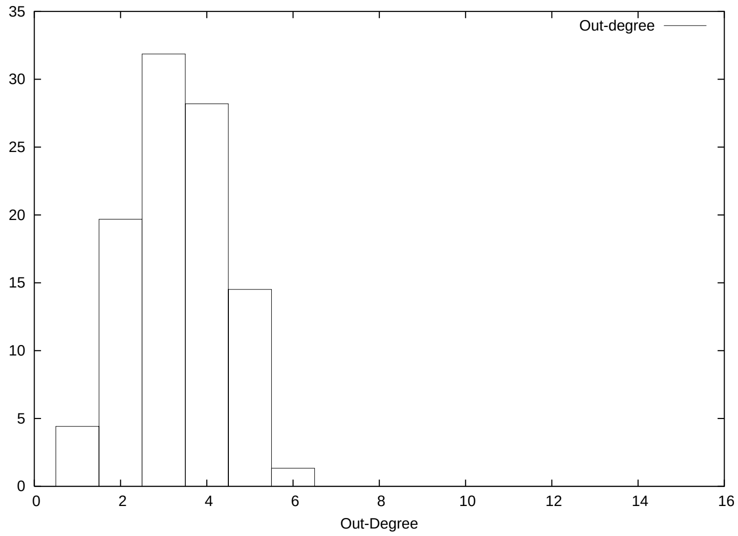
Graph: cadp/HAVi_sync

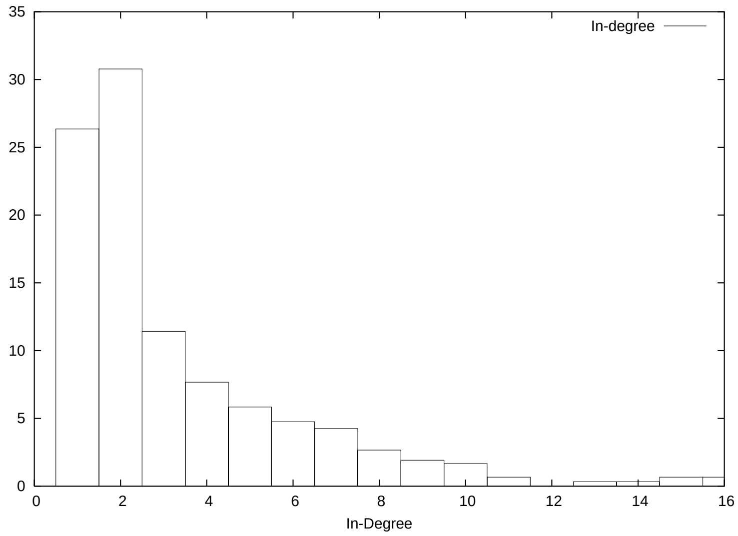
General Info

Example title	HAVi leader election protocol
Parameter	
Reduction	
Modification	synchronous
States	1,199
Edges	3,989
Average degree	3.3

Out-Degrees distribution:



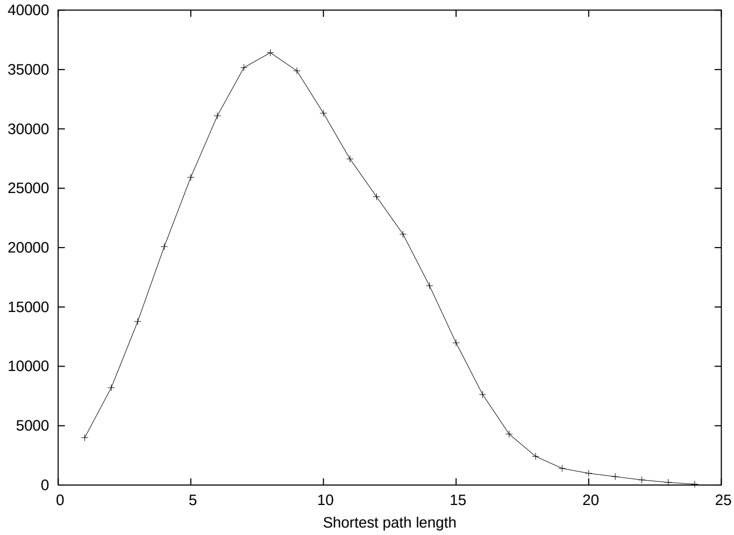
In-Degrees distribution:



Shortest Paths Info

Diameter: 24
Average shortest path length: 8.93392

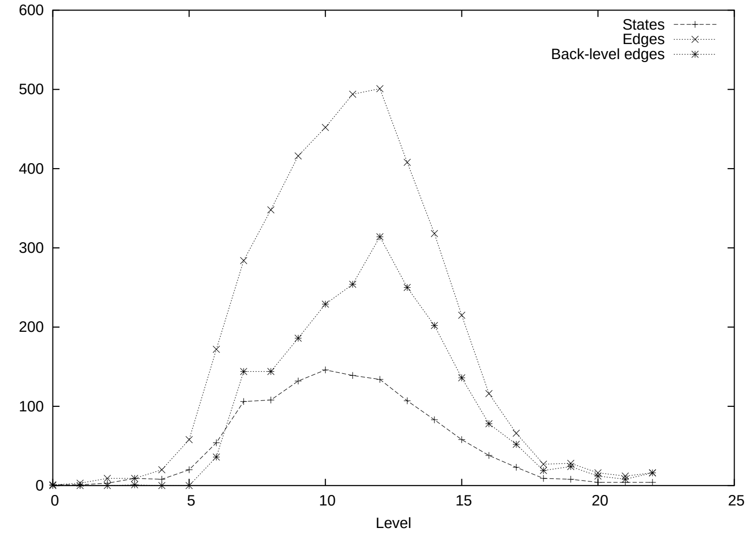
Shortest paths lengths frequencies:



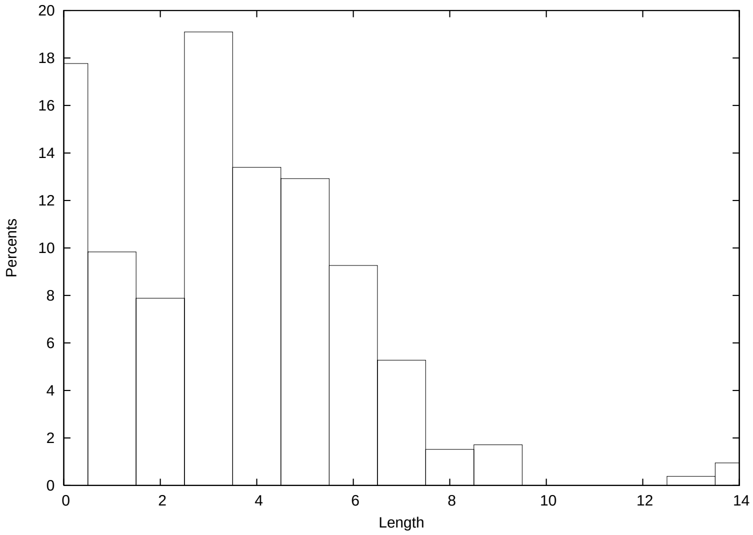
BFS Info

BFS height	22
BFS width	146 (12.1%)
Back level edges	2,105 (52.7%)

BFS level info:



Back level edges lengths:



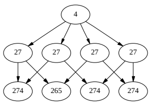
SCC Info

SCC components	9
SCC quetient height	2
SCC quetient nontrivial height	2
Number of terminal components	4
The largest component is	terminal

Statistics according to **sizes**:

Size	Number of components	Number of states here
274	3	68.5%
265	1	22.1%
27	4	9%
4	1	0.3%

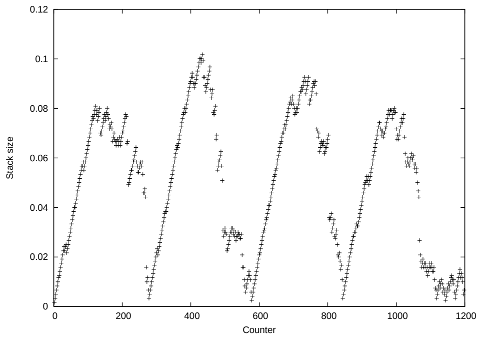
SCC component graph (part):



DFS Info

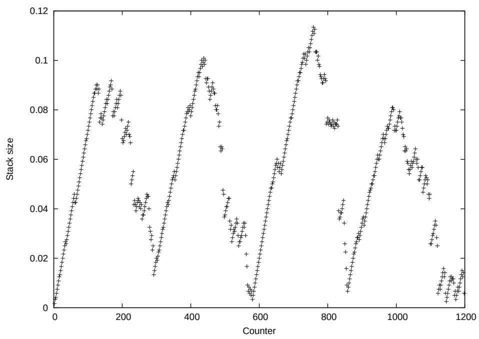
Run 0

front-edges : back-edges : cross-edges = 1,198 : 1,324 : 1,467 = 30%:33.1%:36.7%
Max. stack size: 122 (10.1%)
Shortest cycle detected: 4
Most often detected lengths of cycles: 4 (142), 5 (97), 6 (58), 7 (39), 10 (33)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 1,198 : 1,323 : 1,468 = 30%:33.1%:36.8%
Max. stack size: 136 (11.3%)
Shortest cycle detected: 4
Most often detected lengths of cycles: 4 (144), 5 (116), 6 (62), 10 (45), 11 (39)
Stack graph:



Local Structure

Short cycles(up to 6)

2	0	(0%)
3	0	(0%)
4	736	(61.3%)
5	256	(21.3%)
6	80	(6.6%)

