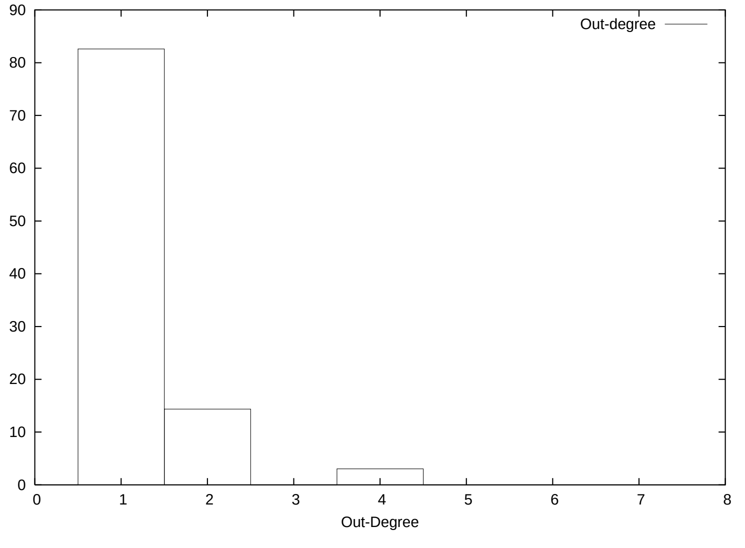
Graph: cadp/brp_protocol

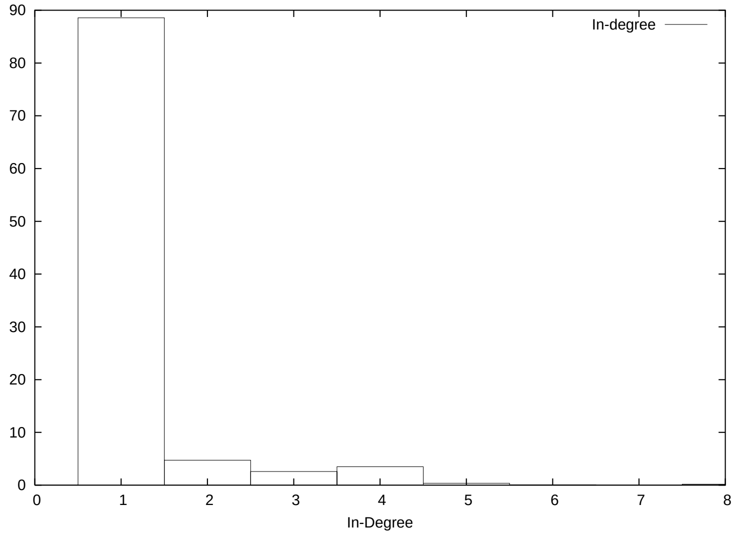
General Info

Example title	Philips' Bounded Retransmission Protocol
Parameter	
Reduction	
Modification	
States	60,381
Edges	74,564
Average degree	1.2

Out-Degrees distribution:



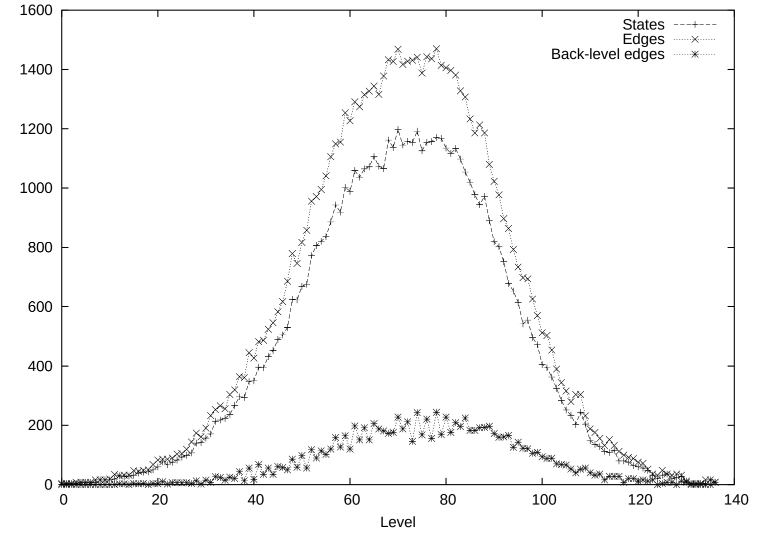
In-Degrees distribution:



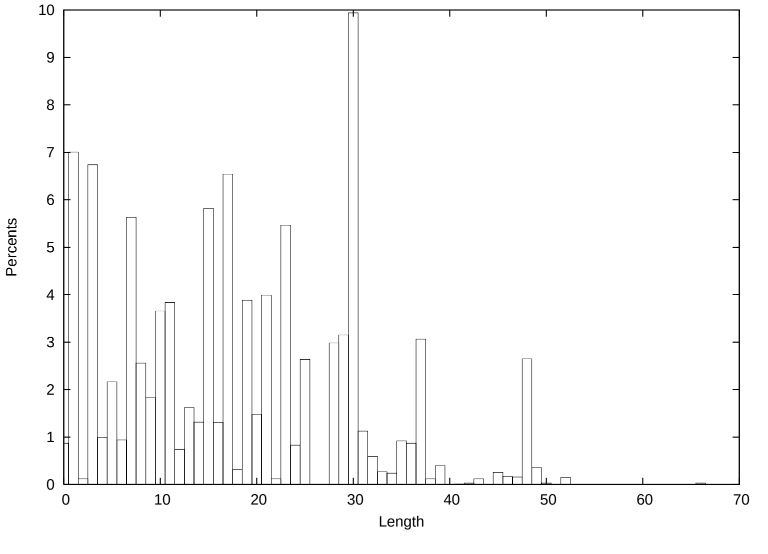
BFS Info

BFS height	136
BFS width	1,198 (1.9%)
Back level edges	10,121 (13.5%)

BFS level info:



Back level edges lengths:



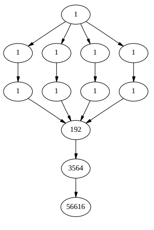
SCC Info

SCC components	12
SCC quetient height	5
SCC quetient nontrivial height	3
Number of terminal components	1
The largest component is	the only terminal

Statistics according to **sizes**:

Size	Number of components	Number of states here
56,616	1	93.7%
3,564	1	5.9%
192	1	0.3%
1	9	0%

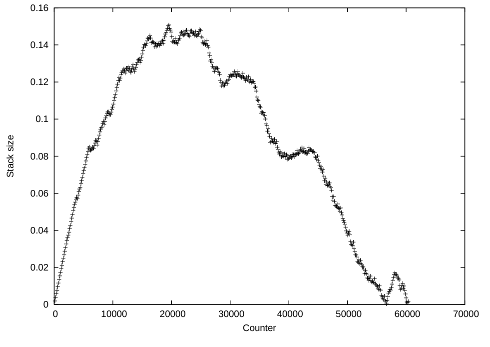
SCC component graph (part):



DFS Info

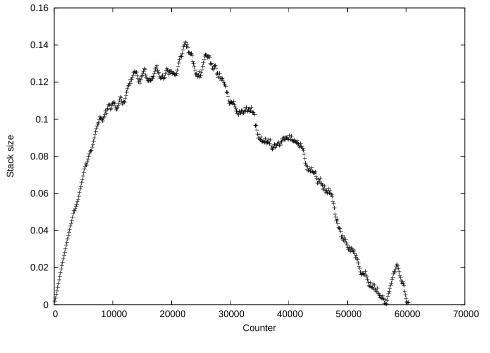
Run 0

front-edges : back-edges : cross-edges = 60,380 : 4,286 : 9,898 = 80.9%:5.7%:13.2%
Max. stack size: 9,129 (15.1%)
Shortest cycle detected: 20
Most often detected lengths of cycles: 40 (609), 80 (341), 120 (151), 47 (38), 160 (27)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 60,380 : 4,234 : 9,950 = 80.9%:5.6%:13.3%
Max. stack size: 8,590 (14.2%)
Shortest cycle detected: 20
Most often detected lengths of cycles: 40 (625), 80 (342), 120 (172), 47 (42), 160 (36)
Stack graph:



Local Structure

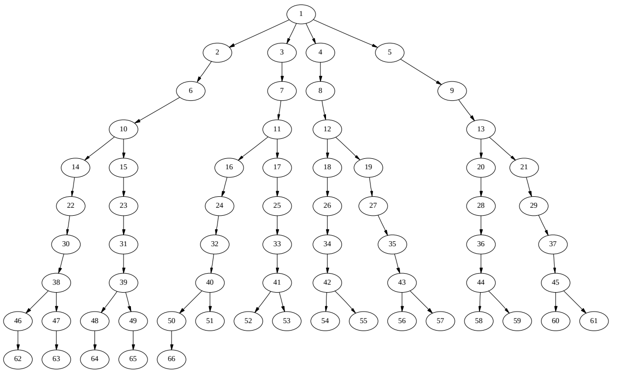
Short cycles(up to 6)
none
Diamonds

0 (0%)

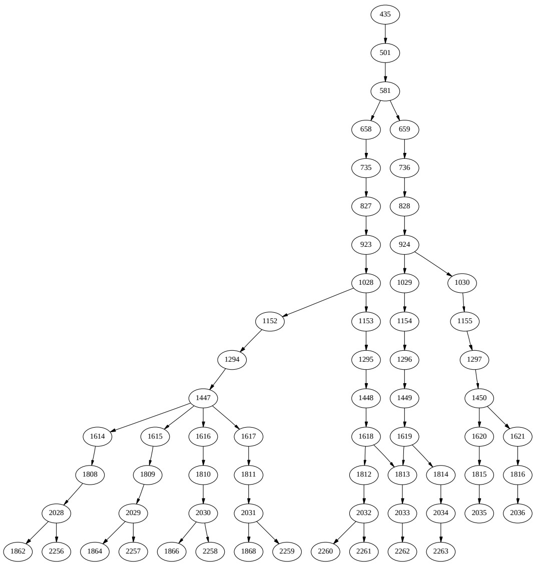
Neighborhoods

k	avg size	avg clustering
1	2.2	1
2	3.7	1
3	5.7	1
4	8.1	1

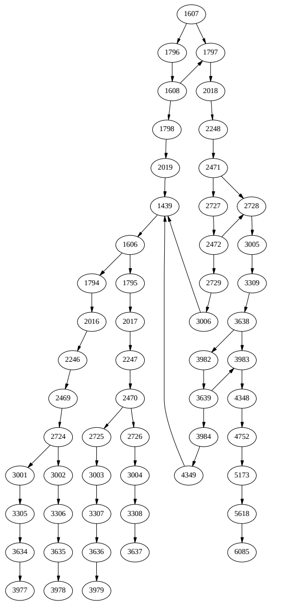
Visualization of some parts of the state state space:
Initial walk length: 0



