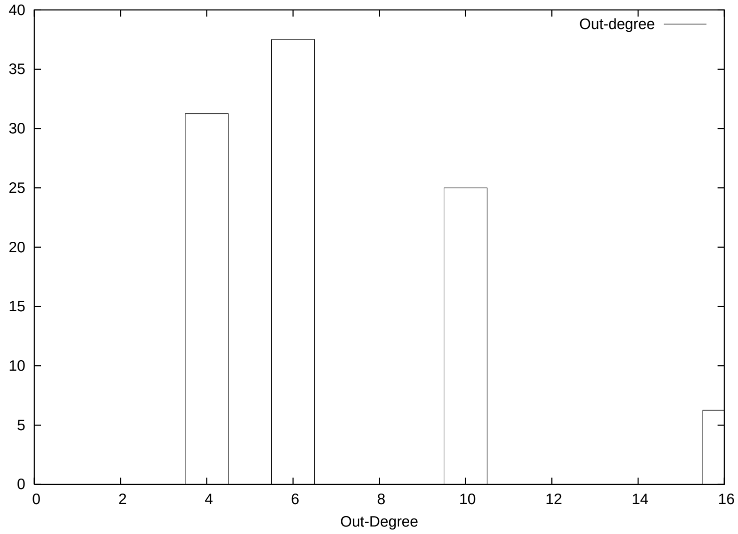
Graph: mcrl/chatbox

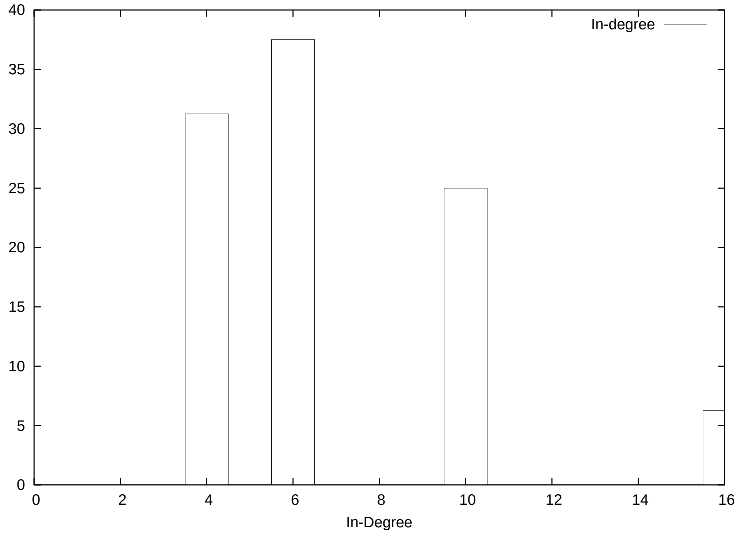
General Info

Example title	Chatbox
Parameter	
Reduction	
Modification	
States	65,536
Edges	458,752
Average degree	7

Out-Degrees distribution:



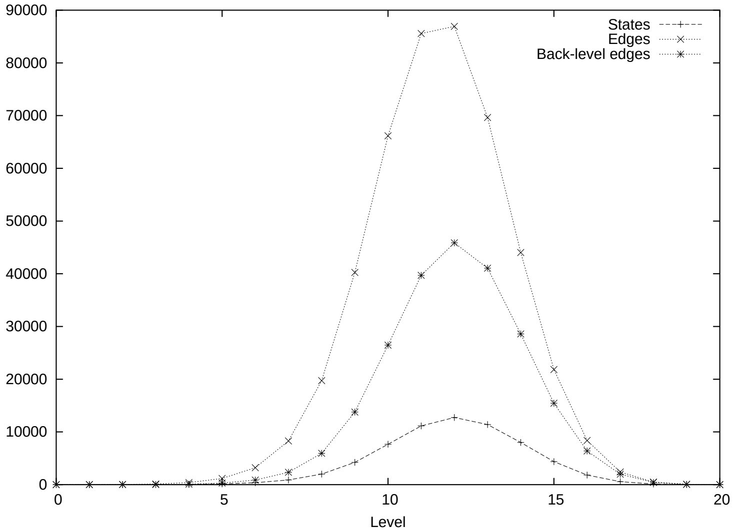
In-Degrees distribution:



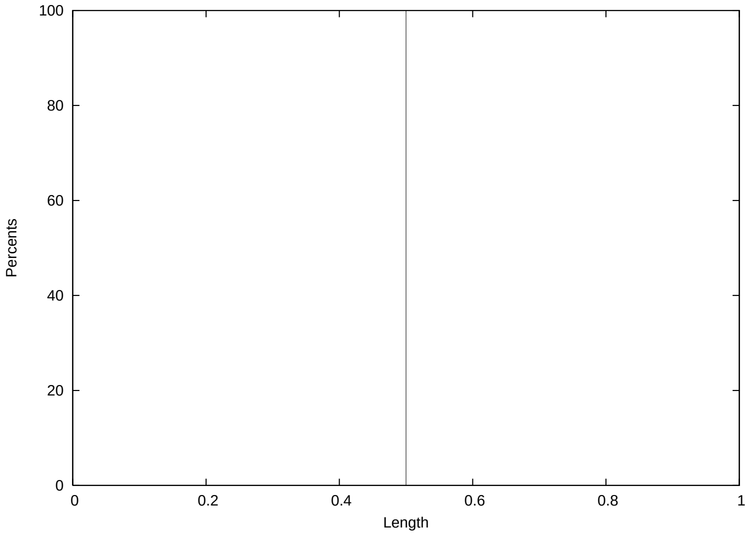
BFS Info

BFS height	20
BFS width	12,730 (19.4%)
Back level edges	229,376 (50%)

