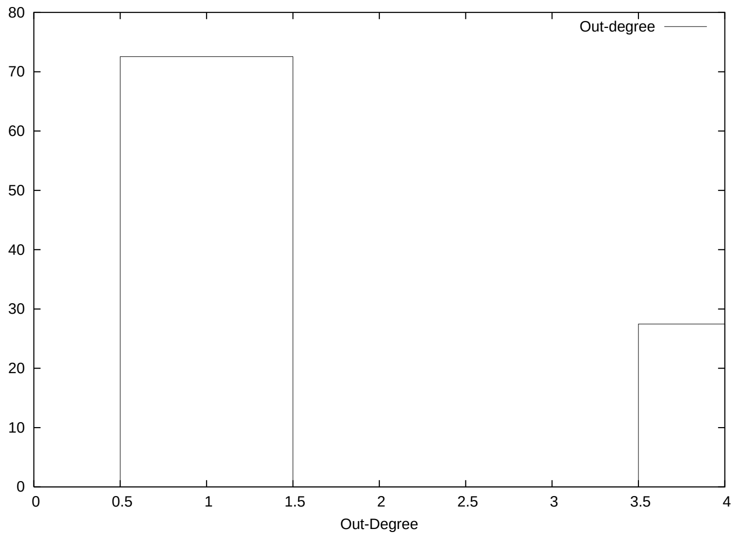
Graph: nusmv/abp2

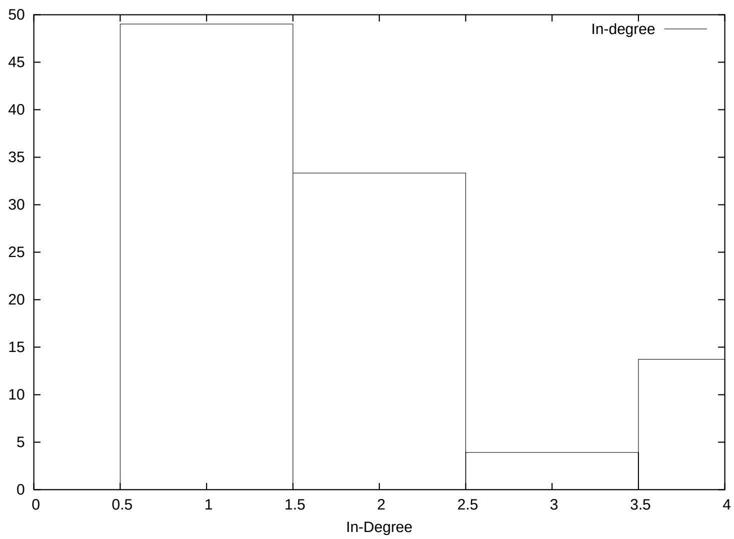
General Info

Example title	Alternating bit protocol
Parameter	data 0..3
Reduction Modification	disabled fairness,
States	408
Edges	744
Average degree	1.8

Out-Degrees distribution:



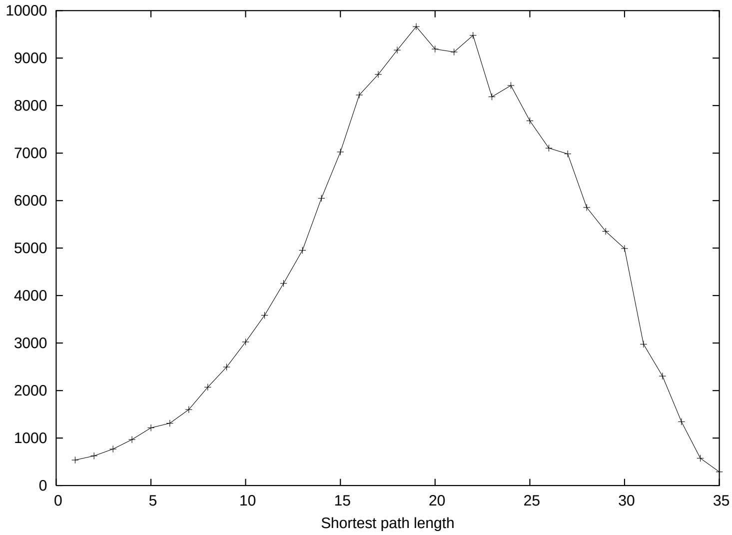
In-Degrees distribution:



Shortest Paths Info

Diameter: 35
Average shortest path length: 20.0136

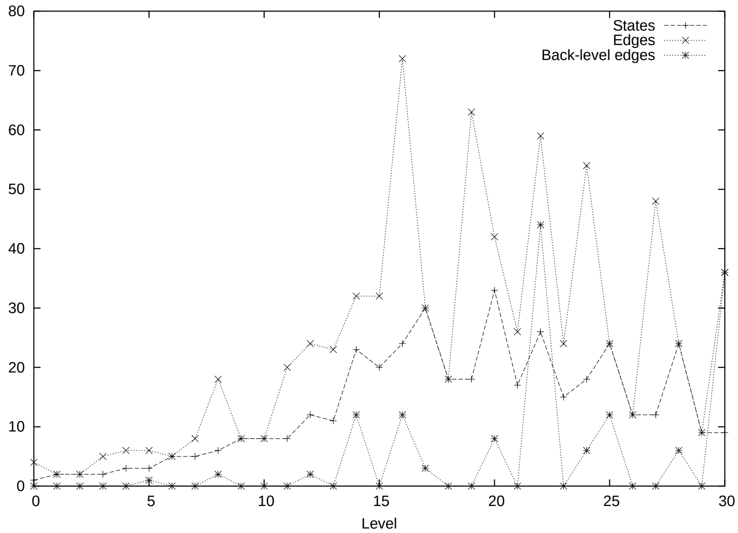
Shortest paths lengths frequencies:



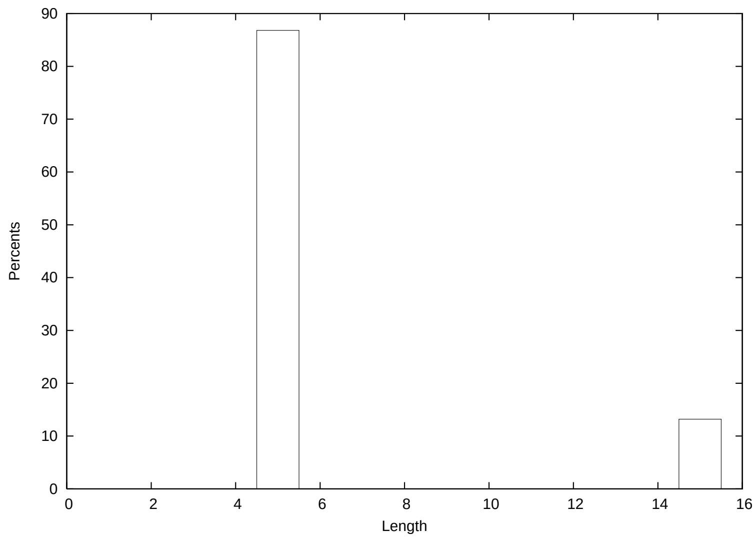
BFS Info

BFS height	30
BFS width	33 (8%)
Back level edges	144 (19.3%)

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**:

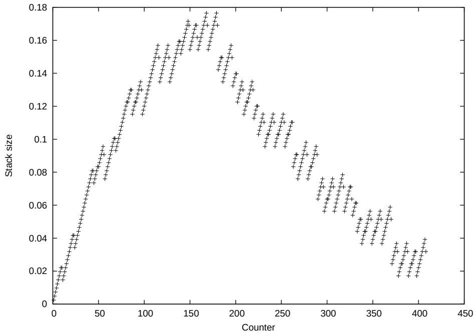
Size	Number of components	Number of states here
408	1	100%