Diamonds

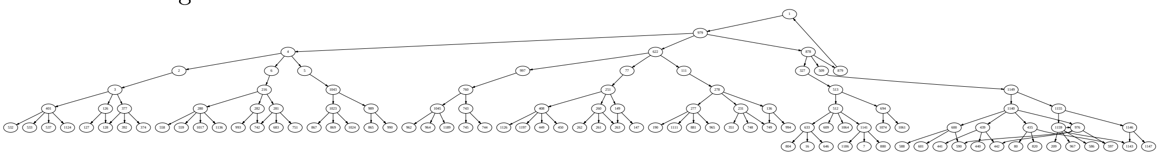
1,005 (83.8%)

Neighborhoods

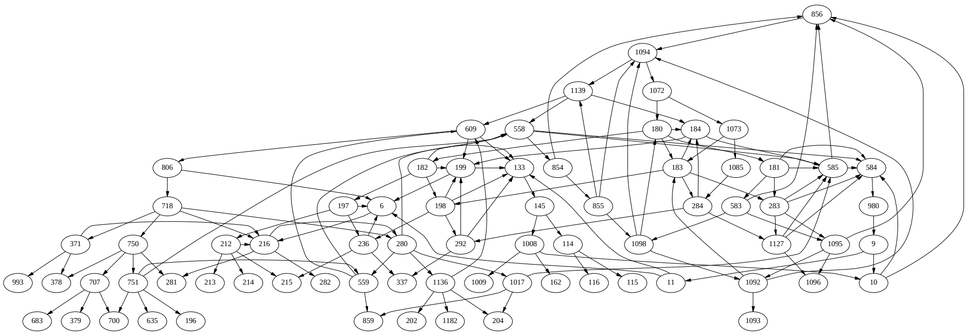
k	avg size	avg clustering
1	4.3	1
2	11.1	1.3
3	22.6	1.4
4	39.4	1.6

Visualization of some parts of the state state space:

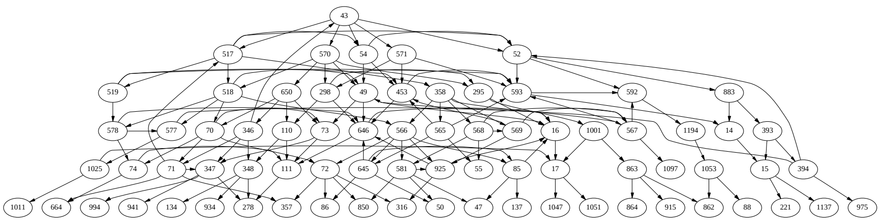
Initial walk length: 0



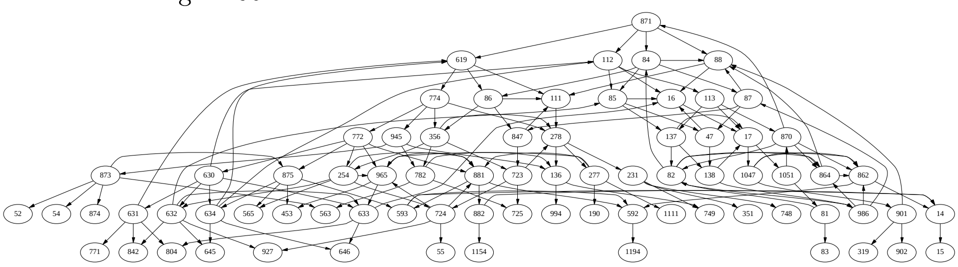
Initial walk length: 20



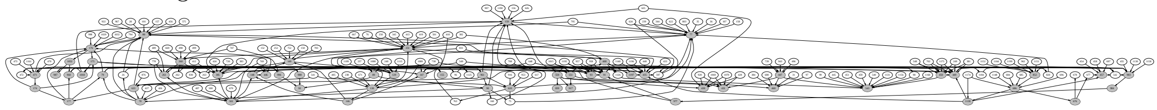
Initial walk length: 40



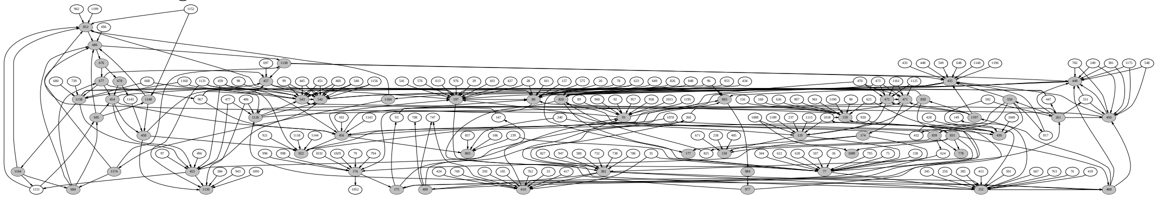
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60