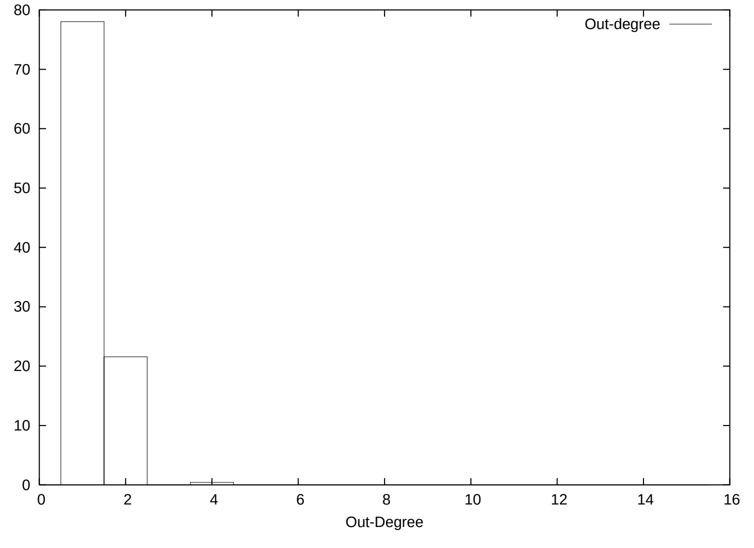
Graph: cadp/brp_protocol.min

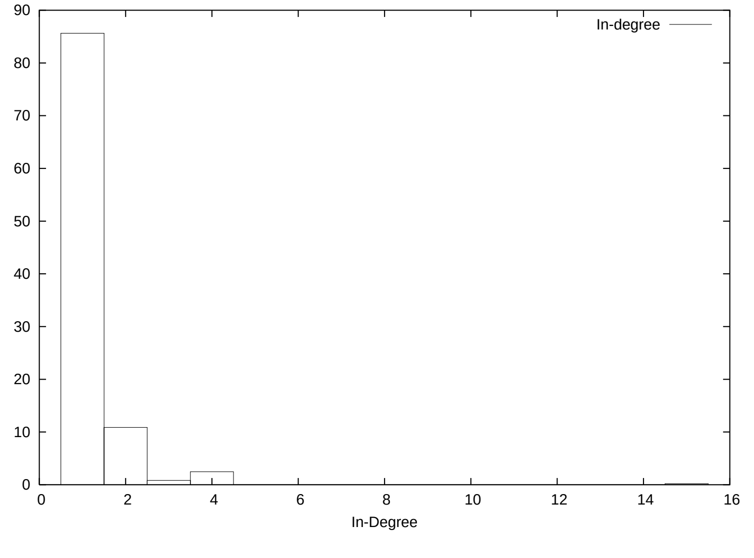
General Info

Example title	Philips' Bounded Retransmission Protocol
Parameter	
Reduction	MIN
Modification	
States	487
Edges	598
Average degree	1.2

Out-Degrees distribution:



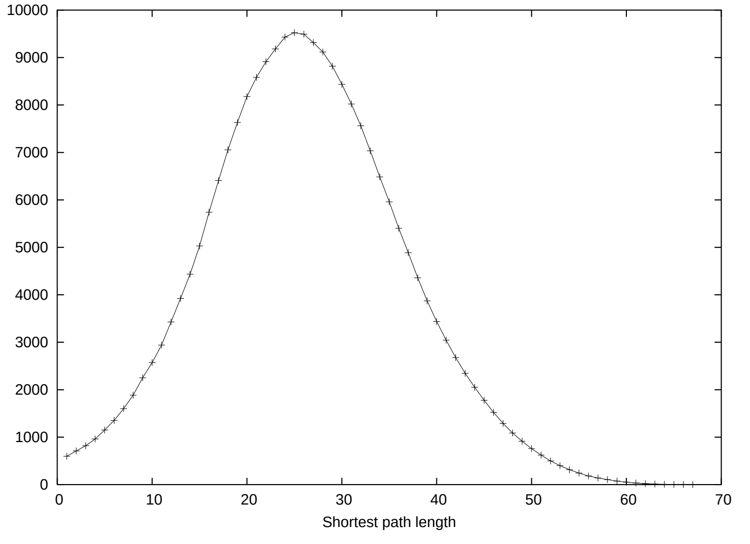
In-Degrees distribution:



Shortest Paths Info

Diameter: 67
Average shortest path length: 26.2303

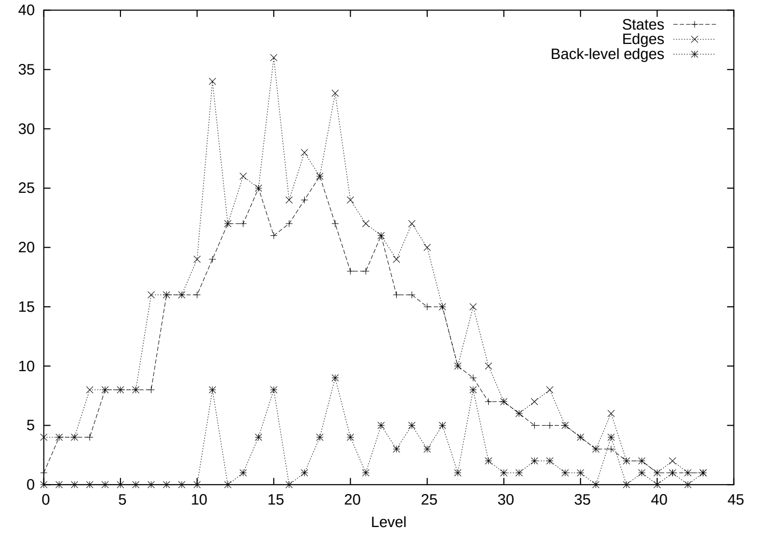
Shortest paths lengths frequencies:



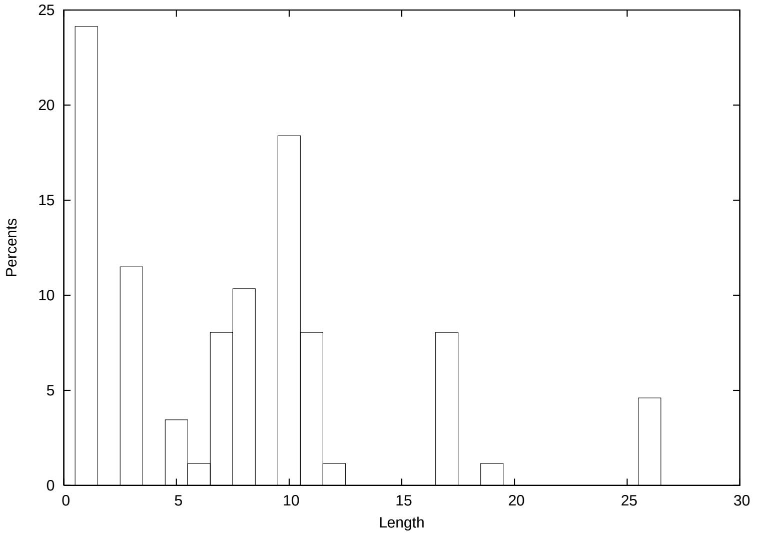
BFS Info

BFS height	43
BFS width	26 (5.3%)
Back level edges	87 (14.5%)

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**:

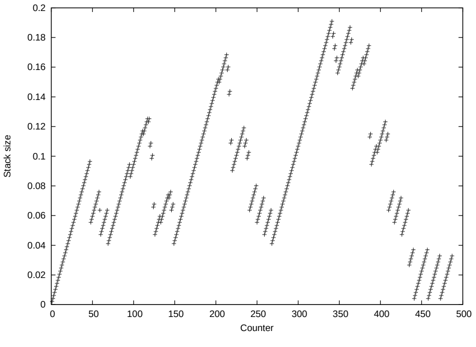
Size	Number of components	Number of states here
487	1	100%

SCC component graph (part):

DFS Info

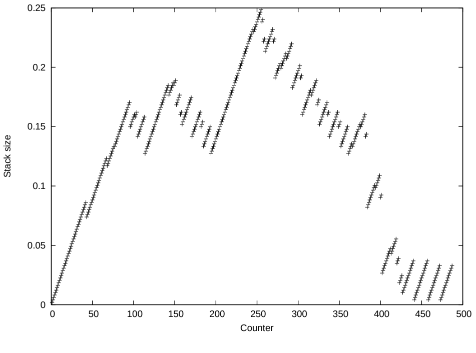
Run 0

front-edges : back-edges : cross-edges = 486 : 9 : 103 = 81.2%:1.5%:17.2%
Max. stack size: 93 (19%)
Shortest cycle detected: 11
Most often detected lengths of cycles: 25 (1), 11 (1), 21 (1), 76 (1), 19 (1)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 486 : 13 : 99 = 81.2%:2.1%:16.5%
Max. stack size: 121 (24.8%)
Shortest cycle detected: 25
Most often detected lengths of cycles: 38 (3), 25 (1), 32 (1), 28 (1), 75 (1)
Stack graph:



Local Structure

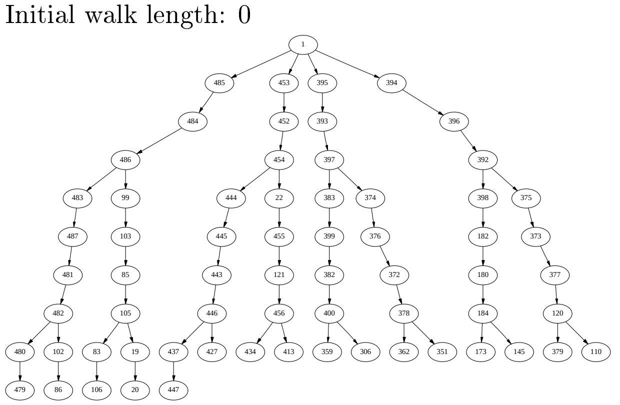
Short cycles(up to 6)
none
Diamonds

0 (0%)

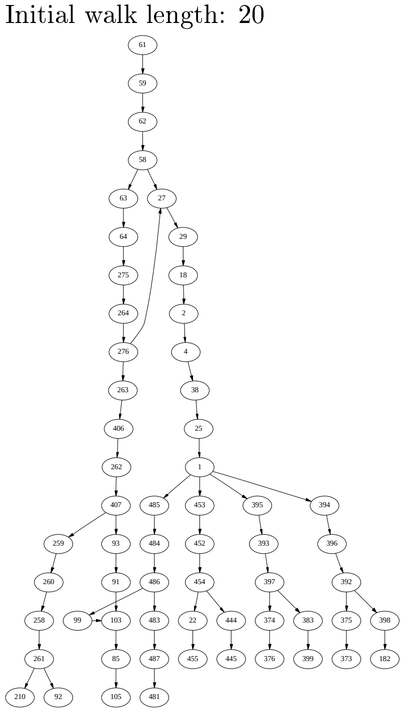
Neighborhoods

k	avg size	avg clustering
1	2.2	1
2	3.6	1
3	5.3	1
4	7.3	1

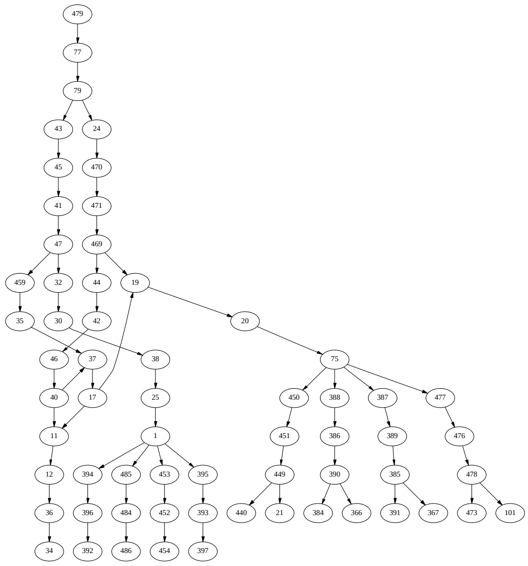
Visualization of some parts of the state state space:
Initial walk length: 0