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**:

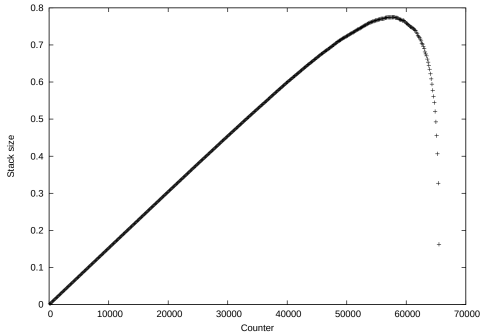
Size	Number of components	Number of states here
65,536	1	100%

SCC component graph (part):

DFS Info

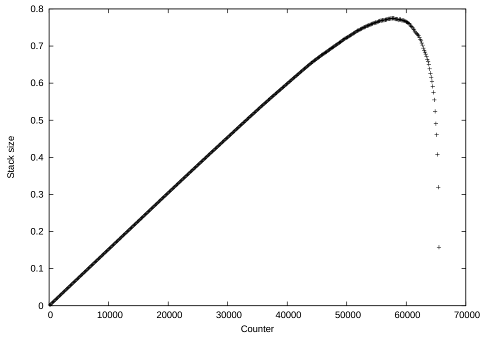
Run 0

front-edges : back-edges : cross-edges = 65,535 : 229,376 : 163,841 = 14.2%:50%:35.7%
Max. stack size: 50,817 (77.5%)
Shortest cycle detected: 2
Most often detected lengths of cycles: 2 (65535), 4 (9067), 6 (4512), 8 (1940), 10 (848)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 65,535 : 229,376 : 163,841 = 14.2%:50%:35.7%
Max. stack size: 50,797 (77.5%)
Shortest cycle detected: 2
Most often detected lengths of cycles: 2 (65535), 4 (9152), 6 (4434), 8 (1921), 10 (830)
Stack graph:



Local Structure

Short cycles(up to 6)

2	65,536	(100%)

Diamonds

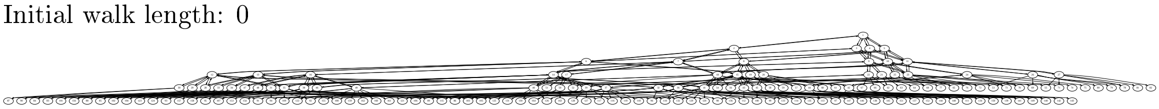
65,536 (100%)

Neighborhoods

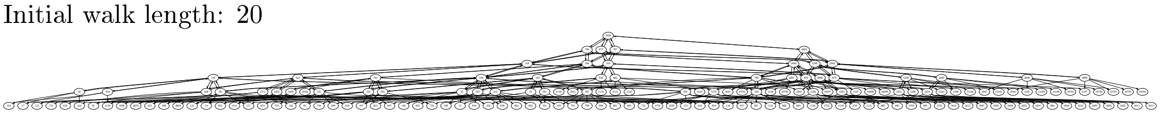
k	avg size	avg clustering
1	8	1
2	40.2	1.6
3	165	2.1
4	570.1	2.6

Visualization of some parts of the state state space:

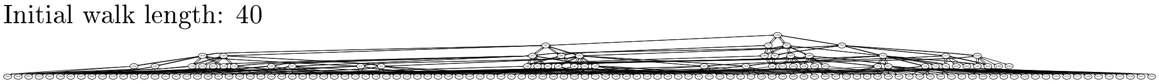
Initial walk length: 0



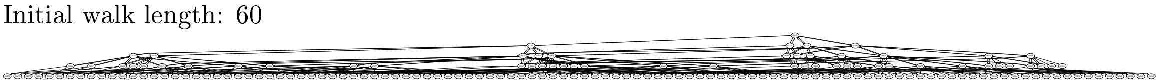
Initial walk length: 20



Initial walk length: 40

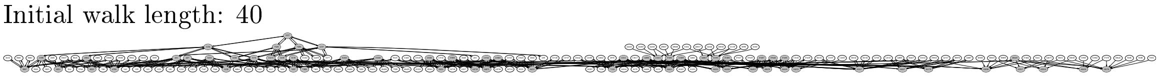


Initial walk length: 60



Initial walk length: 20

Initial walk length: 40



Initial walk length: 60