

Appendix A

Generating project network instances

In appendix A, we will demonstrate how to generate project network instances which have been set level in chapter three (section 3.2). For the example, we want to generate low level network instances which have one type resource.

1. Set value of n and OS. (Set $n = 10$ and $OS = 0.2$)

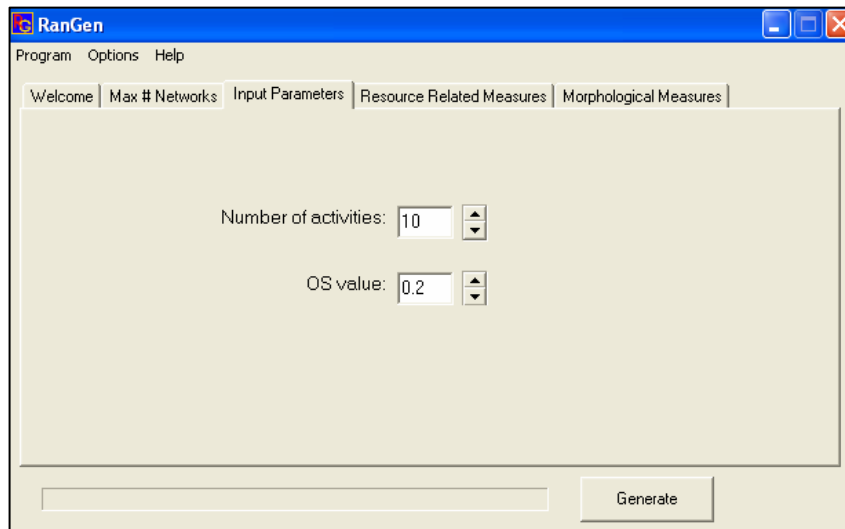


Figure A-1: Set value of n and OS

2. Set value of number of resource, RF and RC (Set number of resources = 1; $RF = 0.3$ and $RC = 0.3$)

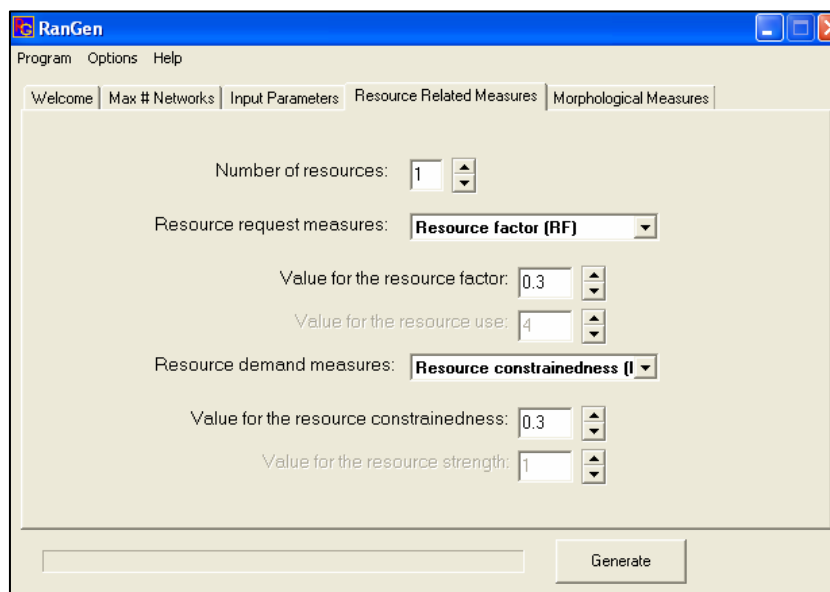


Figure A-2: Set value of the number of resource, RF and RC

3. RANGEN could generate 613 network instances for one type of resource while these project networks are in low level

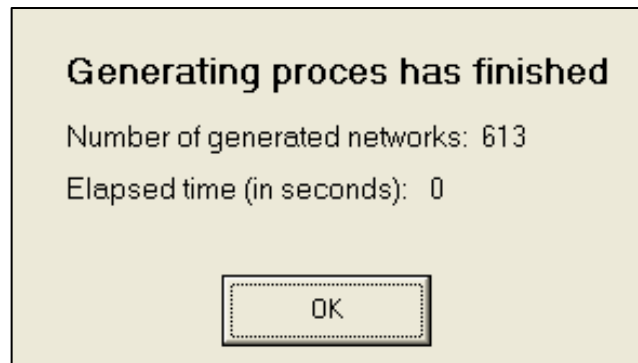


Figure A-3: Show the maximum number of network instance generated by RANGEN