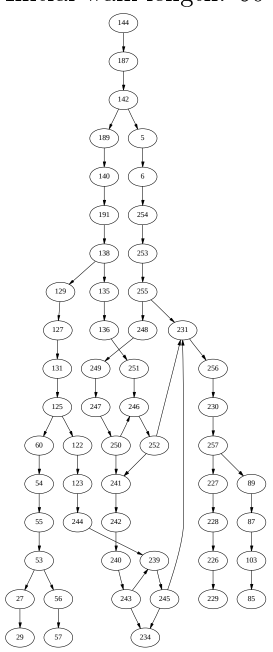
Initial walk length: 20



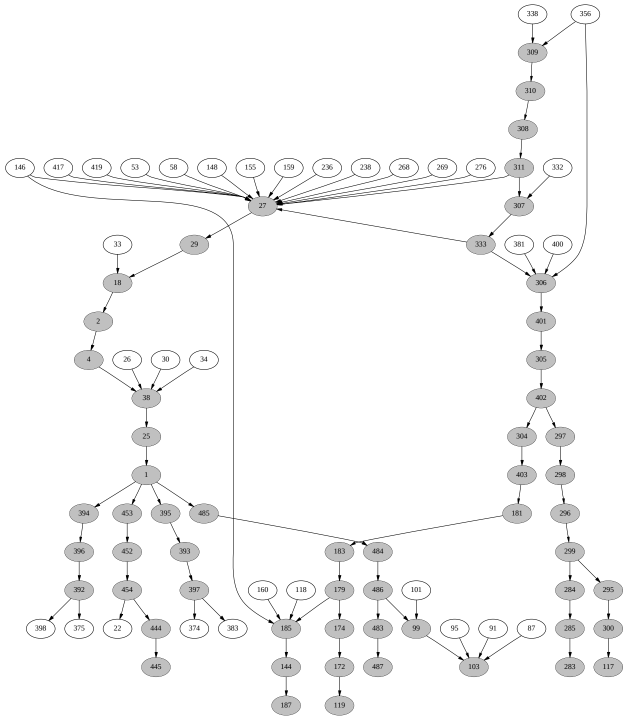
Initial walk length: 40



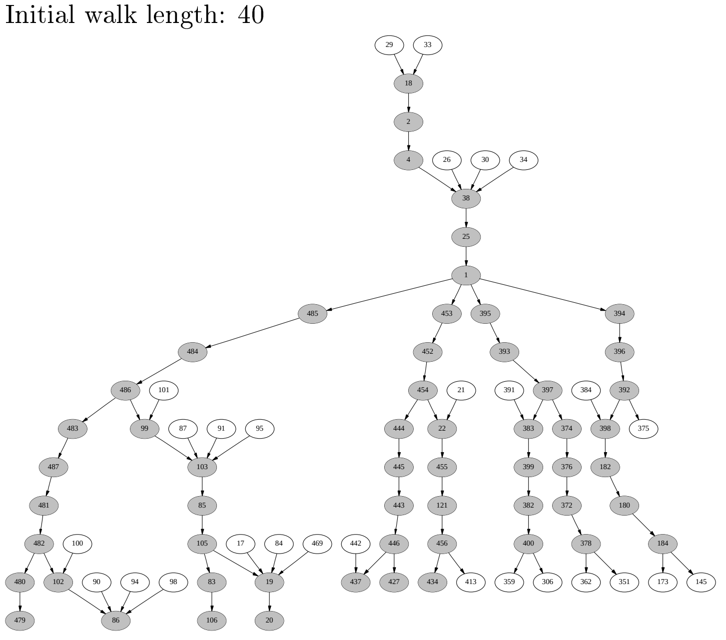
Initial walk length: 60



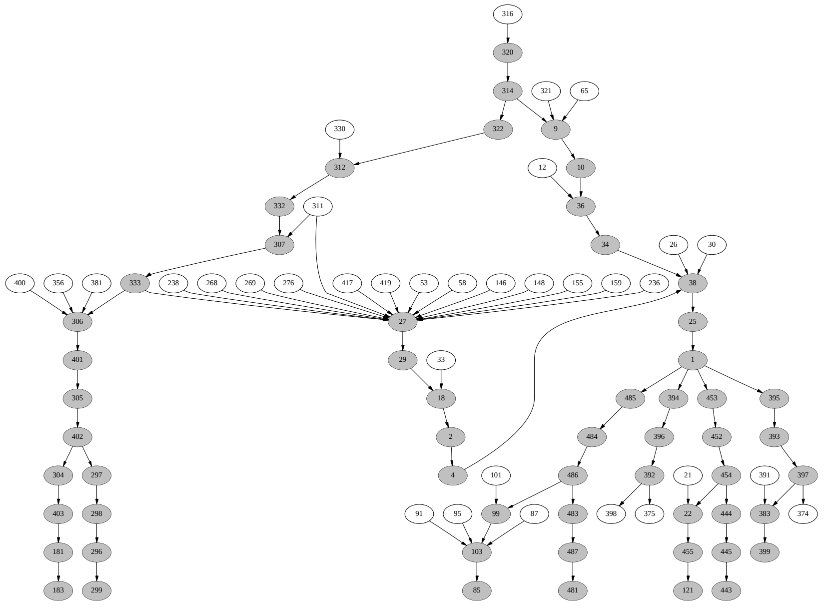
Initial walk length: 20



Initial walk length: 40



Initial walk length: 60


316
320
314 321 65
330 322 9
312 12 10
332 311 36
307 34 26 30
400 356 381 333 238 268 269 276 417 419 53 58 146 148 155 159 236 38
306 27 25
401 29 33 1
305 18 485 394 453 395
402 2 484 396 452 393
304 297 4 101 486 392 21 454 391 397
403 298 91 95 99 87 483 398 375 22 444 383 374
181 296 103 487 455 445 399
183 299 85 481 121 443