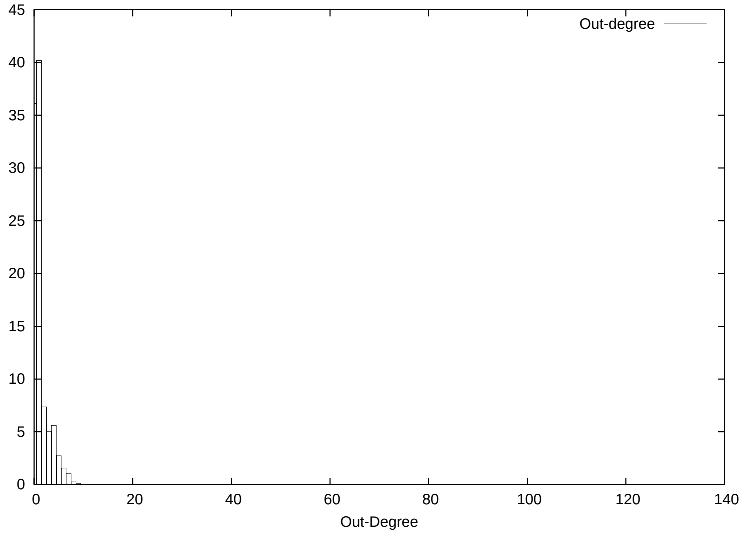
Graph: cadp/co4-1a-3

General Info

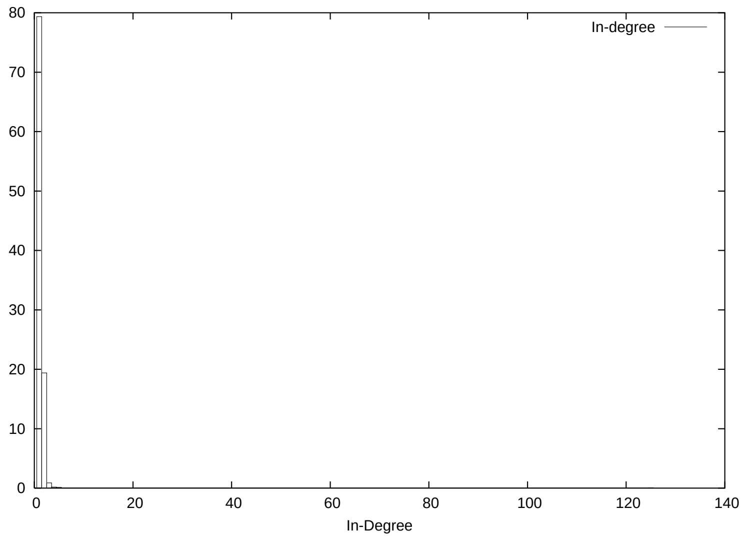
Example title	CO4 protocol for distributed knowledge bases
Parameter	
Reduction	
Modification	

States	3,193
Edges	4,025
Average degree	1.2

Out-Degrees distribution:



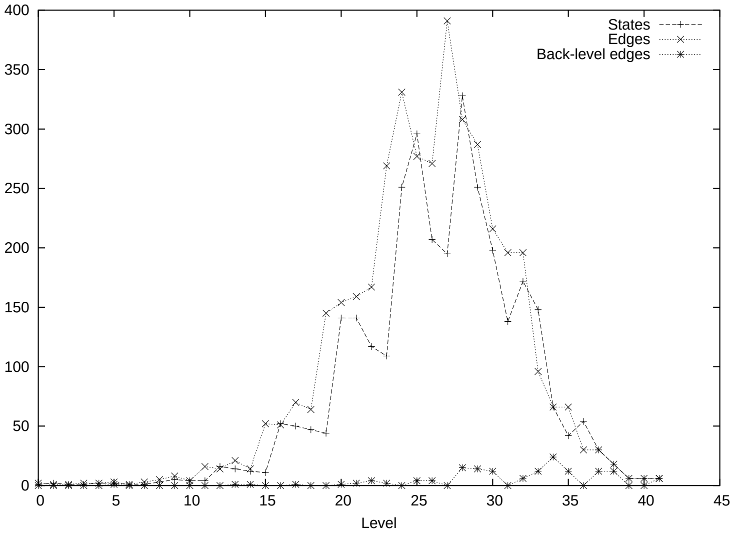
In-Degrees distribution:



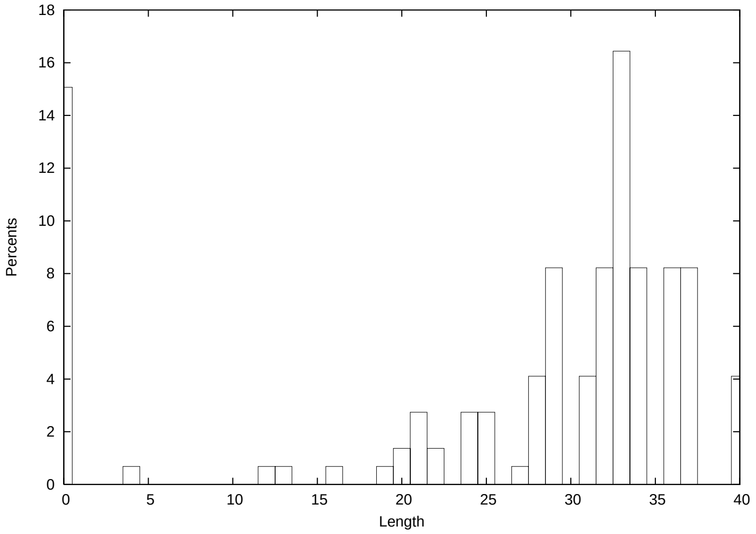
BFS Info

BFS height	41
BFS width	328 (10.2%)
Back level edges	146 (3.6%)

BFS level info:



Back level edges lengths:



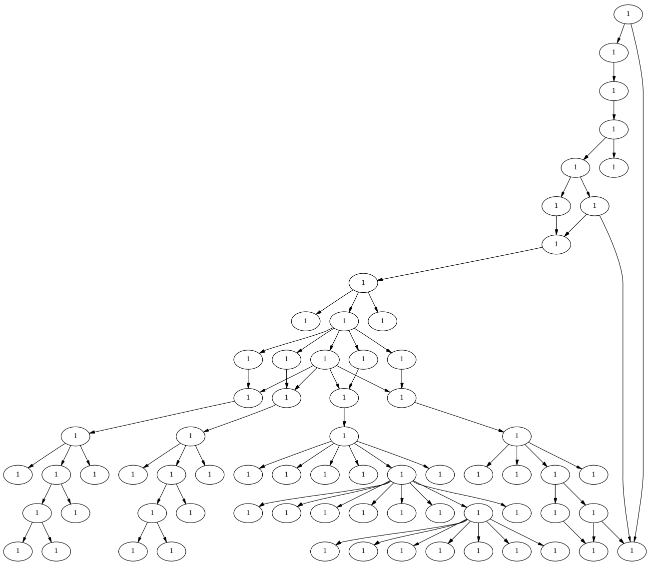
SCC Info

SCC components	3,193
SCC quetient height	42
SCC quetient nontrivial height	0
Number of terminal components	1,153
The largest component is	terminal

Statistics according to **sizes**:

Size	Number of components	Number of states here
1	3,193	100%

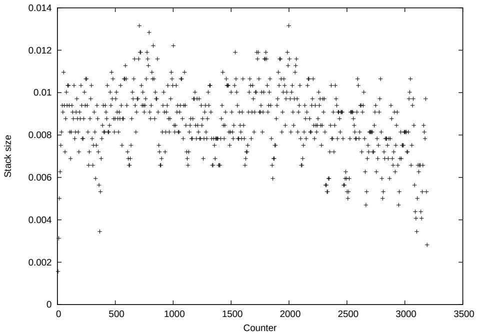
SCC component graph (part):



DFS Info

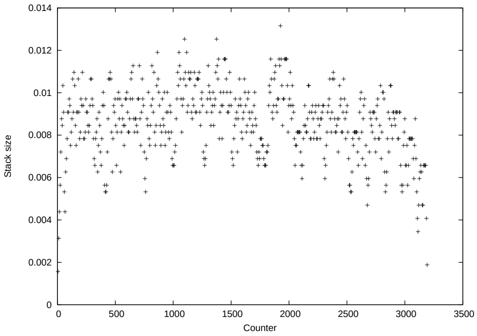
Run 0

front-edges : back-edges : cross-edges = 3,192 : 0 : 833 = 79.3%:0%:20.6%
Max. stack size: 42 (1.3%)
Shortest cycle detected: -1
Most often detected lengths of cycles: (), (), (), (), ()
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 3,192 : 0 : 833 = 79.3%:0%:20.6%
Max. stack size: 42 (1.3%)
Shortest cycle detected: -1
Most often detected lengths of cycles: (), (), (), (), ()
Stack graph:



Local Structure

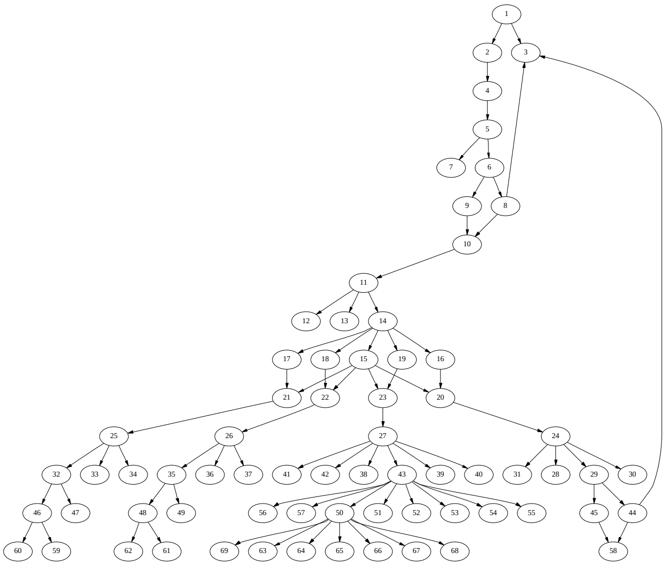
Short cycles(up to 6)
none
Diamonds

179 (5.6%)