4. Save project network instances

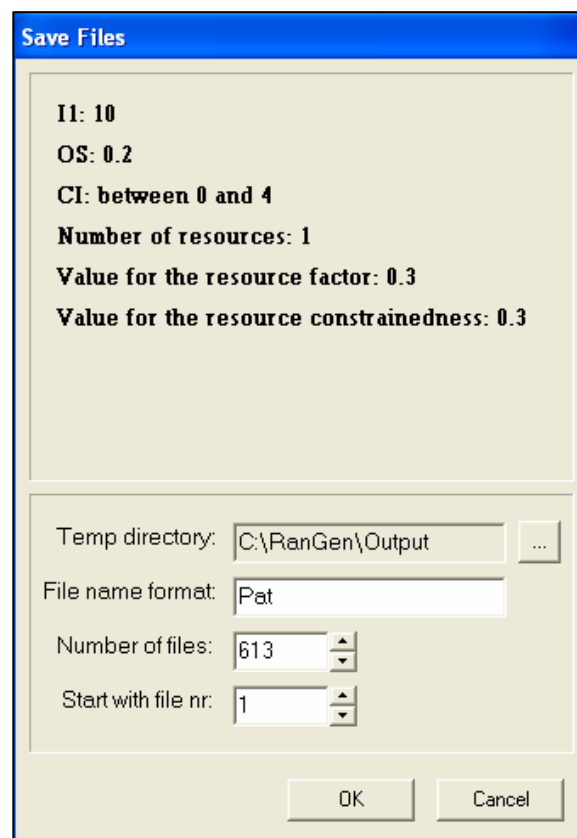


Figure A-4: Save project network instances

- Using Network Viewer for opening *.rcp files generated by Rangen in graph format and Patterson format.

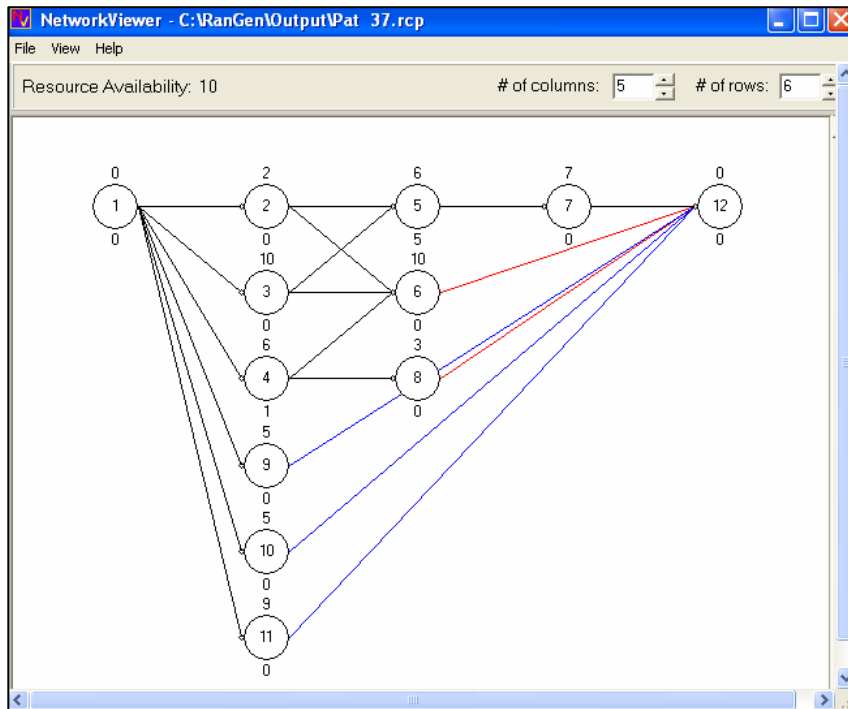


Figure A-5: Using Network viewer for opening *.rcp file in graph format

The screenshot shows a window titled "Structure of C:\RanGen\Output\Pat 37.rcp". The main area displays a Patterson matrix, which is a lower triangular matrix of integers representing the resource requirements of the nodes. The matrix is as follows:

12	1								
10									
0	0	6	2	3	4	9	10	11	
2	0	2	6	5					
10	0	2	6	5					
6	1	2	8	6					
6	5	1	7						
10	0	1	12						
7	0	1	12						
3	0	1	12						
5	0	1	12						
5	0	1	12						
9	0	1	12						
0	0	0							

Figure A-6: Using Network viewer for opening *.rcp file in Patterson format