COMPARATIVE ANALYSIS OF METHODS FOR SOLVING CLOSED QUEUEING NETWORKS

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Abstract: The objective of this study is to present two methods of solving closed queueing networks. The first method is about analyzing the average values of queueing networks, and the second one is about using RAQS application.

RAQS is Windows based application software that combines several different queueing models into an integrated environment. All of the algorithms in RAQS are based upon the two-moment framework i.e. the algorithms are capable of dealing with general distributions, and require only the first two moments of these distributions. It is assumed that the user has prior knowledge of queueing network theory and has all the necessary information to build and solve a model.

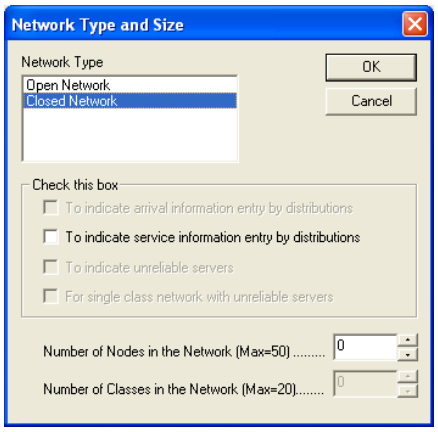

Fig 1 Network types in RAQS software

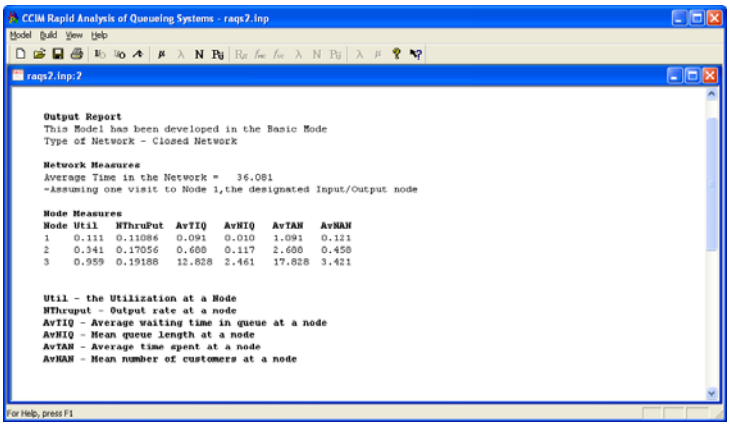

Fig 2 Results obtained from the RAQS software execution

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