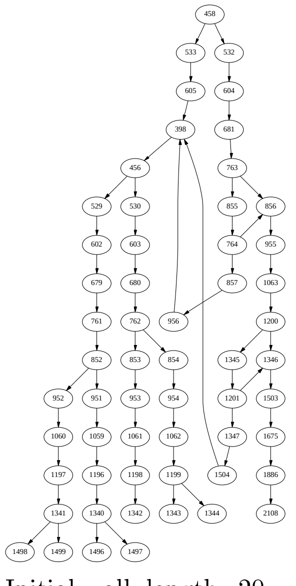
Initial walk length: 20



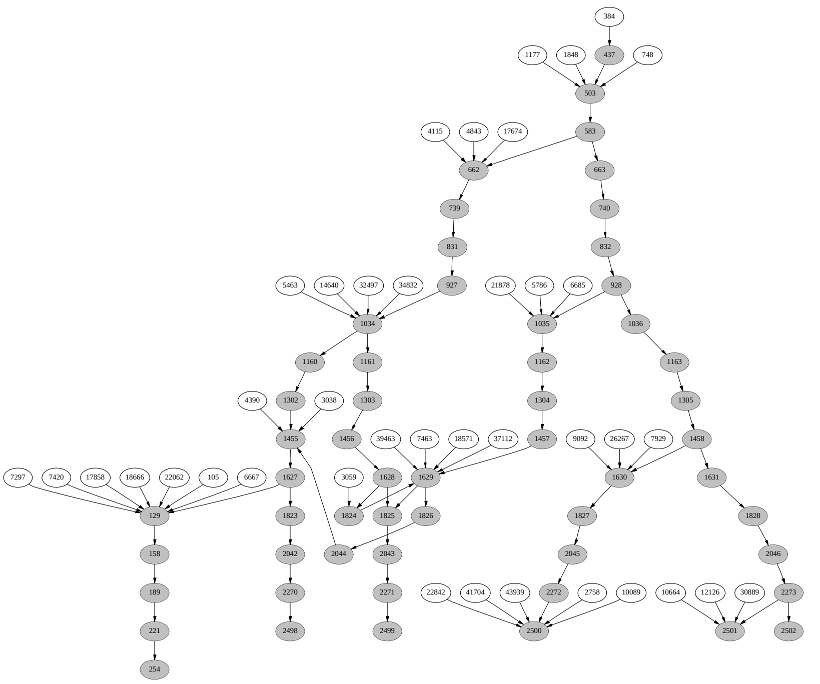
Initial walk length: 40



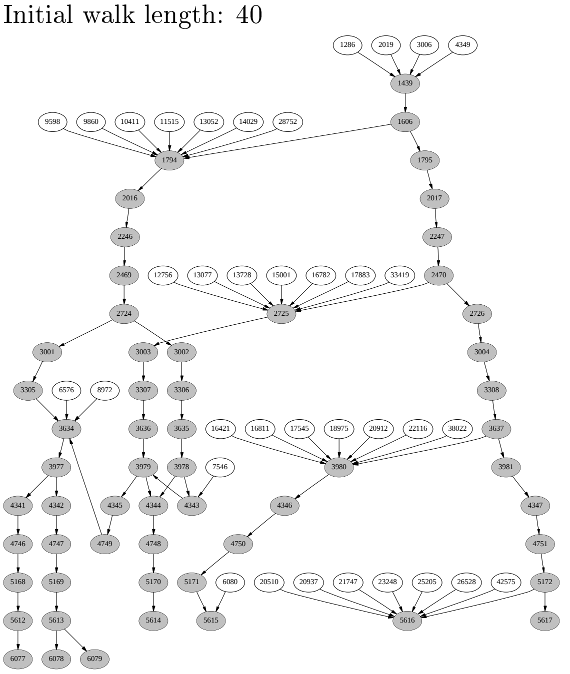
Initial walk length: 60



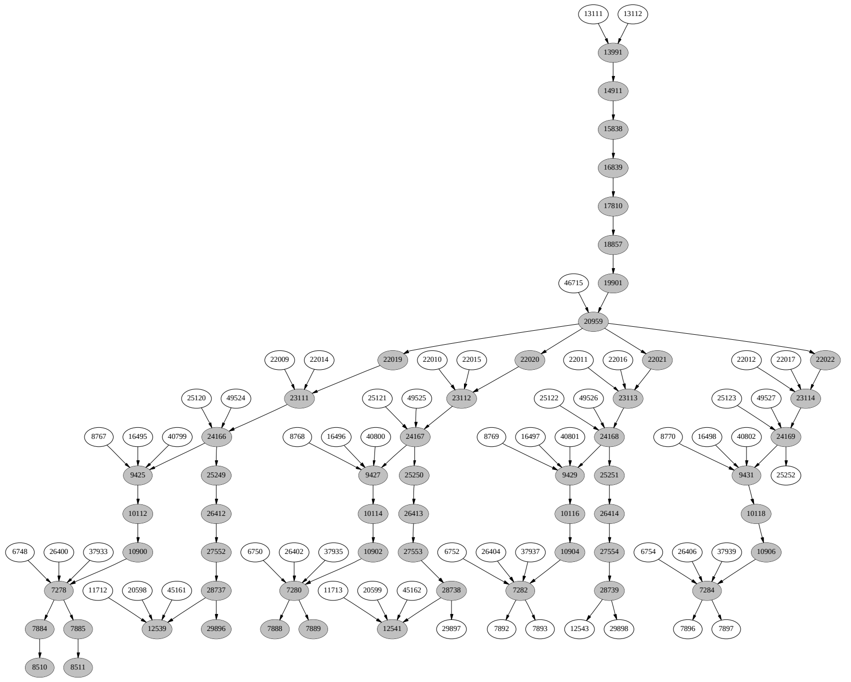
Initial walk length: 20



Initial walk length: 40



Initial walk length: 60


13111
13112
13991
14911
15838
16839
17810
18857
46715
19901
20959
22009
22014
22019
22010
22015
22020
22011
22016
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22012
22017
22022
25120
49524
23111
25121
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23112
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49526
23113
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23114
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16495
40799
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16496
40800
24167
8769
16497
40801
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9431
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10114
26413
10116
26414
10118
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26400
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10900
27552
6750
26402
37935
10902
27553
6752
26404
37937
10904
27554
6754
26406
37939
10906
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8510
8511