SCC component graph (part):

DFS Info

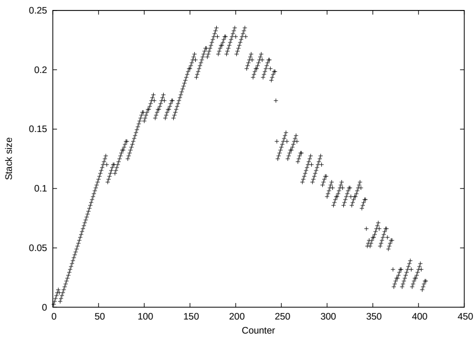
Run 0

front-edges : back-edges : cross-edges = 407 : 96 : 241 = 54.7%:12.9%:32.3%
Max. stack size: 72 (17.6%)
Shortest cycle detected: 6
Most often detected lengths of cycles: 6 (78), 16 (6), 38 (3), 32 (2), 64 (2)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 407 : 96 : 241 = 54.7%:12.9%:32.3%
Max. stack size: 96 (23.5%)
Shortest cycle detected: 6
Most often detected lengths of cycles: 6 (79), 22 (7), 50 (2), 38 (2), 66 (2)
Stack graph:



Local Structure

Short cycles(up to 6)

2	0	(0%)
3	0	(0%)
4	0	(0%)
5	0	(0%)
6	280	(68.6%)

Diamonds

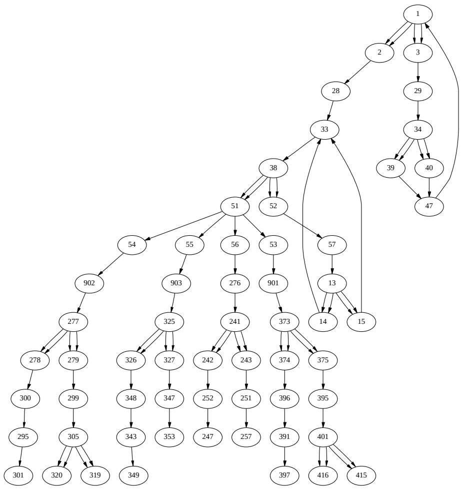
40 (9.8%)

Neighborhoods

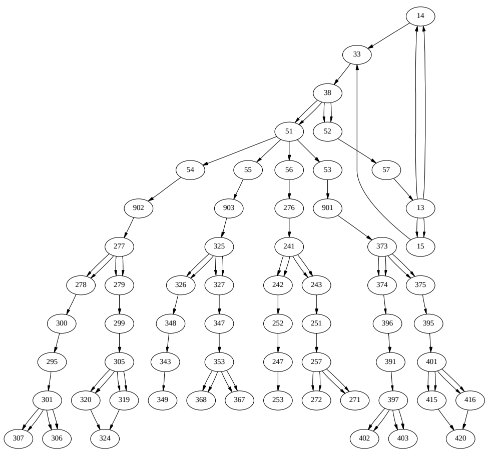
k	avg size	avg clustering
1	2.3	1.2
2	3.8	1.3
3	5.7	1.4
4	8	1.4

Visualization of some parts of the state state space:

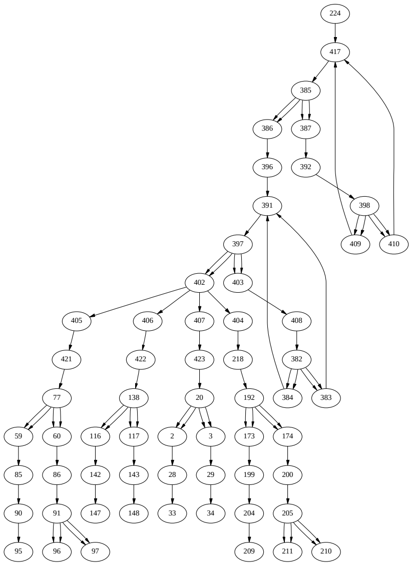
Initial walk length: 0



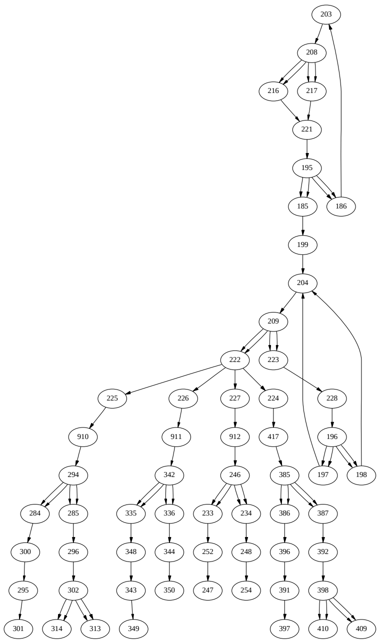
Initial walk length: 20



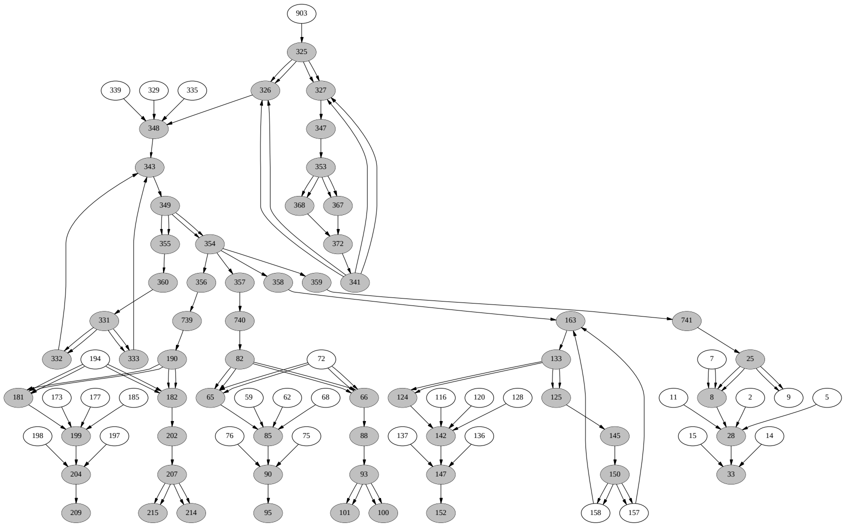
Initial walk length: 40



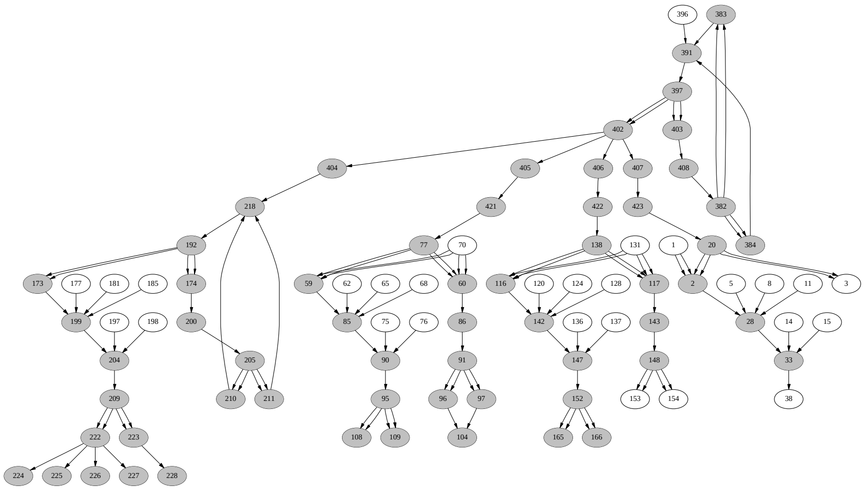
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60