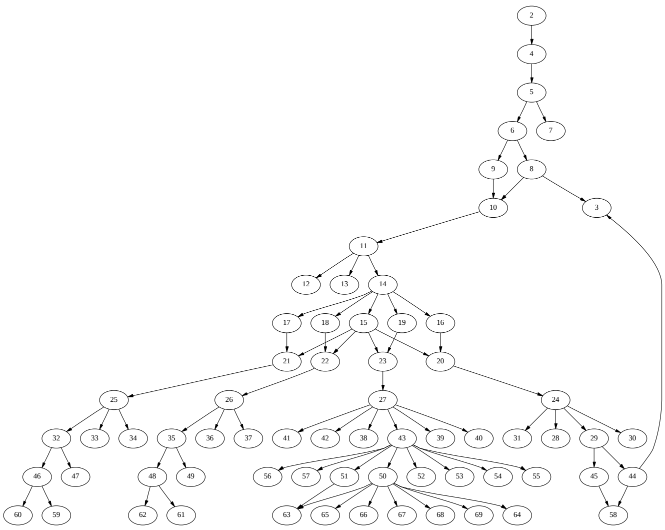
Neighborhoods

k	avg size	avg clustering
1	2.2	1
2	3.5	1
3	5.2	1
4	6.9	1

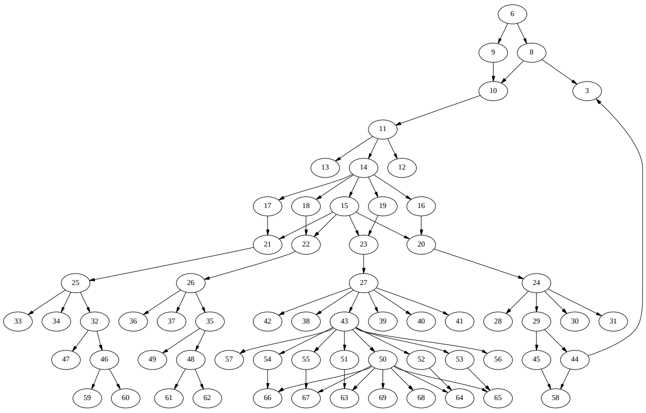
Visualization of some parts of the state state space:
Initial walk length: 0



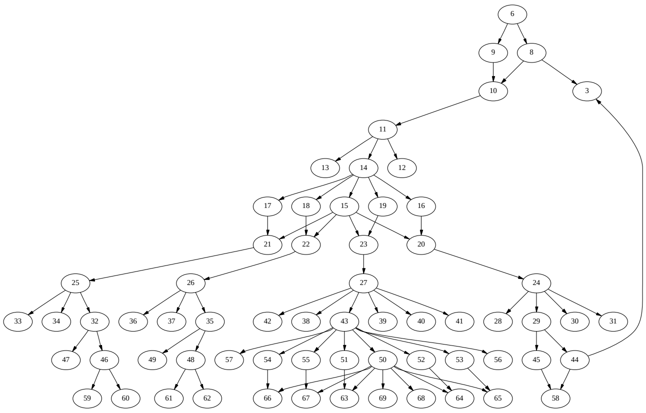
Initial walk length: 20



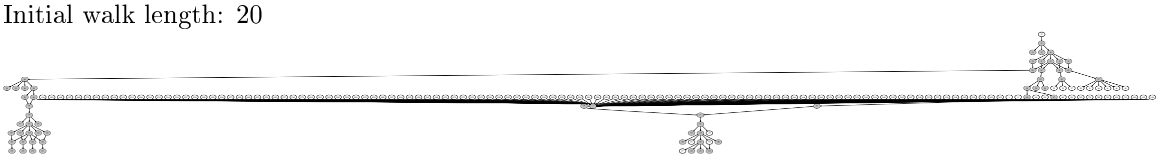
Initial walk length: 40



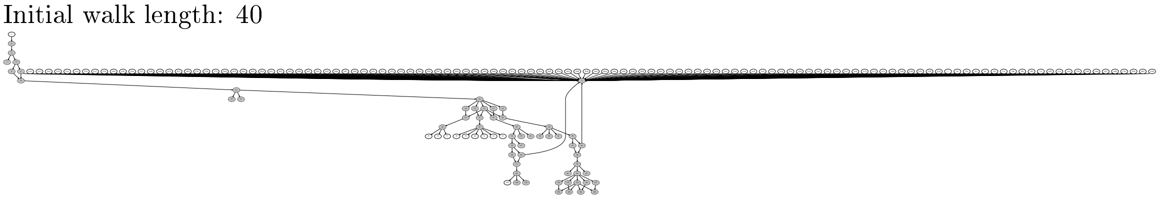
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60